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“Theme: Bridging clinical and public health perspectives to promote adolescent health”

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PHW-1

Addressing Health Disparities and Improving Health and Education Outcomes Using Peer Education**Smita Shah, Nihaya Al Sheyab***

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OBJECTIVES: 1- Develop an understanding of why peer health education is an effective way to address health disparities amongst disadvantaged adolescents.

2- Gain practical skills required for implementing and facilitating a peer education program for adolescents in a school based setting.

METHODS: In this workshop participants will learn about the key principles and theoretical foundations of peer-education and how this approach can be used to effectively address health disparities and improve educational outcomes amongst disadvantaged adolescents. Peer-education involves students undertaking organized educational activities with their younger peers aimed at developing their knowledge, attitudes, beliefs and skills and enabling them to protect and be responsible for their own health. Schools are the ideal place for initiating such programs as they provide ease of access to young people and they can also provide an inroad to parents and the community. We will demonstrate how two peer-education programs, SALSA (Students As Lifestyle Activists) and Triple A (Adolescent Asthma Action), based on sound theoretical frameworks, have been used to effectively address health disparities amongst disadvantaged communities in Australia, Jordan and China, by preventing specific risk factors such as smoking and obesity for chronic diseases. In particular, participants will have the opportunity to gain skills in implementing and facilitating the SALSA and Triple A programs, which involve a step-wise peer education process. Firstly, trained university students coach senior high school students to become Peer Leaders in an interactive one day workshop. Peer Leaders learn about specific health risk factors, including asthma, smoking and obesity, and acquire skills in group facilitation and leadership. Secondly, working in groups of three, Peer Leaders deliver health lessons to their younger peers using standardised program manuals and materials. Interactive activities, including videos, acting out, games and informative quiz shows are used to engage students, while furthering their educational skills. Finally, wider dissemination of health messages occurs when younger students relay what they have learnt to students and members of the school community, through creative performances. Peer-education programs have been found to have a positive influence across a range of health and education outcomes for adolescents. Triple A and SALSA, have been found to lead to notable improvements in health behaviours and quality of life. Triple A has led to decreases in asthma attacks, school absenteeism and an increase in self-efficacy to avoid taking up smoking, while SALSA has led to an increase in healthy eating and physical activity. In terms of educational achievement, through their involvement in the programs, adolescents have been found to develop a sense of personal responsibility and confidence as well as leadership, communication and teamwork skills. The programs also promote engagement and retention of adolescents in schools, furthering their educational outcomes. Furthermore, by involving future medical and other health and education professionals as Educators, the program offers adolescents with positive role models. Overall, feedback from high school students and staff indicate that the peer-education programs are rated highly by all involved as they help to create a supportive school environment to promote health lifestyles and foster educational development.

CONCLUSIONS: There is a clear need in public health for programs which are focused on the prevention of chronic diseases and are developmentally and culturally appropriate for adolescents, specifically from disadvantaged communities. Previous research has found that successful preventative programs for adolescents in schools include using appropriate age peers as educators (as opposed to adult providers), interactive learning strategies, and including training and practice in the use of refusal and other life skills. Our proposed peer-education programs encompass all these elements, thus presenting a unique, innovative and effective means to addressing health disparities and improving health and education outcomes amongst adolescents.

Keywords: Public Health

CW-1

Overweight Adolescents: How to Involve Parents in the Treatment?**Catherine Chamay Weber, Francoise Narring, Helena Fonseca***

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OBJECTIVES: • To understand the principle of family systems theory applied to the assessment and treatment of overweight adolescents and their families.

• To discuss some tools for involving parents in the weight management process in order to facilitate and support adolescent behavioral changes.

METHOD: Adolescence is a crucial period of development. Overweight adolescents are at risk of poor psychosocial development. Weight management at this stage faces multiple challenges besides weight loss, including allowing a successful transition into adulthood. Involving parents in the program, although challenging, has shown to be a key element for supporting life style changes.

This workshop is designed for professionals who have some familiarity with overweight, but desire to gain further knowledge and skills to involve parents and families in the treatment. The facilitators will discuss the approach they have developed in their respective programs. Case based presentations will guide the session and practical problem solving and solution focused strategies will be discussed.

CONCLUSIONS: The incidence and prevalence of overweight and obesity among adolescents, as well as the demand for treatment for these individuals and their families, is increasing every day. This workshop provides tools for involving families in the treatment of overweight adolescents in order to effectively achieve weight control and a better quality of life.

CW-2

Legally Young – Everyday Ethics and Young Patients' Rights**Kirsten Boisen, Mary Ott Leads*, Anne Meynard****

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OBJECTIVES: After the workshop, the participants will be able to identify core ethics principles in global adolescent health, how adolescent development intersects with these core principles, and the practical application in clinical settings, focusing on confidentiality and informed consent.

2- have a personal agenda on how to encourage self-management and competencies of young people in a developmentally appropriate manner in their local clinical setting

METHODS: Because of the cognitive, psychological, physical, family, legal, and social transitions that mark adolescence, professionals in contact with young people (health care providers but also teachers, social educators or social workers) may be confronted with legal and ethical challenging situations.

Of particular importance is the transition in responsibility and decision-making in health care. Adolescents have a greater need for involving their family and network in relation to critical or chronic illness compared to adult patients. However, the role and involvement of the parents may be challenging in a clinical setting e.g. managing the gap between the adolescent's right to confidential care versus the parents' rights to know and care. Adolescent providers have an obligation to support and stimulate emerging autonomy, protect adolescents with diminished autonomy, and provide the most beneficial care possible.

Ethical dilemmas are resolved with case-based reasoning. This workshop will use case scenarios, adapted from the facilitators' experience, to illustrate key points and meet learning objectives. A systematic approach to case-based analysis will be taught. These cases represent a spectrum of ethics and legal dilemmas in adolescent health, and will include issues related to confidentiality, consent, capacity and disclosure. Specific examples include HIV disclosure to adolescents in a low income setting, disclosure of substance use to parents, sexual behavior and contraceptive needs in very young adolescents, negotiating adolescent-parent disagreement on treatment.

The cases will be analyzed in a developmentally-focused and practical approach focusing on involving young people and their network in decision-making and self-management in concord with patients' rights and guidelines for youth friendly health services. The workshop will highlight teaching tools.

CONCLUSIONS: Adolescent providers must frequently deal with legal and ethics dilemmas, ranging from confidentiality to end-of-life decisions. However, there is little training in systematic approaches to identifying and analyzing these dilemmas.

SHW-1

Contemporary Gay, Lesbian, Bisexual Health and Questioning Adolescent Health Issues, and the Persistent Burden of HIV

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OBJECTIVES: 1. List the major determinants of health that affect this population.

2. Understand the epidemiology of HIV risk among YMSM, and learn about potential approaches to HIV prevention.

METHODS: Sexual Minority youth face a variety of health issues unique to them. These include poor quality of health care from practitioners who lack knowledge about this group, not seeking care due to anxiety about confidentiality and prejudice, high prevalence of mental health problems including anxiety, depression and suicide, increased rates of substance use such as nicotine, alcohol and illicit compounds and elevated incidence of STIs and HIV, among others. HIV, particularly, has emerged as a persistent health challenge, as numerous recent epidemiological studies have revealed continued high rates of HIV infection among a subpopulation of these adolescents, young men who have sex with men (YMSM), especially YMSM of color.

These disparities have persisted in spite of growing public health intervention efforts in education, and prevention targeted toward these adolescents. While the discrepancies above are well established, it is much less clear why they exist. As it relates to HIV, previously held theories that YMSM of color engage in risky behaviors (e.g. unprotected anal intercourse, intercourse with more partners, intravenous drug use) at higher rates than members of other racial groups are countered by growing evidence to the contrary.

We propose a workshop that will allow providers to discuss the determinants of health that impact this population and how to address these barriers. The first half of this workshop, using a case based approach, will outline the determinants of health that impact this population; the second portion of the workshop will specifically address HIV in YMSM, discussing best practices from successful pilot, and long standing interventions targeted towards YMSM that have effectively decreased incidence of HIV infections.

CONCLUSIONS: Sexual minority youth are a population at risk. Most health care practitioners have not received adequate training to manage this sub group of adolescents. Given that they have a high rate of mental health problems, substance use, and sexually transmitted infections including HIV. It is important that this educational lack be remedied. Health care practitioners have to be aware of recent literature, identify risk behavior and intervene to decrease risk behavior.

SHW-2

Menstrual Problems in Adolescents: too much, too often, too little, too painful

Barbara Snyder

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OBJECTIVES: 1- Describe normal menstruation, including physiology and patterns.

2- List the differential diagnosis of abnormal uterine bleeding in young women.

METHODS: Menstrual problems are common in adolescents and are one of the most frequent reasons young women seek medical attention. Teen menstrual concerns include those related to: cycle regularity (irregular or absent); cycle frequency (too often, too infrequent); cycle length (too long); amount of bleeding (heavy and/or prolonged); and associated symptoms (pain, gastrointestinal symptoms, headaches). While many young women's menstrual complaints fall within the range of "normal," they are often troubling and can disrupt the woman's regular activities, including school, work and sports. However, menstrual complaints can also indicate a significant underlying problem. The differential diagnosis of menstrual problems is extensive. Etiologies include genetic or anatomic abnormalities; polycystic ovary syndrome or other endocrine disorders; coagulopathies; endometriosis; infection; extreme weight loss or exercise; and pregnancy. This workshop will review normal menstruation and the clinical presentation and evaluation of abnormal uterine bleeding, primary and secondary amenorrhea, and dysmenorrhea. Options for management of each of these problems will be presented, including evidence-based treatments when available. Patient cases will be used to illustrate clinical features and to enhance discussion.

CONCLUSIONS: Menstruation has been described as a "vital sign" for adolescents because menarche and menstrual cycles are critical indicators of health or, conversely, of disease. Even when menstrual cycles and menstrually-associated issues fall within the normal range, they are a common source of worry and distress for young women. There are important differences in the physiology between adolescents and older women, and it is essential that those providing gynecologic care to young women know the causes, presentations, and treatment for common menstrual disorders in this age group.

Keywords: Clinical Practice

PHW-2

Youth Participation in Europe: Evidence, Opportunities and Challenges in Various Settings**Anne Meynard, Damian Wood*, Fiona Straw*, Jessica Platt***, Grete Teilmann****

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OBJECTIVES: 1- Gained understanding on innovative approaches to the meaningful and ethical participation of young people

2- Developed skills in involvement of young people in research, education or clinical work based on case studies in various European countries and settings

METHODS: Delivery of health services relies more and more on a collaborative client-provider approach. Training programmes for health professionals have to adapt and include these approaches but teachers are not always adequately trained and health services are often not adapted to the needs of adolescents. Youth participation is very patchy in European countries and often more focused on social change or community projects.

In this workshop the participants will be encouraged to develop:

- An understanding of young people's right to meaningful and ethical participation in the development of health services as well as their own healthcare as outlined in the United Nations Convention on the Rights of the Child (UNCRC)
- A common language of participation including addressing terms such as consultation, engagement and involvement as well as understanding tokenism, manipulation and decoration
- Skills in planning, facilitating and evaluating young people participation
- Innovative ideas and approaches to reduce health inequalities and support the participation of young people from groups who are difficult to reach or who have difficulties accessing services
- Know about the extent of the current healthcare evidence base for young people's participation in health services.

The workshop will be interactive and aims to offer an opportunity to share experiences around youth participation projects through small group discussions. Groups discussions will be based on VIPP techniques (visualisation in participatory programs) to allow exchange on criteria for effective youth participation based on practical case studies and existing models of evaluation. This workshop is adapted for a wide range of professionals (youth workers, nurses, social workers, health educators, doctors, psychologists, policy and health planning...).

CONCLUSIONS: The right of young people to be involved in decisions about them and their healthcare is enshrined in article 12 of the UNCRC. Health services are often developed and designed around the needs of elderly or very young patients. The ethical and meaningful participation of young people has the potential to positively influence their health and wellbeing as well as influencing service design and delivery and addressing health inequalities. Increasingly participation is seen as a key aspect of public health policy to drive quality improvement and assure effective governance of health services but is still underdeveloped in most health services.

CW-3

Parents Need Transitional Care Too!

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OBJECTIVES: 1- To identify the challenges presented by parents of young people with long term conditions (LTC) that participants encounter in clinical practice and strategies to address them

2- To explore parenting from a socio-anthropological perspective (according to the different cultural backgrounds of the participants).

METHODS: Adolescence is a time when parents are confronted with new challenges such as shared-management of the condition, letting go of their previously dependent child, fostering resilience in their child to take on more responsibility. Although there has been increase in understanding of the impact of a long term condition on adolescent development, less attention has been focused on the changing/evolving roles of parents of such young people. In the absence of this evidence, assumptions are being made by practitioners as to roles parents play in condition-management and/or supporting self-management in young people and young adults with long term conditions. This workshop will aim to enable participants to reflect on (1) the changing nature of parenthood in the twenty first century; (2) the challenges they, as health practitioners, face in their clinical practice when working with parents of young people with long term conditions; (3) the impact of their own cultural backgrounds on these interactions; and (4) the strategies they use when facing such families. The workshop will include small group interactive exercises which will draw on the clinical experiences and cultural background of the participants in addition to presentations of current research evidence. This will be made possible through the joint competencies of the facilitators, JMCD being both a practising MD in the field of adolescent rheumatology as well as clinical researcher in the area of adolescent health and transitional care, and CA being an anthropologist doing research in the field of adolescent health and who is currently doing her PhD on the subject of parents of adolescents with long term conditions.

CONCLUSIONS: In clinical practice, negotiating the often differing perspectives regarding condition management of practitioner, parent and/or adolescent can be a major challenge for practitioners. Adolescence is a time when parents are confronted with new challenges regarding their child's condition management. Many of these challenges are influenced by the sociocultural background of the family and the practitioner and by the changing nature of parenthood in the 21st century. Sharing experiences through the diverse settings and cultures represented by the participants will help better understand the needs of parents of young people with LTC and the strategies practitioners can use to address them.

Keywords: Clinical Practice

PDW-2

A Workshop on Workshops

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OBJECTIVES: 1 Learn the 6 components of pre-workshop planning.

2- Be able to design and develop effective interactive educational activities for educational purposes in their own environment or for conference presentations.

METHODS: Workshops are defined as "a usually brief, intensive educational program for a relatively small group of people in a given field that emphasizes participation in problem solving efforts...." (Webster, 1977). This definition requires interaction between the presenter and an audience. However all too often a workshop is a passive activity where the learner listens to a long didactic presentation instead of being an active partner in the learning process. This workshop will use interactive teaching approaches to demonstrate the key principles involved in creating an interactive workshop to enhance the teaching and learning experience of presenters and participants. Participants will learn the 6 components of pre-workshop planning: Defining a subject matter, Setting actionable objectives, Finding out who your audience will be, Deciding on the content, Choosing appropriate teaching methods, Designing objectives based evaluation based on the objectives and to obtain appropriate feedback. The teaching tools will be defined and modeled throughout the workshop. Participants will be invited to decide on a topic that they want to develop into a workshop. Small groups will use clear guidelines in order to identify and clarify objectives that 'RUMBA'. Sharing the objectives with the wider group will enable an examination of presentation skills, how to deal with difficult participants and how to give feedback in a positive and constructive fashion. The groups will consider a variety of teaching methodologies and decide which are best suited to the workshop they are developing and why. Small group exercise will be used to develop and compare possible evaluation tools. Participants will be invited to bring their own ideas of workshops they would like to develop. The workshop will be an opportunity for both junior and senior participants to explore and develop their teaching styles and take away new ideas to help them ensure that their teaching is accessible to all. At the end of this workshop participants will be able to develop effective interactive educational activities for educational purposes in their own environment or for conference presentations.

CONCLUSIONS: A workshop is meant to be an interactive learning experience for adult learners. Yet, too often it is a passive activity where learners listen to a long didactic presentation instead of being active partners in the learning process. The goal of this workshop is to help remedy this problem by providing participants with a practical approach to planning and delivering an interactive workshop. It will demonstrate the skills needed to successfully achieve this goal, provide participants with the opportunity to apply what they have learnt and obtain feedback from the co-leaders and their colleagues.

Keywords: Clinical Practice

CW-4

Culturally Competent Care and Nurses Role in Developing the Health Status of the Adolescents Living in Different Conditions**Ayşe Ferda Ocakçı, Candan Öztürk***

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METHOD: Cultural affiliations can have a strong influence on determining family structure and dynamics. These affiliations include socioeconomic status, educational attainment, race, ethnicity, and communities where families live. Family interactions can make a significant impact on the treatment of health problems and concerns and, in turn, can influence adolescent relationships with the healthcare professionals.

Different conditions means, To live in workplaces instead of school, to be homeless and live on the streets, to be in prison, to live in hospitals with chronic illnesses. today I want to talk about the adolescents working in workplaces we generally call them as; labour adolescents. In Turkey, The 2006 child labour survey showed that 5.9 percent of all children aged between 6 and 17 were employed in some form of economic activity. This represents over 900.000 children. One third were in the 6-14 age group and the remainder aged 15-17.

CONCLUSIONS: Adolescent Health Nursing can do lots for those adolescents to develop their health status. They can teach how to protect themselves from unhealthy conditions.

SHW-3

Risk Factors and Preventative Strategies for Adolescent Sexual Violence – A Cross-National Urban Perspective**Andrea Goddard, Sophie Khadr*, Katriona Ogilvy Webb****

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OBJECTIVES: 1. Compare and discuss the nature of and risk factors for the various forms of adolescent sexual violence in culturally diverse/multinational urban settings

2. Explore known preventative strategies and discuss novel approaches to identification and intervention.

METHODS: Sexual violence affects individuals of all ages, cultures, gender, orientation and abilities. Some groups may be disproportionately affected. 30% of under 18s in London, England, are non-white but in the years 2008–2011, 50% of 13–17 year olds attending the London Havens Sexual Assault Referral Centres came from census groups other than White British, White Irish or White Other. Ten percent had learning difficulties compared with a population average of 2.5%.

Based on evidence submitted to the current CSEGG (Child Sexual Exploitation In Gangs* and Groups*) Inquiry in England, at least 16,500 children under 18 years were identified as being at risk of child sexual exploitation during one year and 2,409 children were confirmed as victims of sexual exploitation in gangs and groups during the 14-month period from August 2010 to October 2011. There was a higher rate of victimisation amongst black and minority ethnic (BME) children and young people than has been previously identified.

(* where gangs mainly comprise men and boys aged 13 – 25 years old, who take part in many forms of criminal activity, such as knife crime or robbery, who can engage in violence against other gangs, and who have identifiable markers such as territory, a name, sometimes clothing etc. While children can be sexually exploited by a gang, this is not the reason why a gang is formed. Groups involves people who come together in person or online for the purpose of setting up, co-ordinating and/or taking part in the sexual exploitation of children in either an organised or opportunistic way.)

In terms of intimate partner violence in adolescent relationships, a recent National Society for the Prevention of Cruelty to Children (NSPCC) study in the UK echoed findings in the USA in that high numbers of adolescents experience physical, emotional and sexual violence in their intimate partner relationships (a quarter of girls and 18 per cent of boys reported some form of physical partner violence, three-quarters of girls and half of boys reported some form of emotional partner violence. One in three girls and 16 per cent of boys reported some form of sexual partner violence). The incidence, frequency and level of negative impacts rates for all forms of violence were greater for girls. The majority of young people either told a friend about the violence or told no one. Most respondents in this study were white.

We propose an interactive session to:

- compare and contrast risk factors for adolescent sexual assault among urban youth in major cities of different countries with attention given to particular characteristics and vulnerabilities associated with adolescents who are trafficked, homeless, unaccompanied minors run-aways and/or in the care of the state
- share experiences of preventative strategies among workshop attendees– including government/public health preventative policies and measures, school-based educational measures or those targeted at preventing revictimisation
- identify and discuss obstacles to interventions: particularly those related to culture, social marginalisation and legal frameworks
- examine and discuss efficacy of interventions

CONCLUSIONS: Large numbers of adolescents are victims of sexual violence and exploitation in settings outside the family: in intimate partnerships and by gangs and groups. There are high rates of under-identification. Better understanding of the settings, susceptible groups, risk factors and behavioural identifiers that might increase the likelihood that an adolescent is a victim of sexual violence is needed. In many countries existing health, judicial and social care structures have started but struggle to address these emerging problems. Effective strategies are needed for education and early identification of at-risk adolescents and treatment of those already affected by sexual violence.

SHW-4

What are the Barriers for Young People to Visit a Health Facility for Reproductive and Sexual Health Problems in Different Cultures? How to Overcome the Barriers?

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OBJECTIVES: 1- By the end of this workshop the participant should be able to have an awareness of the impact of the barriers for meeting the SRH needs of young people in different cultures and regions

2- By the end of this workshop the participant should be able to identify barriers to visit a primary health care center and list recommendations to overcome barriers for young people to visit health facilities.

METHODS: Workshop program will have these stages: 1. Introduction 2. A summary presentation according to the sexual and reproductive health needs of young people. 3. Divide the group in 3 small groups. Hand out a flipchart with a pen. One small group will brainstorm on the physical barriers for young people to visit a primary health care center for their sexual and reproductive health needs. Another small group will brainstorm on the individual personal barriers of young people themselves. And the last small group will look at what kind of barriers young people face with the medical staff of a primary health care center 4. The results will be grouped to social, physical and legal. The answers according to different social structure will be opened to discussion while this grouping time. In order to eliminate these barriers (remove obstacles), solution recommendations will be taken from the foreign participants. Also their experiences from their countries will be asked to share. Health service worker, family and society point of view will be analysed at eliminating barriers. 5. Divide the participants into three groups. Instruct each group to go to a specific part of the room. Distribute a sheet of flipchart paper and markers to each group. When the groups are ready, explain that you want them to imagine that they have received funds to reorganize their primary health care centre and make it youth friendlier. Ask the groups to describe what this facility would be like. Let the group write down criteria for all the questions. 6. There will be a voting between the pictures and the first adolescent friendly reproductive health service institution will be determined.

CONCLUSIONS: In growth and development period adolescents think that sexual growth and development is very important. In this period, some problems can occur and health services needed to be used, however in many societies reproduction and sexual health (RSH) issues are thought to be private. Also these RSH services are not adolescent friendly provided. This decreases the use of the services by adolescents. There're social, legal and physical barriers at access to RSH. Service providers should know these obstacles and can be able to discuss how to remove these obstacles. The recommended criteria in adolescent friendly RSH services will be discussed.

Keywords: Public Health

PHW-3

Providing Care to Underserved Adolescents Utilizing the Enhanced Medical Home Model of Care

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OBJECTIVES: 1- Describe the key components of the Enhanced Medical Home model of care

2- List the Pros and Challenges of each of the models presented: mobile, community-based, and school-based clinics

METHODS: Low-income and poverty populations have numerous barriers to accessing needed health care, and adolescents are often the least served of these populations. The Enhanced Medical Home model of care has been successfully utilized in the United States and Europe to provide comprehensive, continuous, affordable, and culturally sensitive care to these adolescents. Three different approaches have been developed in targeting underserved adolescents using the Enhanced Medical Home model: mobile clinics, community clinics, and school-based clinics. There are pros and challenges associated with each of these 3 models of care. This workshop will discuss the Enhanced Medical Home Model of Care in depth, as well as the 3 models of care utilized as noted above. Successful model programs will be featured in detail. Dr. Ammerman will give the American perspective and Dr. Martin, European perspectives.

CONCLUSIONS: Research has demonstrated that the Enhanced Medical Home model of care can lead to superior health outcomes in underserved populations, including adolescents. Further adoption of this model could lead to improving the health of underserved adolescents in any underserved community.

Keywords: Public Health

CW-5

Cognitive-Behavioral Treatment of Adolescent Depression and Obesity: A Model of Group Therapy for Their Combined Treatment**R. Hulya Bingol Caglayan, Dilara Demirpence**

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OBJECTIVES:1- Behavioral therapy based group therapy experience by depressive adolescents
2- combined therapy experience for depression and obesity**METHODS:**It is only last two decades that adolescent depression has become the focus of public and scientific interest. In recent years several large scale epidemiological studies have shown that clinical depression among teenagers is a significant problem affecting up to 3% of the general high-school population at any point in time (Kashani, Holcomb, and Orvaschel, 1986). Overweight and obesity in adolescence are known to have significant impact on both physical and psychosocial health. Especially mood disorders are examined frequently by obese individuals. Despite their co-occurrence, depression and obesity rarely are treated concurrently, and there are no models for providing such combined therapy. Studies are lacking of obese individuals with major depression who are provided behavioral treatment for both their obesity and their depression, and in whom mood is assessed by diagnostic interview and scales. In our workshop we plan to introduce a 9 week group therapy program that combined two evidence-based approaches-cognitive behavioral therapy (CBT) for depression and behavioral treatment-lifestyle interventions for obesity. Our primary hypotheses were that at the end of treatment, participants would achieve 1) a mean weight loss 2) a clinically significant relief in depression defined by a decrease on child depression inventory. A cut-off score of 19 on CDI and according to clinical psychiatric interviews 9 adolescents were assessed as depressive and eligible for the group therapy. Participants attend 9 weekly, 50-min group sessions (in groups of 4-7 participants) led by a child cognitive-behavioral therapist. Participants are introduced to the cognitive model of depression and taught to identify and modify their negative automatic thoughts and core beliefs. Skills taught included mood monitoring, improving social skills, increasing pleasant activities, decreasing anxiety, reducing depressogenic cognitions, improving communication, improving better self/body perception and conflict resolution. The same adolescent group supplemented with a separate CBT parent group. Detailed therapist manuals for therapists and co-therapists are used for both adolescents and parent group to ensure the protocol compliance. Every week lifestyle interventions are performed by pediatricians working on the adolescents department. Weight control is also achieved in these visits. Participants completed outcomes assessment at baseline, week 2, week 6 and week 9 which depression, self-esteem, social anxiety, social phobia and life quality were measured. The aim of this group therapy model is to treat depressive adolescents, and to motivate them in losing weight.**CONCLUSIONS:** Especially mood disorders are examined frequently by obese individuals. Despite their co-occurrence, depression and obesity rarely are treated concurrently, and there are no models for providing such combined therapy. Studies are lacking of obese individuals with major depression who are provided behavioral treatment for both their obesity and their depression. This model of group therapy can be accepted as a base method and can achieve interest of researchers to develop and enhance the new ways for the therapy of depression and obesity. It helps also to improve the clinical experience in this field.**Keywords:** Clinical Practice

PDW-3

Journal Publishing in the Global Age: An Editorial Perspective**Tor D. Berg, Donald Payne*, Charles E. Irwin****

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*Associate Editor, Archives of Disease in Childhood

**Editor in Chief, Journal of Adolescent Health

Which journal is the best forum for my work? How do I show that my study is novel and therefore worthy of a review? How can I prepare my manuscript for an English-language journal if I'm not a native speaker? How do I write a concise and compelling abstract? How do I respond to reviewer critiques in a way that increases the chances of my manuscript being published? These are some of the key challenges you'll face in getting your manuscript published in a peer-reviewed journal.

In this interactive workshop, participants will learn key strategies for successfully publishing a manuscript. Many journals screen manuscript submissions, with only a percentage sent out for review. One goal of this workshop will be to discuss effective strategies for getting manuscripts reviewed, including the importance of writing a compelling abstract. We will also discuss the importance of demonstrating study novelty, determining whether your study's findings are most appropriate for an international or a regional audience, and provide tips on typical pitfalls that should be avoided when submitting manuscripts. Discussion will also center on the components that are most critical to reviewers in the first submission, and how best to respond to reviewers' critiques in a revised manuscript.

This workshop will be led by editors from the Journal of Adolescent Health and Archives of Disease in Childhood. Workshop participants are invited to bring specific examples for discussion and consultation.

SHW-6

Gynecologic Evaluation of Adolescents and Approach to Common Gynecologic Disorders in Adolescents including Minimally Invasive Surgery

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OBJECTIVES: 1. Gynecologic evaluation of adolescents

2. Management of gynecologic disorders in adolescents

3. Indications for laparoscopic and hysteroscopic surgery in young adolescent girls and the timing of decision-making process

4. Learning the main concept of establishing dialog between young patients after the decision of surgery

5. Learning basic information about how to apply the methods of minimally invasive surgery in age group

METHODS: Gynecologic evaluation of an adolescent is different than routine evaluation as her physical and emotional changes are rapid during this period. The aim of such evaluation is to clinically evaluate and diagnose the patient and then to carry out the appropriate treatment. To achieve these aims, the clinicians have to establish a relation that is based on trust, since such patients may have serious sexual and fertility related problems. Therefore, creating a supporting environment has the utmost importance. On the other hand, due to the social, psychological and cultural differences between such patients, creating such an environment may be somewhat difficult.

The aim of this workshop is to cover how to establish healthy dialogue with adolescent patients, how to approach certain gynecologic disorders and especially how to approach patients and their relatives in a conservative environments like Turkey and finally to cover indications of laparoscopic and hysteroscopic surgery in adolescents, while presenting basic techniques during surgery. During the workshop, ways of explaining sexuality to adolescent patients will be discussed in an interactive setup with the attendees. In addition, sexuality of adolescents and how sexually transmitted diseases should be explained to such adolescents will be covered as well. Especially, Mullerian anomalies and how they should be conveyed to patients and their relatives will be highlighted. How to establish a gynecologic evaluation protocol for adolescents, which tools to use, differences between the evaluations of sexually active adolescents and sexually inactive adolescents will be included. Differences between abdominal, vaginal and rectal ultrasonography in adolescents (when to choose each modality and for which pathology) will be presented with sample cases.

In the pediatric adolescent gynecology clinic of Istanbul University School of Medicine, the most common disorders in admitted patients are (1) dysfunctional uterine bleeding, (2) polycystic ovarian syndrome (PCOS), (3) vaginal discharge and (4) premature ovarian insufficiency (POI). In the second part of the workshop, above-mentioned disorders will be presented. Factors causing dysfunctional uterine bleeding and its management in adolescents will be discussed. PCOS in obese adolescents and how they should live with this disease, including changes in lifestyle will be presented. How to manage hirsutism cosmetically and medically will be covered as well. Reasons of vaginal discharge in sexually active adolescents and sexually transmitted diseases, especially Human papillomavirus (HPV) infection, will be presented, along with the management of smear sampling in adolescents. Vaginal discharge in sexual inactive adolescents will be another topic of discussion. POI can be seen in approximately 1% of the population. POI affects the quality of life patients directly and negatively. The management of POI has not been clearly established as of yet. Therefore, experience of the clinician plays an important role in the approach to the patient. The workshop will focus on the clinical management of POI patients, including various problems they may face (i.e. treatment of adolescents with and without chromosome anomalies).

The most common laparoscopy indication in adolescents is adnexal masses. The incidence of adnexal masses in the pediatric and adolescent population is approximately 2.6 per 100.000 girls per year. Because of this low incidence, there have been only few studies covering the clinical presentation and management of adolescents with adnexal masses. Management of adnexal masses, when to laparoscopically approach the mass and how will be presented as well.

Another indication for laparoscopic surgery in adolescents is Mullerian anomalies. The workshop will cover how to approach laparoscopically to different uterine anomalies, including basic surgical techniques.

Endometrial polyps in adolescents may cause serious vaginal bleeding. Although this is a rare incidence, hysteroscopic management of such polyps in adolescents may be vital to stop the bleeding. When to perform hysteroscopy and to which patient, namely the decision making process, will be covered during the workshop and will include different algorithms. Virginity is important. Hence, hysteroscopic approach without perforating the hymen, the right technique, etc. will be discussed.

The workshop will incorporate videos and training box demonstrations as a part of its minimally invasive surgery component.

PDW-4

Simulated-Patient-Based Programs in Adolescent Health Care Training-An Interactive Workshop**Daniel Hardoff, Anne Meynard***

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* Geneva University Hospital, Switzerland

OBJECTIVES: 1- Discuss utilization of simulated-patient-based programs in teaching adolescent health care
2- Practice adolescent related simulated scenarios as a group exercise

METHODS: Physicians are frequently positioned in the front line of adolescent health care, in primary care or in hospitals as well as in specialty clinics (gynecology, gastroenterology, nephrology, pulmonology, etc). Adolescents often tend not to share personal issues with their health care providers either because they do not realize the health hazards connected to these issues (e.g. cigarette smoking, or unprotected sex), or because they do not wish to share confidential matters with adults identified as part of the "rules forming system". The adolescent-physician encounter demands unique communication skills, in order to obtain sufficient information regarding the youngster's health and at the same time to create an atmosphere of confidentiality, professionalism as well as empathy and support. The use of actors as simulated patients (SPs) is an educational tool commonly used to develop communication skills with patients.

In Geneva University hospital, the multidisciplinary youth clinic has the mandate for developing training programs in adolescent health both for undergraduate and postgraduate trainees of various health professions. In this context adolescent SP-based programs were utilized since 2005 mainly for postgraduate training and for continuous medical education of doctors and nurses. The SPs were young people recruited through an acting group. Since 2008 Geneva's medical school started to implement a workshop to improve interviewing skills (e.g. confidential care, the HEADSSS) for medical students. There is a growing interest of other professionals (nursing school, midwives, dental hygienists) to utilize SP-based programs in their training curricula.

The Israel Center for Medical Simulation (MSR) at the Chaim Sheba Medical Center and the Sackler School of Medicine - Tel Aviv University, strives to improve patient-safety and health care providers' skills through new approaches to health care training and clinical practice. MSR works to reduce errors and improve quality of care by training on teamwork, clinical and communication skills. Since 2002, MSR provides one-day simulated-patient (SP) based workshops for physicians who see adolescents in their practices. In the past 10 years more than 700 Israeli physicians were trained at MSR to improve their communication skills with adolescent patients and their parents. In this workshop two experienced physicians in the field of SP-based training from Geneva University Hospital and from MSR, will share with the participants their experience in the development and implementation of SP-based programs in adolescent medicine, as well as in research projects based on these programs. The workshop will include description of different modalities for SP based educational programs, and presentations of programs that have been practiced with physicians who encounter adolescent patients in their clinics from various specialties: residents in training in pediatrics, primary care physicians, gynecologists, as well as military physicians and school doctors. Live and video recordings of simulated scenarios of physician-adolescent encounters will be demonstrated, followed by interactive discussions with the workshop's participants.

CONCLUSIONS: Physicians' communication with adolescent patients and their parents requires unique skills that are not routinely taught in undergraduate and postgraduate frameworks. Only few medical schools and continuous medical education curricula include simulated-patient-based training programs that address communication issues in the health care of adolescents. This workshop, facilitated by two physicians experienced in simulated-patient-based training from two large medical centers, will expose adolescent health care providers from various countries to this powerful modality that can be implemented in most of the teaching programs in adolescent medicine.

Keywords: Educational issues related to adolescent health.

CW-6

When Adolescent Medicine Is Not Enough - A Neurodevelopmental Perspective**Charlotte Nylander, Deborah Christie***

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OBJECTIVES: 1- To raise awareness about neurodevelopmental problems in relation to Adolescent Medicine.
2- To gain tools regarding how to target concomitant neurodevelopmental problems in adolescents with chronic conditions.

METHODS: Much is known about the adolescent biopsychosocial development as well as the development of the adolescent brain. This workshop will focus on neurodevelopmental aspects in relation to adolescent medicine. It will widen the horizon of adolescent medicine when it comes to challenging adolescent patients. Examples will be given from our research on adolescents with type 1 diabetes and poor metabolic control, where we showed that concomitant neurodevelopmental problems, such as definite memory and learning problems as well as mild executive problems, were associated with poor metabolic control. Our identified correlation between low numbers of protective factors and an increased risk for experimental behaviour in adolescents with chronic conditions will also be highlighted. The workshop will be interactive with case studies, brainstorming and role play. It will provide tools concerning how to address challenging adolescent patients from a neurodevelopmental perspective.

CONCLUSIONS: The workshop will raise awareness about undetected concomitant neurodevelopmental problems in adolescent patients with chronic conditions and poor compliance. It will also provide tools on how to target these patients, when our knowledge about the adolescent development and adolescent medicine is not sufficient.

CW-7

A Transcultural Approach to Adolescent Health

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OBJECTIVES: 1- Each participant will confront one of their own biases about adolescent health care in cultures other than their own.

2- Each participant will understand the differences and similarities in adolescent health care in their own country as compared to Saudi Arabia, Thailand, Jamaica and Canada.

METHODS: There are currently 1.2 billion adolescents in the world, making up 18% of the world's population and with the great majority living in developing countries (UNICEF, 2011). Demographic differences across countries are seen due to changes in fertility and mortality rates, with North America and Europe now having low growth rates and an aging population; Latin America, the Caribbean, East Asia, and some parts of the Middle East and South Asia have moderate population growth; and others such as most of Sub-Saharan Africa, some parts of the Middle East and South Asia continue to have young and youthful populations (Brown et al., 2002). Many countries have not recognized adolescence as a distinct age group until recently. Cultural, societal and sometimes religious norms influence adolescence and adolescents and shape what may be acceptable for adolescents from a specific part of the world as opposed to another. This in turn may influence behavior and addressing such behavior. The establishment of adolescent health as its own field has primarily been in developed countries and is more recently emerging in many developing countries. The available literature that addresses adolescents and their health needs may not necessarily align with the health needs and approach to adolescent healthcare for those adolescents of a certain part of the world. Local healthcare providers may therefore face the challenge of working with an adolescent yet not have received the training or have resources available that are culturally sensitive and take into consideration the needs of local adolescents. Similarly, healthcare providers in developed countries may be faced with multicultural adolescent patients whom require a modified or different approach to their healthcare in comparison to a native adolescent. The concept of a transcultural approach to adolescent healthcare therefore becomes a necessity. This workshop will use animations and role playing to explore the richness and challenges of providing adolescent health care in a wide variety of cultures. This workshop is being designed by leaders in adolescent health in Saudi Arabia (Fadia AlBuhairan), Thailand (Boonying Maribaniboon; Rosawan Areemit), Jamaica (Abigail Harrison-Kong) and Canada (Miriam Kaufman). We will all lead the workshop, but have picked 2 of the 5 of us as the "official" workshop leaders and one as the organizer for the purposes of this application.

CONCLUSIONS: For too long, adolescent health care has been the domain of a small number of countries and has made assumptions based on the dominant cultures of those countries. Adolescents everywhere deserve health care that is appropriate to their developmental stage and that help them reach their full potential. There are ethical challenges in deciding what kind of care to provide and whether that care must always be congruent with the overriding culture of the area. This workshop will explore these difficult issues in an interactive manner and with humour and a sense of solidarity in difference.

Keywords: Clinical Practice

SHW-5

Sexual Health and Contraception in Young People

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OBJECTIVES: 1- To understand the numerous potential barriers to provision of age-appropriate sexual and reproductive health advice for young people

2- To raise awareness of the whole range of contraceptive options for young people and to improve communication and clinical skills in sexual health consultations with young people through scenario-based teaching

METHODS: The workshop will comprise 3 sections, comprising small group work, facilitated open discussion and some Powerpoint lecture-style slides. 1. Participants will be asked to consider their personal early experience of sexual health education and whether this was comprehensive and accurate. The sources of sexual health information for young people will be discussed and this will encourage reflection on participants' interactions with young people in sexual health settings. They will identify any personal barriers/prejudices that may influence their consultations. Detailed sexual history taking skills and the potential difficulties young people may face in sharing personal information will also be discussed. 2. A brief participation exercise will demonstrate the importance of consent being given voluntarily and free from pressure or coercion. The relevance of this to staff working with young people in sexual health or child sexual abuse settings will be highlighted. A facilitated discussion on consent and confidentiality will follow to identify varied practice and attitudes globally, as well as outlining the UK legal/ethical stance. 3. An interactive session will show the full range of contraceptive options for use in young people, including indications for use, UKMEC eligibility criteria and potential side effects. This will be in accordance with UK Guidance for Young People from the Faculty for Sexual and Reproductive Health.

CONCLUSIONS: The United Nations Millennium Development Goals identify the importance of achieving universal access to reproductive health, in particular highlighting the need to reduce teenage pregnancies and improve family planning services. The workshop will equip participants with the knowledge, reflective attitude to practice and skills in sexual history taking in order to work towards this goal for all young people seen in daily clinical work. Clear and accurate contraceptive advice is important for young people to ensure compliance and minimal failure rates.

Keywords: Sexual Health

CW-8

Gender Focus in Addressing Eating Disorders in Adolescents

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OBJECTIVES: 1- Acquisition of knowledge in detecting warning signs of eating disorders in adolescents in general and by gender particularly
2- To develop skills in addressing this disease by gender

METHODS: With this workshop is intended to make health professionals and other professionals able to diagnose eating disorders in adolescents by recognizing warning signs and realizing that these signs and the approach of this disease should be gender specific. Participants should acquire skills to use in clinical practice through the discussion of real clinical cases, by performing role play, by answering open and closed questions about topics of related articles. The new classification of ED according to DSM V will be briefly address.

CONCLUSIONS: WHO European Region's series "Young people's health as a whole-of-society response", addresses gender as a key determinant of adolescent health. This series shows that gender differences and inequalities affect disease, health and well-being of children including emotional and social wellbeing, chronic diseases and disabilities, teenage pregnancy, HIV / STI, overweight and obesity, violence, injuries and substance abuse. In this context the authors consider this workshop is crucially important to approach gender specificity in eating disorders in adolescents, particularly in boys where this disease is not always properly diagnosed and addressed.

Keywords: Clinical Practice

PHW-4

Working to Prevent Health Hazards of Tobacco Use the Dual Roles of Health Professionals: Advocating for Policy Change and Providing Screening and Intervention through Brief Negotiated Interview

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OBJECTIVES: 1: Grasp the significance of tobacco use on youth and society
2: Understand how to utilize legal and regulatory strategies to control the global tobacco epidemic among youth
3: Understand how screening and brief interventions for alcohol and other drug can be utilized in both health care and community settings and disseminated by many types of health care providers.

METHODS: According to the World Health Organization (WHO Report on the Global Tobacco Epidemic, 2011), "Tobacco use continues to be the leading global cause of preventable death. It kills nearly 6 million people and causes hundreds of billions of dollars of economic damage worldwide each year." Tobacco is possibly the greatest public health threat the world has yet faced. Unfortunately, nearly 80% of smokers live in low and middle income countries. The rise in smoking is dramatic; globally an estimated 1.1 billion people smoked in 2000, a number that is expected to increase to 1.64 billion in 2025. Youth advocates can and should play a major role in tobacco control and prevention in that 80-90% of adult tobacco use begins before age 18. In the U.S., and elsewhere, public health strategies that focus on legislative and regulatory interventions offer the most promise for controlling this epidemic.

In addition to providing leadership for advocacy efforts to control tobacco use, health professionals also have a duty to address tobacco use among their patients seen in clinical settings and to build the capacity for smoking interventions in community settings. The Screening and Brief Intervention techniques (SBIRT) are efficient, effective, and evidence-based methods designed to initiate behavior change around unhealthy behaviors. Developed for use with alcohol abuse in adults and adolescents, we have been using this method in clinical settings to alter the trajectory of tobacco use in youth. This technique combines screening for tobacco use with a brief negotiation interview (BNI). This is a 5 to 7 minute intervention wherein health care workers who have initially screened youth for drug use, such as tobacco, provide counseling that incorporates motivational enhancement techniques to assist youth in their tobacco and other drug consumption. The BNI is a low cost and portable intervention that is easily adapted and transported into community settings by nurses, social workers, and community health workers and addiction counselors.

Through small group discussion and feedback, participants will learn how to implement legal strategies for tobacco control locally, and how to disseminate the SBIRT intervention clinically to non-medical providers in community settings, in order to increase the capacity to successfully prevent long term morbidity and mortality from tobacco use in adolescents and young adults.

In this workshop, youth workers will learn:

- 1) The magnitude of the problem and the adverse effects of active tobacco use on individuals, and the passive effects of second and third-hand smoke on children and youth;
- 2) The current international efforts to control tobacco use;
- 3) The procedure of SBIRT and the BNI in clinical settings for motivating behavior change around tobacco use; and
- 5) Strategies to build capacity in community settings, where the SBIRT technique can be used by nurses, APRNs, social workers, and community health or addiction counselors.

CONCLUSIONS: Tobacco use is a significant public health problem for adolescents and young adults worldwide. There is an urgent need to increase the capacity for adolescent health providers to alter the trajectory of tobacco use. Through this workshop, providers in both the primary care and community settings will learn the scope of the problem of tobacco use, how to address the problem using legal and regulatory strategies, and how to use in clinical and community settings SBIRT techniques. This training will increase the capacity to prevent the substantial morbidity and mortality associated with alcohol and tobacco use.

PHW-5

Ethics and Vulnerability in International Research with Adolescents

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**Moi University, Kenya

OBJECTIVES: 1-Identify adolescent-specific vulnerabilities and potential developmental benefits in international research.

2- Describe ethically acceptable approaches to working with vulnerable youth worldwide (with specific application to street-involved youth), including maximizing developmental benefits and building supports for vulnerabilities into research procedures.

METHODS: Adolescents, as a group, are considered to be vulnerable research subjects, and ethics review committees place increased restrictions on research with minor adolescents. While this approach protects adolescents from potential research harms, it also deprives both individual adolescents and adolescents as a group of the benefits of research. This group-based approach to vulnerability also fails to recognize the many different ways in which adolescents can be vulnerable, and discounts potential developmental benefits of research. Using a case-based approach, this workshop will (1) provide the participants with a newer approach to addressing adolescent vulnerabilities and benefits in international research; and (2) specifically address vulnerabilities related to street youth in low income settings. Part 1 will provide an overview of adolescent vulnerabilities in international research and will provide a conceptual framework and practical tools to address adolescent vulnerabilities in research protocols and when working with research ethics committees. Key to addressing vulnerability is to move from the group-based approach to vulnerability, in which adolescents who have not reached the age of majority in their jurisdiction are considered vulnerable, to a characteristics-based approach to vulnerability, in which specific characteristics of adolescents (cognitive capacity, access to resources, illness) make them vulnerable. Once specific characteristics are identified as causing vulnerability, then it is possible for research procedures to support adolescents in ways in which they are vulnerable. Cases will explore different types of vulnerabilities. Part 2 will specifically consider the vulnerabilities of street youth world-wide, and provide examples of ways research can support these vulnerabilities from research with street youth in North America and western Kenya. Challenges specific to street youth include the process of informed consent for minors to participate in research, provision of appropriate compensation without coercion, and obstacles to accessing care. Innovative approaches to adolescent consent include working with the local government agencies responsible for vulnerable children and child wellbeing (e.g. District Children's Officer) and performing a formal assessment of comprehension of the implications of participation in the study. Pros and cons to different approaches to compensation will be discussed. Specific research procedures to reduce coercion and ensure fair and equitable recruitment include community engagement and partnerships, and the use of street outreach workers.

CONCLUSIONS: Adolescent access to the benefits of research is an issue of justice. Adolescents differ from adults in biology, social status, developmental capacity and behavior, and therefore research results from adult studies are often not applicable to adolescent populations. Although research on difficult issues such as HIV and reproductive health, injury and violence are necessary to advance the health of adolescents, few research resources are devoted exclusively to adolescents, and adolescents are often excluded from relevant research studies that involve adults. Ethical and creative approaches to addressing adolescent vulnerability in the research contexts are needed to expand adolescent access to research.

Keywords: Public Health

CW-9

Recognizing and Managing Physical Complications of Eating Disorders in Adolescents: Challenges and Strategies

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Physical consequences of eating disorders can be profound and potentially fatal. Chronic underweight can cause growth and developmental problems and have significant impact upon bone density. However paediatricians frequently report low confidence in this area, and knowledge base can be low. Despite this, most undergraduate and postgraduate training in Paediatrics ignores underweight in older age groups, especially in the context of eating disorders. This workshop is led by three paediatricians who routinely work with young people with eating disorders from three different centers (London, Singapore, Melbourne). The workshop will address important aspects of the assessment and management of both acute and chronic physical issues related to eating disorders and highlighting where possible an evidence base. Differing approaches in different units will also be explored. This workshop would be suitable for any health professional that works with young people and would like to explore management of underweight secondary to eating disorders in more detail (whether they do this regularly or occasionally). Different perspectives and experiences will be welcomed.

CW-10

I Don't Need a Psychiatrist, I Am Not Crazy!" Mental Health Care for Adolescent, with or without Psychiatrist**Françoise Narring, Paul Jacquin***

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OBJECTIVES: 1- To identify mental health needs of adolescents.

2- To gain knowledge about innovative approaches to young people's mental health issues in a non psychiatric setting, in a context of network and multidisciplinary health care.

METHODS: The prevalence of mental health problems increases during adolescence affecting 15 to 25% of young people attending primary care facilities. Nevertheless, the mental health needs of young people often go unrecognized for various reasons: poor awareness of mental health in the community, inappropriate beliefs about mental health, impaired access to services or lack of youth friendly services (including insufficient training of health professionals), and finally the stigma associated with psychiatric illness. Even when adolescent health physicians are skilled and experienced, they have to face resistance and a lack of continuity in mental health care. It can be difficult to refer adolescents to psychiatric care, to motivate young patients to go to the specialist and to adhere to treatment. This is often due to perceived obstacles, including lack of knowledge and fear of mental health professionals. Parents' attitudes and resistance also play an important role in discouraging adolescents. At the same time, expecting all the solutions from the mental health specialist could weaken the role of the physician.

We propose a two-phase approach to respond to those obstacles, 1) efforts to educate and motivate adolescents and their families before the first appointment; 2) measures to ensure the continuity of mental health care:

- ♣ Networking and interprofessional collaboration opportunities; early interventions for complex situations during medical and psychiatric joint interviews
- ♣ a multidisciplinary approach during weekly team meetings
- ♣ regular individual supervision
- ♣ group supervision
- ♣ medical and psychiatric joint interviews

During this workshop, participants will have the opportunity to discuss what they see as obstacles to getting adolescents to mental health care, and to share their own experience of networks and cooperation with psychiatrists and psychologist in their own setting.

1st part: group work with 3 clinical cases to list the different health needs of the adolescent and the possible barriers to mental health care. A synthesis will end with a summary of the obstacles most commonly experienced by adolescent health professionals.2nd part: interactive presentation will present innovative approaches from the two facilitators and allow discussion of their concrete use in different settings.

This workshop is the result of a team work involving a psychiatrist, Dr Shqipe Shehu, Geneva Youth Clinic, a pediatrician and a general practitioner working in adolescent medicine.

CONCLUSIONS: This is an important topic because mental health is one of the main issues in all adolescents who come to adolescent health care facilities. This is one of the unrecognized priorities to screen and to treat. In order to offer patients the chance to voice their questions, and then, to know how and when to send them to the psychiatrists, physicians need experience and training.

If the adolescent physician doesn't speak about this important and delicate issue, it will remain under diagnosed and neglected.

Keywords: Clinical practice

SHW-7

Sexuality and Adolescents with Disabilities: Addressing the Challenges Involved in Promoting Healthy Sexual Development

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OBJECTIVES: 1- Promote awareness of the challenges involved in healthy sexual development in adolescents with disabilities and the importance of addressing related issues in educational and health care settings.

2- To acquire knowledge and skills for promoting sexual and reproductive health in adolescents with disabilities working with the adolescents and their families.

METHODS: Disability presents in different ways in Adolescence depending on multiple factors such as the nature of the disability, the age of the adolescent, the life skills and resilience the adolescent has developed during childhood, the support or the barriers the adolescent encounters as he/she struggles towards independence and autonomy, and the family, social and cultural environment involved. Issues differ when the onset of the disability is during adolescence and when it is present since early childhood. Issues also change if the disability is visible to others or not or if there is an early or delayed puberty resulting in difficulties with psychosocial adjustment. In this complex scenario, Adolescents and their families face multiple challenges and issues related to emerging sexuality that are of great concern. Information and support is most often scarce and difficult to obtain. Health care professionals see many adolescents and families in this situation in their every day practice but often lack sufficient knowledge and skills to address sexual and reproductive health care issues with them thus resulting in unmet needs. The Workshop will include different modalities of Interactive Group participation including case problems and discussions on possible strategies and approaches. To finalize, conclusions and take home messages in line with the learning objectives will be summarised.

CONCLUSIONS: Health care teams tend to "desexualize" the adolescent when a disability is present resulting in negative consequences for the adolescent's psychosocial development and his/her achievement of independence goals. It is very important that adolescents with disabilities receive the support they need for a healthy and full Social and Sexual life with emphasis on developing autonomy and independence related skills. Professionals should feel confident and empowered to address sexuality and related issues with patients presenting with disabilities and their families.

Keywords: Sexual Health

PHS-1

Wired and Wireless: Potentials and Perils for Digital Adolescents**Michael Rich, Evelyn Eisenstein*, Tito De Morais Morais****

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**MiudosSegurosNa.Net (KidsSafeOnThe.Net), Porto, Portugal

OBJECTIVES: 1-Understand the scientific evidence supporting opportunities, challenges, risks and benefits that the digital world presents to adolescents and their healthy development

2-Develop strategies for raising healthy and successful adolescents who master the digital world, optimizing its potential and avoiding its risks

METHODS: Adolescence has gone global. Today's youth spend more time with television, movies, music, and internet than they spend in school, with parents, or pursuing any other activity. Teenagers are connected in ways unimaginable even a decade ago - sharing ideas, images, videos, and much more through social media whose 1 billion regular users make it the third largest "nation" in the world. Youth are adept with texting and tweeting, creating photos, videos and mash-ups and sending them around the globe in an instant. In their pockets, they carry computers thousands of times more powerful than those who landed humans on the moon and they use them nearly constantly to connect, to learn, and to entertain themselves. The Digital Revolution has created remarkable capabilities. Young people have powerful new voice with which to tell their stories. They can bridge chasms of language, culture, and age-old animosities that grew out of ignorance by using social media to reach each other across the silence of mutual suspicion. The same technologies, however, have made it possible to develop a host of health risks from obesity to substance use; to learn hatred and rehearse violence; to discover sex as a commodity rather than a commitment; to lose touch with each other and with the world in which they live as they become increasingly connected to the wired world. The leading causes of morbidity and mortality among youth have all been associated with the media they use. This symposium will approach digital media neither as a threat nor as a panacea, but as an ever-present reality in the lives of adolescents worldwide, examining the positive and negative effects of these powerful tools on young people's physical, mental, and social health. We will use the growing scientific evidence to reframe the traditionally values-laden discourse into an evidence-based discussion of media as environmental influences on the development and well-being of youth around the world. We will review neurodevelopment to understand how media are a fertile arena for key developmental tasks of adolescence - and why youth are not yet ready to handle many of the responsibilities and demands of the digital world by themselves. We will explore how adolescents become aware of themselves and their peers as sexual beings, and the ways in which the digital world can distort healthy sexual and social development. We will discuss technological and educational strategies for helping young people stay healthy, safe and successful in the fast-moving digital environment. Finally, we will seek to "crowdsource" the experiences, challenges, and solutions of the group to find universal issues and develop action steps to pursue, individually and in parallel, when we return to our practices.

CONCLUSIONS: Interconnected electronic screen media are, arguably, the most universal influence on health and development of adolescents worldwide. Media present rich opportunities and previously unknown risks for the critical developmental passage through adolescence into autonomous adulthood. The content adolescents receive, create and send, the contacts they make, and the behaviors they play out in this new environment for human interaction all contribute to their physical, psychological and social well-being. Scientific evidence on media influences on health, development, sexuality and relationships, as well as strategies for enhancing critical thinking and positive outcomes will be presented and action steps for the future discussed.

CS-1

Innovative Approaches & Programs in Adolescent Health Indicators and Research. Examples from the Field

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OBJECTIVES: 1-To evaluate the determinants of the sexual and reproductive behavior of adolescents in tree Latin America countries

2-To propose alternative forms to improve the communication in sexual an reproductive health in adolescentes

The International Center of Sexual and Reproductive Health ICRH and six organizations in five different countries (Bolivia, Ecuador, Nicaragua, Lithuania, Holand) are involved in a participative intervention project about t he reproductive health needs of adolescents (12 till 19 years). The investigation is carried out in three in Latin America cities : Cuenca (Ecuador), Managua (Nicaragua) and Cochabamba (Bolivia). The main goal is develop an intervention strategy integrated in the communities and improve the quality services of the centers for adolescent. The strategy also will build and support an atmosphere for adolescents so they can acquire abilities to make informed decisions about its sexual and reproductive health General

The main goal of CERCA is: To make primary health systems more responsive to the sexual health needs of adolescents through the development of a comprehensive framework for community-embedded interventions targeted at improved access to primary health services, a supporting and enabling environment, and strengthened competence to make reproductive health choices.

CONCLUSIONS: Trough the intervention CERCA will : 1 assess the sexual and reproductive health needs of adolescents 2 develop a comprehensive strategy of community-embedded interventions targeted at enhanced access to reproductive care in primary health services 3 develop a comprehensive strategy of community-embedded interventions targeted at enhanced access to adolescent-friendly reproductive care in primary health services 4.- analyze the community-embedded health care approach in three Latin American countries 5 To develop a strategy to bridge the gap between research and policy by involving policy and decision makers actively in the research process

Is a special summercamp a solution for diabetic adolescents?

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*University of Duzce, Turkey

OBJECTIVES: 1-Deal with phsicosocial&educational problems of adolescent diabetics

2-Organizing a diabetic summercamp

Type 1 diabetes is one of the most challenging chronic diseases of the childhood and adolescence for the patient, for the family, for the social and official environment (school etc.) and for the caregiver (physician, nurse, psychologist etc.). Adolescence, as a risky period even for healthy childeren, can be a catastrophe for a diabetic youth, since the care of diabetes, apart from other chronic conditions, needs especially uninterrupted and never-ending effort of the affecte d individuals themselves. Recent medical and technological developments provide the potential for "tight metabolic control". But that does not mean this potential to be reached by the majority of affected people even by those with unlimited financial or social security based acces to these opportunities. The main reason is "lack of motivation" ! Many solutions, approaches are introduced to overcome this barrier. None of them are unanimously effective in all cases. On the other hand "summer camp" is an effective alternative to motivate adolescent diabetics for their own care. Hospital or office settings are not places appropriate to communicate with an adolescent in a relaxed fashion despite efforts to create a friendly environment. Moreover time is always limited to go in details of vital importance. In a summer camp, according to the initiative of the organising institution, a spectrum of professionals are available and accesible mostly during the whole day. In addition this potential of communication is facilitated by means of a relaxing atmosphere, such as sunbath on the seaside, swimming pool activity, dinner etc. In our "Diabetic Children Summercamp", which is conducted for one week during every summer since 18 yrs, roughly 100 diabetics in the age range of 10-18 are getting together with 3-4 pediatric endocrinolgists, 4-5 nurse specialists in chilhood diabetes, 2 residents of Pediatrics, 2-3 psychologists and/or psychiatrists, 2-3 dieticians and sports trainers. In addition every group of 4-6 diabetics is coached by a young adult diabetic elected from the pool of former campers. All the mentioned professionals are staying the whole time together within the camp area, which is miles apart from the hospital. As our team is observing improvement in the attitudes in almost all participants allthough not to the same extent the major problem is the limited capacity of the camps. We can calculate nearly a 20 000 demanding population in comparison to a yearly capacity of nearly 500 youths of the diabetic youth camps in our country. The Working Group of Pediatric Diabetes is planning t o apply to the Ministry of Health in order to expand this capacity and to pay for the youngs needing this facility.

CONCLUSIONS: Type 1 diabetes is a challenging chronic disease regarding the difficulty to motivate the individual to the endless effort of injections, sugar testings, carbohydrate countings and calculations. Many solutions, approaches are introduced to overcome this barrier. "Summer camp" is an effective alternative to motivate adolescent diabetics for their own care. In our "Diabetic Children Summercamp"conducted since 18 yrs 100 diabetics in the age range of 10-18 are getting together with a spectrum of professionals, pediatric endocrinolgists, nurse specialists, psychologists and/or psychiatrists, dieticians and sports trainers in a relaxing and joyfull atmosphere. The major problem is the limited capacity.

Participatory Research as a Contributor to Adolescent Health Promotion: Process and Practice Using the Example of Padres Informados/Jóvenes Preparados

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OBJECTIVES: 1-Describe stages of partnership development in participatory research partnerships 2-Identify key tools and resources associated with each stage to assist with developing equitable partnerships that are likely to be sustainable over the long term.

SUMMARY: Participatory research (PR) has been identified internationally as a key component of efforts to achieve health equity. PR recognizes the knowledge, expertise, and resources of communities, and so engages community members as full partners at all stages of the research process. Fundamental characteristics of PR are collaboration and co-learning, community capacity building, and achieving a balance between research and action. In addition, PR attends to social determinants of health including the socio-economic context. Translational researchers have increasingly looked to PR as a means to improve the applicability, acceptability, and efficacy of interventions, ultimately making them more likely to be sustained in communities and disseminated broadly.

Padres Informados/Jóvenes Preparados is a NIH-funded, community-based, randomized controlled trial testing the efficacy of a culturally and linguistically appropriate family-skills training program designed to prevent tobacco and other substance use intention amongst Latino youth. The project was built over six years through a community-university PR collaboration between academics and the Latino-serving community, many of whom are immigrants. The Padres Informados approach attends to social determinants of health, including the socio-economic context, through the intervention content and implementation,

In this workshop we will describe a schema for partnership development and maturation based on Erik Erikson's Eight Stages of Psychosocial development (hope, will, purpose, competence, devotion, affiliation, production, wisdom) and describe how our collaboration is moving through those stages. Each stage is characterized by a) broad developmental partnership tasks that parallel Erikson's individual tasks; b) implementation tasks in the areas of funding, partnership, and research processes; and c) tools that may assist with achieving the developmental and implementation tasks. For example, the competence stage includes the developmental tasks of relating with peers according to rules, learning formal teamwork, and mastering subjects. The implementation tasks include preparing for expanded funding, formalizing rules for decision making, negotiating sharing data and presentation/publication processes. Tools that can help to achieve the implementation tasks and through those the developmental tasks include using templates to develop agreements for collaboration, data sharing, and publication.

Workshop participants will gain an improved understanding of how to implement and sustain effective PR partnerships. Through didactic presentation participants will be able to a) describe stages of partnership development using the experiences of the Padres Informados collaboration, b) identify key tools and resources associated with each partnership stage to assist with developing equitable partnerships that are likely to be sustainable over the long term.

SHS-1

Education, Life Transitions, and HIV Risk Among Youth in Sub-Saharan Africa

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OBJECTIVES: 1-Participants will be able to reflect and articulate ways in which education influences life trajectories leading to HIV infection.

2-Participants will be able to describe and critically analyze mechanisms by which economic empowerment interventions can promote health among youth.

METHODS: One third of the world's population is under age 19, with 90% living in developing countries, most often in poverty. Sub-Saharan Africa is the region with the highest and fastest growing number of orphaned, and vulnerable children, including those impacted by HIV/AIDS. It is also a region in which effective social policies for these children are desperately needed. Education is a key factor influencing successful life transitions for youth in both the developed and developing world. Success in school is a potent protective factor for health, social, and occupational outcomes. In developing countries, access to school is a critical factor for promoting successful adolescent transitions and a key factor in national developmental strategies. This symposium will review epidemiological and intervention data on education, life transitions, and sexual and reproductive health. It will focus on our work with youth in the Rakai District in southwestern Uganda. Dr. Santelli's research includes qualitative and quantitative studies of HIV risk among youth and the impact of prevention policy. The Rakai Community Cohort Study is a longitudinal, community-based, open cohort including ~4000 youth, ages 15-24 years, interviewed annually since 1994. From these studies staying in school has emerged as a key protective factor in reducing HIV risk behaviors and new HIV infections. These data suggest that increased school participation and the national government's policy of Universal Primary Education (UPE) promulgated in 1997 have contributed to a decline in HIV-related risk behaviors and new HIV infections among youth ages 15-24 years. Likewise, school-based interventions using innovative youth and family-based economic empowerment models to address poverty have produced substantial benefits including school retention and HIV risk reduction. Dr. Ssewamala has conducted randomized trials of economic empowerment interventions, with youth ages 12-15 years and their caregiving families, to improve health and educational outcomes. He has developed and tested a theoretically-informed intervention with the goal of improving the life chances of poor, orphaned, and vulnerable children, including those impacted by HIV/AIDS in Uganda. Economic empowerment (EE) programs are a promising structural approach to HIV prevention among youth which address root causes such as poverty via asset-building tools, such as microfinance (MF) and conditional cash transfers (CCT). Such programs promote school retention and address multiple social, economic and health outcomes, including improved educational attainment, a reduction in teen pregnancy, and reductions in HIV risk behaviors. EE programs may be highly effective in increasing motivation toward education and career goals, as well as health protective behaviors. Drs. Santelli and Ssewamala will use examples from their own research funded by the U.S. National Institutes of Health (NICHD & NIMH), and the literature to illustrate the importance of education in shaping life transitions and health. Participants will be encouraged to discuss their own clinical, programmatic, and research experiences with regard to education and health. Participants will be also encouraged to consider ways to incorporate educational interventions and youth economic empowerment thinking into their work.

CONCLUSIONS: Education is a key protective factor in a youth assets/resiliency framework. Both access to education and success in education increase chances for healthy adolescent life transitions. Likewise, interventions within schools or those that increase educational opportunities can be effective in promoting health. Economic empowerment interventions have critical educational, social, health and psychological benefits for individuals and families. Synergies among education, asset-ownership and health are critical in promoting adolescent health.

PHS-2

HBSC- International Perspectives on Adolescent Health from the 43 Country Health Behaviour in School-Aged Children (Hbsc) Study**Perceived Schoolwork Pressure and Perceived Academic Achievement as Indicators of an Effort-Reward Imbalance and the Self-Reported Health Status of Students****Wolfgang Dür, John Freeman*, Dorothy Currie**, Oddrun Samdal***, Mette Rasmussen******

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OBJECTIVES: The aim of this study was to examine the associations of perceived schoolwork pressure and perceived academic achievement with the self-reported health status of students in a large sample of adolescents aged 11-15 years in 43 European and North-American countries. According to effort-reward imbalance (ERI) theory (Siegrist 1996) the combination of the two school related items represents a typology that allows to examine whether students with an adverse effort-reward imbalance also report a lower health status.

METHODS: Using data from the 2009/10 Health Behaviour in School-aged Children (HBSC) study, we examined the extent to which the relation of individual schoolwork pressure and students perceived academic achievement was related to the odds of adolescents reporting poor/fair health status with the use of logistic regression. Results are presented as odds ratios with 95% confidence intervals.

RESULTS: The calculated odds ratios, controlled for age and socioeconomic status, indicate that an adverse effort-reward imbalance at school increases the risk of poor or fair self-reported health status by 75 % for boys and 93 % for girls.

CONCLUSIONS: The use of the ERI theory to the school environment is a new approach to studying effects of psychosocial stress in students. Implications for the role of teachers and their ways of grading are discussed.

Absolute and Relative Family Affluence and Psychosomatic Symptom Complaints in Adolescents**Frank J Elgar, Bart De Clercq*, Christina W Schnohr**, Phillipa Bird**, Kate E Pickett***, Candace Currie******

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OBJECTIVE: Consistent with evolutionary perspectives on the effects of social rank on health, previous research on adults has found that income relative to a comparison group and rank income in groups of similar individuals relate more closely to adult emotional distress and life satisfaction than absolute income. This study explored whether psychosomatic symptom complaints in adolescents are similarly related to differences in comparative affluence (disparity with a predicted affluence score) and rank affluence within regions and schools.

METHODS: In the 2009/10 Health Behaviour in School-aged Children study (www.hbsc.org), data on family material affluence and psychosomatic symptoms were collected from 52,071 adolescents in eight countries – Austria, Belgium, Canada, Norway, Scotland, Poland, Turkey, and Ukraine.

RESULTS: Multilevel regression analyses of the data showed that rank affluence in schools predicts symptoms better than absolute or comparative affluence. When differences in absolute affluence were held constant, rank affluence in schools still related to differences in symptoms.

CONCLUSIONS: Results supported psychosocial explanations of socioeconomic differences in adolescent health. The health of adolescents with equivalent absolute affluence varies depending on their rank in affluence among their schoolmates.

Keywords: Social inequality, affluence, symptom complaints, Health Behaviour in School-aged Children, Social rank

Determinants of Adolescent General Self-Efficacy: an Assets Based Approach to the Role of Psychosocial Environment

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OBJECTIVES: 1) To explore the relative impact of different aspects of adolescents' psycho-social environment on general self-efficacy. 2) To identify core elements that might be protective of young people's general self-efficacy.

METHODS: The study drew on data from 4400 students aged 11-15 years who participated in the Health Behaviour in School-aged Children (HBSC) study in England in 2009/2010. Aspects of the adolescents' psychosocial environment (family affluence, family life, school life, peer relationships, community life, extracurricular activities, and health-related quality of life (HRQoL)), as well as age and gender, were investigated for their relative impact on adolescent general self-efficacy (GSE). The data was analysed using multi-level modelling.

RESULTS: Elements of the psycho-social environment appeared to operate as core assets influencing the presence of GSE in adolescents. Having a strong sense of belonging in school was associated with greater GSE, and may be of particular relevance for those adolescents who feel strongly pressured by school work. HRQoL showed interactions with many of the effects, suggesting that it may have a moderating role in GSE. The relationship with parental involvement and engagement with school life was more complex and suggests that greater understanding is needed of how those factors operate in relation to GSE.

CONCLUSIONS: Taking into account multiple aspects of adolescents' psychosocial environment, participation in extracurricular activities and several aspects of connection with school life were shown to be important factors for young people's GSE. While reinforcing previous research in terms of the impact of age on GSE, our data did not find an association with gender which contradicts other studies that tend to show boys as having higher GSE. The findings highlight the relevance of school life for the development and maintenance of well-being among young people.

Turkish Adolescents' Eating Pattern: Opportunities for Intervention

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OBJECTIVE: The aim of this cross-sectional study was to examine the food related life style aspects and dietary patterns of Turkish adolescents.

METHODS: This study involved the completion of international version of "Health Behavior in School Age Children (HBSC) 2005/2006" survey questionnaire by 5574 (female= 2922, male=2652) grade 6th, 8th and 10th students.

RESULTS: Sixty one percent of adolescents do not have breakfast with their parents. Fourty one percent of adolescents do not have breakfast on schooldays. Thirty four percent of adolescents eat their midday meal at school on school days. Seventy five percent of students eat their midday meal at home on schooldays. Twenty six percent of adolescents do not have dinner with their parents. Twenty eight percent of the students usually eat snack while watching TV or DVD. Thirty nine percent of the students watch TV while they are having meal. Twenty seven percent of the parents give permission to consume junk food. Of the students 64 % do not eat fruits, 87% do not drink milk, 52% do not eat cheese and 91% do not consume cereals everyday. Sixty five percent of adolescents consume white bread and 26% of them consume brown bread everyday. Ninety percent of adolescents eat fish at least two times a week.

CONCLUSIONS: Eating pattern and eating related life style aspects are important issues to prevent obesity and cardiovascular diseases. Most of our adolescents are not consuming healthy foods adequately. Because important amount of students are eating their midday meal at school, school environment can play an important role in the encouragement and provision of healthy food options. Parents should be aware of the impact of food choices and eating behaviors on their adolescents' health.

Keywords: Adolescents, eating pattern, obesity

PHS-3

Advancing Indigenous Youth Research

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OBJECTIVE: To share examples of health research conducted among indigenous young peoples and explore how research can improve health outcomes for these populations.**METHODS:** This workshop will be a collaboration between youth health researchers in New Zealand, Australia and the US. Case studies utilising indigenous research will highlight the role of research in advocating for improved health outcomes and prioritising national policy.**RESULTS:** Indigenous-led and indigenous specific research is required to reduce health disparities among indigenous youth.**CONCLUSIONS:** Indigenous people worldwide endure significant health and social disparities. Quality and genuine research collaborations and fostering workforce development is required to advance indigenous health agendas.**Keywords:** Indigenous, adolescent health

CS-2

Teenage and Young Adult Cancer Care - "Beyond No-man's Land"

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OBJECTIVES: 1. Demonstrate the principles, philosophies and practices of age appropriate cancer care for Teenagers/Young Adults that enable them to navigate through the cancer journey from UK and Danish perspectives.

2. Demonstrate the significance of inter-professional working and learning in this emerging cancer and Teenage/Young Adult health speciality.

METHODS: Historically, little attention has been given to the specific needs of the TYA (Teenage/Young Adult) cancer population and practice changes have been slow to occur internationally. This patient group has been described "at the edge of no man's land" (Hollis and Morgan 2001). Teenage Cancer Trust is the leading UK Charity dedicated to improving the lives of young people with cancer. Over the past twenty five years the charity has funded the development of 23 specialist Teenage Cancer Units across the UK which deliver specialist care in a state of the art age appropriate environment. The charity also funds specialist Nurses and Youth Workers. Largely due to this momentum, TYA cancer care has gained recognition as a speciality within its own right. In contrast, professionals in Denmark, have adopted a different approach to TYA care using a network focused care approach and 'network meetings' (Olsen & Harder 2009). This model brings people from the patient's private social network together with people from the patient's health professional network, to help 'break the ice', keep lines of communication open, and help young patients with cancer mobilise their support networks at a time when they might otherwise be cut off from their normal lives (Olsen & Harder 2009). It is evident that age appropriate care and inter-professional team working are at the heart of TYA Cancer Care and these principles are central to any service development. Teenage Cancer Trust have captured these principles in their Blueprint of Care for Teenagers and Young Adults with Cancer (Smith et al 2012). For the first time, the growing body of knowledge and expertise of professionals working within this field, particularly those working within Teenage Cancer Trust Units, has been documented. Concurrently, an emergent professional educational need for those working in this field of oncology has arisen. In 2006, Coventry University with support from Teenage Cancer Trust developed a Post Graduate Certificate in Cancer Care for TYA's that is delivered entirely by E-Learning which is now in its sixth year of delivery. The course draws from a multi-professional student body from across the world. It engages leading experts to create re-usable learning objects for the purpose of teaching which is delivered synchronously and asynchronously. E-learning offers flexibility, interactivity, motivation, collaboration and connectivity (JISC-E-Learning Programme n.d) for those working with TYA's with Cancer to learn with, from and about each other (Barr 2001) in a virtual environment that is facilitated by expert teachers. International colleagues are now looking to the UK for support, guidance and education as other countries, including U.S.A, Canada, Australia, New Zealand, Denmark and Sweden; now look to develop multi professional specialist care for this patient group. From the historic development of the first Teenage Cancer Trust Unit, the UK are now seen as worldwide leaders in TYA cancer care and young patients within healthcare increasingly move "beyond the edge of no man's land". We are keen to share experiences and collaborate so that care of TYA's with cancer improves internationally.**CONCLUSIONS:** Internationally, TYA cancer care is gaining momentum as professionals recognise the unique needs of this vulnerable patient group and strive to develop and deliver services that meet their needs. The principles of "best practice" can now be described and young people are receiving expert care in bespoke environments. The TYA cancer "world" has largely remained isolated from the wider adolescent healthcare world. We can learn from each other and it is important that international healthcare professionals now come together to share expertise in order to embed age appropriate cancer care for young people across the broader adolescent healthcare world.

PHS-4

Anger Management - A Tool to Prevent Violence in Adolescence

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AACCI Association of Adolescent and Child Care in India

OBJECTIVES: 1 Teaching providers how to teach adolescents – to cope with their emotions and control anger
2 Empowering providers with a tool to conduct workshops in schools and colleges

METHODS: The symposium will have three lectures 1 Sharing lectures created for Teaching students anger management – age 6-10 yrs, 10-14 yrs and 15 yrs and above 2 Sharing methodology of Role plays and group discussions for students, parents and teachers in preventing violence 3 Research results on aggression behaviour, beliefs and attitudes of over 500 children from age 6-17 yrs 4 Question answer session Violence among children and youth is a public health problem, worldwide. Every day thousands of adolescents and youths die as a result of violence, and many more are hospitalized with injuries. The root cause of violence is the inability to deal with emotions specially anger that leads to frustration that escalates into aggression and violence. Poor social skills and impulsiveness are important factors that fuel this violence. Parents make efforts to give children coaching classes for academics, sports, artistic talents but no one thinks of giving skill training for children and adolescents to deal with their emotions. One useful tool is Life skill education –LSE. which teaches Life are cognitive, emotional, interpersonal and social skills that enable individuals to deal effectively with the challenges of everyday life. Evidence shows that preschool enrichment and social development programmes, which target children early in life, can prevent aggression and improve social skills. AACCI experience: In view of the escalating violence in many cities of India which involves children and youth in various aspects, AACCI decide to spearhead a project that got together many stake holders to plan practical interventions which are doable at various levels. This Project is the brain child of Dr Swati Y Bhawe Executive Director AACCI. In August 2012 AACCI held the "National Consultative meet in New Delhi for prevention of violence and aggression in children and youth". There were over 90 participants who came from a very diverse group of experts: doctors from various specialties- pediatricians, adolescent specialists, family physicians, Psychologists and clinical psychologists, principals, teachers, counselors, legal experts, media experts, social scientists, educationist, parents and representatives from various NGOS, as well as students. Group discussions were held under various themes: interventions at parental, school, college, community levels, legal aspects, special situations like rural, tribal and urban slums and specially challenged children. The recommendations brought out in this consultative meeting will be used to improve ongoing programs in these fields. AACCI has developed 3 training modules for master trainers to conduct programs for creating awareness and capacity building of teachers, students and children to prevent and empower with ability to cope up with violence and prevention of violence and aggression in children and youth. This module has been pilot tested in schools over 900 children, over 50 parents and 50 teachers with very positive results. This module has lectures, interactive sessions that include group discussions and case scenarios.

CONCLUSIONS: There is increasing incidences of violence in adolescents the world over... This can be categorized as violence against and by adolescents themselves. Violence is the result of aggression caused by acute and chronic anger and frustration. If teenagers are taught how to cope up with their emotions and control their anger and stand up to prevent violence and aggression against themselves we can go a long way in making the world a peaceful place. AACCI has been conducting workshops on this subjects in India and has come out with a training module. This experience will be shared by the team.

PS-3

Make It Safer: Medical Care for the Adolescent and Young Adults with an Eating Disorder in the Primary Care or Emergency Room Setting

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OBJECTIVE: Eating disorders can be life threatening, especially when undetected. The Academy for Eating Disorders' Medical Care Task Force has created a brochure usable by primary care clinicians and emergency room physicians for the recognition and care of patients presenting with an eating disorder. This brochure is available in multiple languages, for teaching purposes worldwide. This session will cover the early recognition of eating disorders in adolescents and young adults and the identification of acute medical complications in this population, with a focus on:

- 1) helping adolescents and families to better navigate the medical community safely using the new medical brochure.
- 2) early recognition and acute medical management of adolescents and young adults with eating disorders
- 3) the role of timely and appropriate nutritional rehabilitation

CONCLUSIONS: Hot topics such as atypical presentations of the adolescent with an eating disorder, approaches to preventing the refeeding syndrome and identification and management the acute and potential chronic impact of eating disorders on the growing and developing body will be discussed. This symposium will also cover strategies for using the brochure, a new advocacy tool, to raise the bar for care in your own community for adolescents and young adults with eating disorders.

PHS-5

Involving Young People In the Creation of Their Own Health States

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****Young Health Programme, Youth Representative

OBJECTIVES: •To introduce the voice of youth into the policy discourses that directly affect their health

•To raise awareness of the issues affecting youth health – as identified by research and young people themselves

METHODS: Young people from the global north and south live in very different contexts, within different demographic and environmental structures. However, the similarities in young people's health concerns are striking. We know that the physical environment in which youth live has a direct impact on their health. In order for interventions to be developed that address the health issues of adolescents, young people need to be engaged in the planning and implementation of the programmes developed for them. Rather than taking a top-down approach, the YHP advocates working with adolescents to create programmes that increase access to health information and services.

At IAAH, youth from the global north and south will lead a discussion on youth engagement, providing their perspectives on these emerging themes and suggesting how to develop content for programmes and policies that support the health issues they identify. Youth will lead the discussion ensuring their voices and perspectives are heard, following which, strategies that address the issues they face and experiences of working with young people within the YHP will be shared and discussed by a panel of YHP partner organisations. Through a working session, delegates will also have the opportunity to help design strategies to strengthen the youth voice in health programmes and policies.

CONCLUSIONS: To improve their health and address the health issues they face in their communities, young people themselves need to be involved in the development of health programmes and policy. By listening to the voice of adolescents and understanding their perspectives, we can deliver more effective health interventions that improve adolescent health both now and in the future.

CS-5

“Spreading the word”: Creating a Critical Mass of Youth-Friendly Practitioners in Primary Care and Developing Their Role in Preventive Interventions

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OBJECTIVES: 1) To reflect on ways to increase the critical mass of youth-friendly primary care practitioners across various settings and professions.

2) To explore how to support putting good preventative care at the centre of providing youth-friendly care, taking into account the benefits and risks of screening in the light of the latest evidence and young people's views.

3) To consider ways in which youth-friendly health and welfare practitioners can form an integrated primary care network across professional and geographical boundaries and support evidence-based youth friendly preventative interventions.

METHODS: Within this session, the discussants will reflect upon how youth-friendly principles can be spread across different primary health and social care settings to raise the critical mass of primary care practitioners offering youth-friendly services to young people.

Globally, primary care represents the main point of access to the health system for young people. Primary care and its generalist approach are particularly well placed to respond to the needs of young people and to address them in a life-course perspective. Each consultation offers an opportunity to promote and sustain long-term trusting relationships, through which preventive health messages can be conveyed.

The burden of disease in adolescence is most often attributable to preventable causes associated with risk taking behaviour; often involving substance use including tobacco, unprotected sexual activity, road traffic accidents and impulsive action. If we are to be an effective health and social welfare workforce we need to understand more about practising prevention, including screening, and what might be the consequences of undertaking such a process; outwith the primary goal of establishing a trusting relationship and beginning a dialogue about psychosocial issues which concern young people.

We need to explore why practitioners may be reluctant to include screening interventions in their practice, and why practitioners may not necessarily pursue the identified risks with effective and acceptable brief interventions. We also need to know more about how these interventions are viewed by the young people for whom they have been designed. There are few things more powerful than the voices of young advocates for effecting change and young people's contribution to practitioner development is necessary if we are to move beyond the current status quo.

Community practitioners typically include health practitioners but if we think more broadly - and we need to do this if we are to create a critical mass - then other professionals such as school nurses, student welfare coordinators, social workers and educational psychologists would be welcome contributors. In this session, examples from pharmacy and youth work will be shared.

There has been much debate about education for practitioners in this field, and the roles of specialists and generalists continue to tax us. It is clear, however, that the intensity and skill of the specialist network needs to be complemented by the engagement of a broad multidisciplinary audience to realise real improvements in the experience and outcomes of health care for young people.

Examples of research and education projects from different countries and settings will be presented and discussed to offer the audience with opportunities to reflect, and to propose ways of moving this agenda forward.

1. Title: GP Champions and linked youth workers: a double act. The launch of a new initiative in the UK (JR)

2. Title: What is the evidence for the behavioral/health impact of health risk screening on young people? (LS)

3. Title: Extending our reach - Young people 'Think Pharmacy' in England (NG)

4. Title: What interventions have been effective in increasing the delivery of adolescent preventive services? (EO & DH)

CONCLUSIONS: Whilst youth-friendly health care is increasing its profile we need to build a critical mass of primary care adolescent-aware practitioners, across disciplines and geographical boundaries, to make sure that a 'tipping point' is reached in each region. This will increase the possibility of health affirming conversations occurring and empower young people. In addition, practitioners will feel less isolated and ready to look at evidence-based preventative interventions which to date have often moved slowly into practice. This symposium provides a forum for summarizing the current state of research and sharing best practices across community settings and countries.

CS-6

A Balanced Model for Adolescent Health and Medicine Clinic in Turkey**Nuray Kanbur, Orhan Derman, Sinem Akgül**

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OBJECTIVES: 1-How to start a new Adolescent Medicine Clinic and increase the awareness and request for clinical help for adolescents? Discuss the clinical and outreach perspectives of this discipline in Turkey as a model.

2-A training model for new Adolescent Medicine Clinicians in a multidisciplinary model in a University Hospital to full fill the needs of the country

METHODS: There are almost 20 million adolescents in Turkey. The adolescent population in our country is even greater than the total population of many countries. These young people have a variety of problems in a large spectrum both medically and psychosocially which may also differ in different regions of the country. Therefore it is clear that this country has a huge need for Adolescent Health and Medicine Clinics and Youth Centers. Since the number of physicians who have formal training for Adolescent Medicine is very limited, to cover the needs of the country these clinicians have many responsibilities such as medical care of adolescents in tertiary care clinics and research activities in this field, as well as the outreach activities and the teaching and training responsibilities. In this roundtable, we want to present our clinic-The Adolescent Medicine Clinic of Hacettepe University as a model to share our experience. We will discuss the clinical work-up and patient follow up in our clinic, with a multidisciplinary approach based in a tertiary care center. We will present the out-reach activities we conduct to increase the awareness and request for clinical help for adolescents. We will inform the participants about the collaboration of our clinic and Ministry of Health to set up the Youth Centers in primary and secondary health care centers in Turkey and therefore will discuss the public health aspect with preventive health services and support for adolescents. We will also discuss the Adolescent Medicine doctorate program of Hacettepe University, Child Health Institute as a training model for new Adolescent Medicine clinicians to full fill the needs of the country.**CONCLUSIONS:** The proposed topic is important because we believe that sharing our experience both with clinical and public health aspects will be helpful for other participants either from Turkey or from other countries who are just starting or developing their health care systems for adolescents. We believe that this presentation will give other participants the opportunity to share their experiences and will lead an interactive discussion for solutions on how to overcome the problems in this field.

PHS-7

Adolescent Health in Rural and Urban Global Contexts: Highlights from American, Australian, and Kenyan Datasets and Implications for Clinical and Public Health Practice**Barbara McMorris, Molly Secor Turner*, Sarah Stoddard****

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OBJECTIVES: 1-To describe risk factors and health concerns at various stages of adolescent development in rural and urban global contexts using multiple existing data sets. 2-To discuss public health and clinical practice strategies that are responsive to differing geographic and social contexts.**METHODS:** The development of positive health practices during adolescence prepares young people to enter adulthood as healthy individuals. However, many young people face barriers to accessing high quality, youth-friendly services that are contextually appropriate, resulting in excessive preventable morbidity and mortality. This symposium will discuss findings from existing data sets that capture various stages of adolescent development, measures of health-risk behaviors, and receipt of healthcare services in multiple rural and urban global contexts. 1. A Comparison of Health-Risk Behaviors between Urban Secondary School Students from the U.S. and Australia. First, we highlight behaviors such as alcohol and drug use, violence, and bullying in survey data from state samples of 15-year-old adolescents who participated in the International Youth Development Study. These data will illustrate the prevalence of health-risk behaviors in urban settings such as Melbourne, Australia and Seattle, U.S. 2. Rural Adolescent Health among Secondary School Students: Accessing Youth Friendly Services from North Dakota, U.S. to Kenya. Second, we link health-risk behaviors to receipt of healthcare services. Quantitative and qualitative data will be presented to describe the challenges experienced by secondary school-aged adolescents in rural areas of the U.S. and Kenya. In particular, findings will highlight the geographic and social barriers adolescents face in receiving youth-friendly preventative health services, including health promoting information and education. 3. Receipt of Youth-Focused Healthcare Services by Young People with and without Physical Disabilities from Rural and Urban Areas of the U.S. Midwest. Third, we continue on the theme of healthcare services for youth and discuss whether or not youth-friendly services are provided to all young people, including those with functional disabilities. Little is known about whether young people with physical limitations are receiving high quality and developmentally appropriate healthcare services. Using online survey data, we will highlight the need for increased delivery of youth-focused services among adolescents and young adults (age 16-24) with physical disabilities in the Midwestern states of the U.S. 4. Adolescent Predictors of Physical and Psychological Health in Early Adulthood: The Role of Exposure to Violence for Urban Youth in the U.S. Finally, we move away from cross-sectional data to describe linkages between adolescent risk and young adult outcomes. Specifically, survey data collected from mid-adolescence through early adulthood in a sample of urban youth will highlight relationships between adolescent risk behaviors and health and psychosocial outcomes in early adulthood. We will discuss the influence of urban context, particularly the role of violence exposure, on health and psychosocial outcomes. These multiple data sources will provide the foundation for a discussion on how to address major health risks facing youth, as suggested in a resolution on youth and health risks adopted by the 64th World Health Assembly (WHA64.28, May 2011). We will discuss the importance of developing intervention strategies and improving clinical practice in ways that are responsive to geographic and social context.**CONCLUSIONS:** All young people experience biological changes and transitions in social roles and relationships, yet, dependent on where they live, they face different risk factors and barriers to receiving health services. This symposium will present findings from several datasets demonstrating similarities and differences in the adolescent experience in multiple rural and urban global contexts. We will describe barriers to accessing high quality, youth-friendly services. For many, the consequences of foregone health care are preventable morbidity and mortality. We will discuss the importance of developing intervention strategies and improving clinical practice in ways that are responsive to geographic and social context.

PHS-8

The Well-Being of Adolescents in Vulnerable Environments: Youth Perspectives in 6 Cities

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OBJECTIVES: 1-To demonstrate how comparative cross national research can be implemented: the challenges, the successes, and the payoff.

2-To present the perspectives of youth from marginalized environments about their health, services in their communities and what they need, and to discuss the implications of the findings for policy makers and program administrators.

METHODS: To broaden our understanding about the health of young people and the connections they have to positive health resources in severely disadvantaged communities, the Well-being of Adolescents in Vulnerable Environments (WAVE) study was launched in 2010 with the primary aims of: 1) Exploring top health challenges facing adolescents; 2) Determining the factors that contribute to the health challenges; and 3) Examining how these factors contribute towards help-seeking in their communities. The proposed symposium will unveil descriptive findings about the perspectives of adolescents who live in highly impoverished areas of 6 cities. Rigorous qualitative studies have set the stage for quantitative surveys in which youth are recruited via respondent driven sampling to ensure inclusion of adolescents both in and out of school and in and out of stable households. **METHODS:** WAVE is a mixed method global study of adolescents ages 15-19 living in disadvantaged environments including: Baltimore, USA; Johannesburg, South Africa; Shanghai, China; New Delhi, India; Ibadan, Nigeria; and Rio de Janeiro, Brazil. In each of these six sites, qualitative data and quantitative data are collected using common protocols. Qualitative data collection includes in-depth interviews; community mapping and focus groups; a Photovoice in which adolescents are trained in photography and take photos of the meaning of 'health' in their communities; and key informant interviews with adults who work with young people. In the second phase of the study, a respondent driven sample of 400 adolescents in each site are interviewed by audio computer assisted methods to explore the prevalence and influences of themes uncovered in the qualitative phase.

RESULTS: Qualitative data illustrate striking agreement in what adolescents perceive as their top health concerns across the different urban contexts. Among females, sexual and reproductive health problems are a primary health challenge, whereas among males, tobacco, drug, and alcohol consumption is the top health concern, often accompanied by concerns about violence. Among both male and female adolescents, personal safety is a major concern, with adolescents from Baltimore and Johannesburg feeling unsafe even within their own homes. When asked about the factors perceived to influence their health, surprisingly, the physical environment is the most salient theme that emerges. Adolescents describe their living conditions as poor and dirty, characterized by inadequate sanitation, over-crowded buildings, and lacking resources and opportunities. As a consequence, there is a general lack of trust in the adults and service providers in the community, and disbelief that such services could be helpful to them. Quantitative survey data, available in the Spring 2013, will clarify the prevalence and salience of these themes across sites and among larger and more representative samples. **Tentative CONCLUSIONS:** Policies and programs to improve the health of adolescents in distressed communities need to focus on initiatives that not only improve the physical environment and their sense of personal safety, but also access to positive social connections.

CONCLUSIONS: This symposium showcases results from an innovative study of youth living in impoverished neighborhoods in 6 very different cities around the world. Rather than concentrating on school age children or adolescents living in households, this study also includes out-of-school and unstably housed youth. Investigators developed common methods and measures informed by extensive qualitative research in each site. In spite of cultural and economic development differences between the sites, the teens living in impoverished neighborhoods describe similar experiences regarding the threats to their health. It is important to tap into youth experiences and perspectives in studying and addressing their health.

CS-7

How Youth-Friendly is Your Health Service? And How do You Know?**Susan Sawyer, Janet McDonagh*, Dagmar Haller****

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OBJECTIVES:1-To discuss different approaches to measuring the 'youth friendliness' of health services (including audit tools, surveys

2-To understand how these tools have been applied in different settings, services and systems in order to promote the development of youth friendly healthcare.

METHODS:The World Health Organization (WHO) has declared the health of young people a global health priority, concerned both by the growing burden of adolescent morbidity and mortality and the importance of adolescence for lifetime health. Over the past decade, various global, national and local policies have been promulgated that support the implementation of youth friendly (or adolescent friendly) health services, a term that is shorthand for quality, accessible and appropriate services for young people. Much clinical research activity has focused on implementation of approaches to increase rates of, for example, preventive screening and assessment, an important aspect of youth friendly health care. However, there are many other aspects that need to be considered before health services can be considered to be youth friendly. What are these other elements? And how does any health service know that the healthcare that they provide is indeed youth friendly. Exploration of this question lies at the heart of this workshop, with the focus on health services and systems rather than individual clinical skills. The workshop speakers will briefly present some core information with the intent of triggering reflection and discussion from participants who will be challenged to consider how they might evaluate the youth friendliness of their own services. The workshop will be introduced by three speakers who come from a variety of countries and different clinical settings. They will each present a mini-lecture (10 minutes) on the following topics: 1. You're Welcome: Using audit tools to improve youth friendly health services. (Dr J McDonagh, UK). 2. Can a quantitative measure of youth-friendly primary care services drive clinical and service improvements in primary care? (Dr D Haller, Switzerland) 3. Measuring youth friendly healthcare delivered in a tertiary children's hospital (Prof S Sawyer, Australia). The workshop will then invite participants to reflect on the youth friendliness of the health care in their own services, whether they are based within primary care or more specialised settings. Interactive activities will encourage participants to consider the benefits of measurement in terms of how objective measurement might be used to drive more youth friendly healthcare. Consideration will be given to using existing quality and safety frameworks to support these activities might occur. Strategies for the active involvement of young people in the development and evaluation of such services will also be explored. The workshop format will mini-lectures and interactive small group work, with the voice of young people being presented via DVD clips. Participants will be provided with a range of resources to support future measurement activities. They will also be provided with tips for interventions to promote more youth friendly healthcare within healthcare services.

CONCLUSIONS:The adolescent health community recognises the value of youth-friendly health services. However, a common challenge is difficulty persuading health care managers about the importance of providing more youth friendly health care. Health services typically manage what they measure. We argue that just like other aspects of health care, it is important to develop measures of youth friendly health services. The development of indicators and more consistent approaches to measuring youth friendly health care can then promote the capacity to benchmark one service against another, and in doing so, allow local services to set targets to drive more focused quality improvement initiatives.

SHS-2

Sexual Exploitation and Trafficking of Adolescents and Youth

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OBJECTIVES: 1- To present updated international human rights framework, which emphasizes the right of protection and the importance of the best interest of the child/adolescent for prevention of commercial sexual exploitation and sexual trafficking and the use of this framework in developing laws and policies;

2- To discuss the challenges in implementing interventions for identification of victims, recognizing main gynecological /clinical/mental repercussions and psychological and social aspects of post-traumatic stress disorders and ensuing vulnerabilities.

METHODS: Commercial sexual exploitation and sex trafficking of adolescents and youth have become an international public health problem although it remains largely "invisible," with lack of reliable data establishing incidence and prevalence and other gaps in evidence-based research, in most regions of the world. The terms sexual exploitation, sex trafficking, sexual victims, abuse and violence have different cultural connotations that contribute to confusion and lack of clarity in addressing the problem. Nevertheless, the U.N. Convention on the Rights of the Child (UN-CRC) contains critically important provisions that make clear this problem is a crime against the best interest and healthy sexual development of the child/adolescent. The contributing factors are poverty, family disturbances and lack of affective bonds, situational risks including war, armed conflicts, forced and illegal labor, migration and drugs. Medical and psychological problems that present in most emergency rooms and shelters include sexually transmitted diseases, teenage pregnancies resulting from sexual abuse and rape, mental disorders including post-traumatic stress disorders, suicide attempts, and the use/abuse of alcohol and drugs. The critical importance of prevention and interventions as effective strategies for tackling the commercial sexual exploitation and sex trafficking of adolescents and youth will be presented and discussed. The international legal and human rights framework will be explained, including key provisions of the U.N. Convention on the Rights of the Child, articles #19 (against all forms of violence), #24 (highest health attainable) and #34, #35 and #36 (against all forms of exploitation and trafficking for any purposes). Challenges and strategies for use of these and other provisions of international law, treaties, and conventions for developing beneficial laws and policies will be explored. The importance of collaboration between different sectors of the health and legal systems will be presented and the best dissemination approaches for improving health, mental health, and legal protections in each country and internationally. Examples of promising programs, media campaigns, and NGO advocacy efforts, also in Turkey, will be presented to stimulate the interaction with the professional audience to clarify the most important issues relating to sexual exploitation and trafficking and to promote development of effective strategies for addressing the problem.

CONCLUSIONS: Commercial sexual exploitation and trafficking remains a controversial but very frequent health, behavioral/mental and social/legal problem affecting adolescents and youth all over the world. Medical repercussions are complex issues to be dealt not only at emergency rooms but also at most of the street youth shelters. Contributing factors like poverty, family abuse and violence, and lack of affective bonds or drugs are associated with lack of social or political support and gender discrimination and cultural barriers. Effective policy strategies for prevention and intervention within the legal framework of the UN-CRC will be presented for an interactive discussion with the participants.

PDS-1

Training in Adolescent Health for All

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OBJECTIVES: 1- to identify key training opportunities in adolescent health internationally

2- to bring together those who have an interest in training in adolescent health

METHODS: Adolescents make up 20% of the world's population, but all too often health care systems in place are not always designed for them and do not fit their particular needs. Health professionals from a variety of disciplines frequently express concern about the lack of training opportunities. This is usually coupled with a desire to up-skill and find resources and other like minded individuals to support their learning. The aim of this symposium / roundtable discussion is to bring together those who are interested in training (both of others and their own) to share experiences and identify key concepts and strategies. The hope is that conclusions and networks from this session can be used to develop strategies for more international collaboration. Overall it is hoped that this will enable improvements in healthcare for young people internationally. All health professionals from all disciplines are invited and encouraged to attend.

CONCLUSIONS: The presenter is the council member for IAAH for education and training, who will chair the session. The council had suggested that such a session be held at the conference in Istanbul to try and build up networks and strategies for trainers and trainees internationally to improve adolescent health care.

Keywords: Public Health

OP01

Gender-Based Violence against Adolescent and Young Adult Women in Low and Middle Income Countries

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OBJECTIVE: Globally, gender-based violence is prevalent with significant health consequences. Youth are thought to be disproportionately burdened, yet to date, the global prevalence of key gender-based violence indicators among adolescent and young adult women remains unclear. The widespread introduction of a violence assessment within the Demographic and Health Survey (DHS) surveillance system, enables for the first time synthesis of national-level data to support this question. We examine the prevalence of intimate partner violence and forced first sex among adolescent and young adult women in low and middle income countries.

METHODS: Analysis of the Demographic and Health Survey (DHS) data was conducted across nations for which data were available to estimate the prevalence of lifetime and past-year intimate partner violence (26 nations) and forced first sex (14 nations) among adolescent and young adult women ages 15-19 and 20-24. We calculate lifetime and past-year estimates of physical and sexual intimate partner violence, and forced sexual debut, by age group within nation, and summarize results via meta-analysis.

RESULTS: Findings demonstrate a significant burden of gender-based violence among youth in most settings, with over 1 in 4 young married women affected by partner violence, and 1 in 5 sexually experienced adolescents reporting forced first sex. In some settings young age was found to confer risk for abuse; in other settings youth were relatively protected from violence as compared with their older counterparts (ages 25-34).

CONCLUSIONS: National-level estimates illustrate that physical and sexual partner violence, and forced sex, are prevalent threats to the health and well-being of young women. Findings affirm the global relevance of violence prevention and intervention for young women, and highlight the need for a trauma-informed approach in adolescent health.

Keywords: Gender-based violence, intimate partner violence, forced sex

OP02

Innovative Photography-Based Approach to Evaluating A Street Children's Drop-in Centre from the User's Perspective: Kenya

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OBJECTIVE: Conduct an evaluation to describe barriers and facilitators to young people exiting street life as well as positive and negative impacts of a drop-in center from the perspective of the user in order to inform program planning. The drop-in centre had existed for two years without any formal evaluation.

METHODS: 32 street-involved young people (10-19 years old) were selected using a stratified purposeful sampling method. An innovative participatory-based evaluation method, adapted from a research method called Photovoice, was utilized to identify impacts of the drop-in centre. This method included participant training, participants independently collecting data using disposable cameras, focus groups centered around the photographs, and an art exhibition. Transcripts were produced from each focus group and analyzed using content-analysis.

RESULTS: Different themes arose from the focus group discussions regarding the broader context of street life and qualitative outcomes of the drop-in centre from the user's perspective. Multiple facilitators (e.g. going to school) and barriers (e.g. glue addiction) to exiting street life were identified. Strengths (i.e. health care) and weaknesses (e.g. substance abuse efforts) of the drop-in center's current operations were also identified. Each participant chose one photograph to be displayed in an art exhibition that resulted in several positive outcomes including creating new community connections for the drop-in centre, positive personal experiences for participants, and helping to dispel stereotypes about street life within the community.

CONCLUSIONS: This method successfully engaged street children and youth in sharing invaluable insights that will inform future programming at the drop-in centre as well as other initiatives aimed at improving the lives of this vulnerable population. It is essential to understand the contextual factors involved in street life and the impacts of a drop-in centre model of care in order to understand how to effectively find healthy and sustainable alternative lifestyles for street-involved young people.

Keywords: Evaluation, street children, street youth, community-based participatory research, Photovoice

OP03

Connectedness and Engagement: Teacher Professional Development to Enhance Early Adolescent Outcomes

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OBJECTIVE: The Minnesota Partnership for School Connectedness (MPSC) is a multidisciplinary, intercollegiate partnership that fuses theory, empirical research and practice from the fields of adolescent health and education. This project tests the hypothesis that students are more likely to succeed if their teachers improve skills for developing strong relationships with students - so that students feel connected to school, and if instruction is interesting and relevant - so that students are engaged in learning.

METHODS: MPSC is a three-year feasibility study, partnering the University of Minnesota with eight diverse Minnesota middle schools (grades 6-8), where teachers participate in a professional development fellowship. MPSC provides best practice knowledge, support, and effective classroom teaching strategies to help teachers engage all of their students, including those most disengaged from learning. MPSC uses an innovative model of professional development that spans the entire school year and includes training, observation, feedback, and coaching.

RESULTS: Preliminary analyses reveal promising results for MPSC teachers and students. The Classroom AIMS instrument was used to assess implementation of classroom management strategies and teacher-student engagement. Data collected through four observations of classrooms during the school year were analyzed using repeated measures ANOVA; findings demonstrated significant increases in ratings over time. Using repeated ANOVA measures with covariates, we found significantly improved engagement in learning among the most disengaged students. In contrast, engagement levels declined among already engaged students.

CONCLUSIONS: MPSC demonstrates promise in connecting with disengaged students. If the spark for learning can be reignited for disengaged learners, they are less apt to drop out of school or engage in an array of risky behaviors.

Keywords: Adolescence, middle level students, school connectedness, student engagement, healthy youth development, teacher professional development

OP04

Mortality in a Six-Year Cohort of Venue-Recruited Youth in San Francisco, California USA

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OBJECTIVE: Homeless individuals face disproportionate rates of morbidity and mortality. However, mortality rates for homeless youth in the United States have not been documented. We examined the mortality rate from 2004-2010 for a cohort of street youth recruited from San Francisco venues.

METHODS: Using data collected from a longitudinal, venue-based sample of 15 to 24 year-old street youth, we calculated age, race, and gender-adjusted mortality rates for a sample of 266 study participants. We use standardized mortality ratios (SMRs) to compare their mortality rate to that of age-matched populations in California.

RESULTS: Of a sample of 266 participants, 12 died between study start and December 31, 2010. The majority of deaths were due to suicide and substance abuse. We calculated a death rate of 7.6 deaths per hundred thousand. The standardized mortality ratio for this group was 8.4 (95% confidence interval: 4.6 to 14.3). The gender specific SMRs were 12.7 (95% CI: 3.2 – 34.5) for females and 7.6 (95% CI: 3.7 – 13.9) for males.

CONCLUSIONS: To our knowledge these are the first prospective cohort findings regarding street youth mortality in the United States, and the only study on mortality to have recruited participants through venue-based, rather than service or shelter-based sampling. Results indicate that homeless and unstably housed youth in San Francisco experience a mortality rate in excess of eight times that of the state's general youth population. Services and programs, particularly mental health and substance abuse interventions, are urgently needed to prevent premature mortality within this vulnerable population.

Keywords: Street youth, mortality, venue recruitment

OP05

Associations Between Home Food Environment during Adolescence and Food-Related Attitudes and Behaviors in Young Adulthood

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OBJECTIVE: To examine if the home food environment during adolescence is associated with eating-related attitudes and behaviors in young adulthood.

METHODS: Population-based, longitudinal cohort study Project EAT (Eating and Activity in Teens and Young Adults). Middle and high-school students in Minneapolis/St. Paul, MN, US (mean age = 15.0 years completed surveys in 1998-1999 and 10 years later in 2008-2009 (mean age = 25.3 years). The current study included 2287 participants (45% male). Principal component factor analysis was used to describe the home food environment during adolescence (healthy and unhealthy foods available, frequent family meals, parent caring about eating healthy and encouraging their adolescents to eat healthy, and enjoyment eating with family) and separately during young adulthood. Outcome variables include healthy and unhealthy food availability, meal enjoyment with family/friends, meal structure (eating less on the run, finding time to sit down and eat, having regular meals), food attitudes (caring and liking the taste of healthy foods), and social eating. Multivariate analysis for each outcome variable was conducted to examine prospective associations. All predictors describing the home food environment along with gender, race, and socioeconomic status were simultaneously included in each model.

RESULTS: Having a positive food environment during adolescence was associated with having healthy foods available at home ($p < .0001$) and with positive food attitudes ($p < .0001$) during young adulthood. Enjoying eating meals with family in adolescence was associated with better meal structure ($p = 0.0012$) and with more social eating ($p < .0001$). Having fewer unhealthy foods available at home during adolescence was associated with fewer unhealthy foods available ($p < .0001$) and positive food attitudes ($p = .0058$) during young adulthood.

CONCLUSIONS: Families providing a positive home food environment for their adolescents may influence the formation of healthy food-related attitudes and behaviors in young adulthood.

Keywords: adolescents, young adults, home food environment, eating-related attitudes and behaviors, factor analysis

OP06

On Your Own Feet Ahead: Does a Quality Improvement Collaborative Strategy Lead to Improved Transitional Care?

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OBJECTIVE: In the Netherlands, adolescents with chronic conditions are often ill prepared for transition to adulthood and transfer to adult care. Health care providers also indicated an urgent need to enhance collaboration between paediatric and adult care. A national four-year innovation programme 'On Your Own Feet Ahead' was set up as a Quality Improvement Collaborative (QIC). Multidisciplinary teams implemented interventions such as developing joint policies, transition clinics, introducing Individual Transition Plans, and encouraging independent health behaviours during consultations. Aim of the evaluation study is to establish the improvements in experiences with transitional care delivery after one year.

METHODS: 30 multidisciplinary teams from 25 different hospitals and rehabilitation centres participated in three rounds by setting goals and changing their own practice within 12 months. For the evaluation, quantitative survey data were collected from providers and adolescents (12-25 years with different type of chronic conditions) at the start (T0) and one year later (T1). To assess adolescents' satisfaction with care we used the 'Mind the Gap' instrument. The providers' survey included a checklist of shortcomings in transitional care.

RESULTS: Paired sample t-tests showed that providers perceived significantly less shortcomings in transitional care after one year, especially in the availability of shared policies and protocols, better co-ordination, availability of more resources, increased responsibility of adolescents regarding self care, better social participation of adolescents, improved compliance, and parents ceding more control to their children. Adolescents were particularly positive about independent health behaviours during consultations and reported feeling more prepared for the transfer to adult care services.

CONCLUSIONS: The QIC strategy seems successful in supporting teams of health care providers to undertake immediate action to improve collaboration in transitional care, in giving adolescents opportunities for independent health behaviours, and reducing most experienced shortcomings. Even in such a short time, adolescents noticed significant changes in transitional care.

Keywords: Transition, transfer, programme evaluation, patient experiences, survey

OP07

Affective Variability in Adolescence - a Temporary Imbalance between Hormonal and Cognitive Development?

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OBJECTIVE: Empirical evidence shows more rapidly changing affective experiences in adolescence as compared to late childhood and adulthood. However, possible factors contributing to age differences in affective experiences lack sufficient empirical investigation. Against common assumptions, hormonal changes in puberty alone only have minor explanatory value. We hypothesize (a) that adolescents show a temporary imbalance between the activating force of hormonal changes and the deactivating force of cognitive control on affective experiences, and (b) that this imbalance accounts for the greater variability in affective experiences during adolescence, as compared to late childhood and early adulthood.

METHODS: We investigated these hypotheses using a 9-month longitudinal design in a sample of 158 male participants aged 10 to 20 years. During a 2-week long experience-sampling phase, participants indicated on several times a day, among other things, how much they were feeling different emotions. To assess gonadal hormone concentration, participants provided morning and evening saliva samples on 4 consecutive days. Individual's working-memory performance was assessed with several memory-updating and complex span tasks in the laboratory and in daily life. The local ethics committee approved of this study. Multilevel regression models were used to investigate whether within-person changes in gonadal hormone concentration and working memory performance predicted within-person variability in affective experiences.

RESULTS: Results support the assumption of a temporary imbalance in adolescents' hormonal and cognitive development. That is, adolescents, as compared to children and young adults, showed great hormonal changes but not yet fully developed cognitive control. Moreover, adolescents in puberty showed larger interindividual variations in their person-specific imbalance than did prepubertal adolescents.

CONCLUSIONS: We emphasize that adolescence is characterized by much developmental heterogeneity, suggesting a need for individually adjusted health services in order to promote individuals' successful socioemotional development and psychological well-being. No author has any conflicts of interests in this research.

Keywords: Affective variability, adolescence, hormones, working memory

OP08

Associations with Positive Experiences of Transfer to Adult Care in Young Adults with Chronic Conditions

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OBJECTIVE: To explore the associations between young adults' experiences with the transfer to adult care and socio-demographics, disease characteristics, transfer readiness, self-management related factors such as self-efficacy and adherence, and Health-Related Quality of Life (HRQoL).

METHODS: 1001 young adults (18-25 years) with somatic chronic conditions, formerly treated in Erasmus MC-Sophia, Rotterdam, were invited to participate in a 6-year follow-up study On Your Own Feet (response 52%; n=518). A newly constructed 18-item scale, the On Your Own Feet - Transfer Experiences Scale (OYOF-TES), was used to assess experienced transfer to adult care. Associations were explored with stepwise multivariate modelling, using past (2006-T0) and current (2012-T1) variables.

RESULTS: On a scale of 1-10, the overall process of transfer was appreciated with 6.7 (± 1.8). Factor analysis showed that the OYOF-TES has two subscales: 1) the organisation of transfer and the experienced collaboration between pediatric and adult care (Cronbach's Alpha=.91); 2) appreciation of preparation and transitional care arrangements (Cronbach's Alpha=.89). Regarding organisation of transfer ($R^2=.31$), those with a higher satisfaction with their relationship with current healthcare providers were more positive ($\beta=.43$). Regarding the appreciation of the preparation for transfer ($R^2=.24$), males ($\beta=.17$) were more positive. This was also associated with higher reported current self-efficacy ($\beta=.20$) and current care consumption ($\beta=.26$). All T0 variables (including transfer readiness) did not contribute significantly to the multivariate models.

CONCLUSIONS: This exploratory study is one of the first reporting on young adults' experiences with the transfer from paediatric care to adult care and its associations. Since self-management factors, transfer readiness, and HRQoL at T0 did not contribute to positive transitional care experiences, it remains difficult to predict a good transfer. However, higher HRQoL and higher self-efficacy were related to better transfer experiences, suggesting that a smooth transfer might contribute to current self-management skills and HRQoL.

Keywords: transition, transfer, pediatric care, adult care, chronic disease, patient perspective

OP09

Behavioral Strategy to Reduce Risk Factors associated with Type 2 Diabetes Mellitus in Youth

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OBJECTIVE: To evaluate the efficacy of an intervention strategy based on problem solving, which aimed to change the lifestyle of youth students at risk of Type 2 Diabetes Mellitus (T2DM).

METHODS: Sample included 447 youths between 9 and 14 years living in Mexico City, 135 were diagnosed T2DM risk according to the following criteria: relatives with T2DM, BMI above the 85th percentile, and the presence of acanthosis nigricans. We used a pre-post experimental design. The design included an experimental group (n=83) and a waiting list group (n=52). The variables measured were the food intake via a 24-hour recall, physical activity and BMI. For the intervention used a behavioral contract (parents, children and experimenters), a behavioral diabetometer expressly designed, brochures and a solving problem strategy.

We used the Wilcoxon rank test to analyze changes in the prevalence of obesity and overweight in each group. For analysis comparing intake of food portions before and after the intervention the analysis was by Student's t test.

RESULTS: In the experimental group decreased obesity cases ($z = -.36$, $p = 0.01$) while increasing cases of overweight and normal weight in the waiting list group showed no significant changes. In experimental group decreased fat intake ($t = -2.16$, $p < 0.05$) and sugars ($t = -3.05$, $p < 0.01$), while the waiting list group had an increase in both food groups ($t = 2.23$, $p < 0.05$) ($t = 3.12$, $p < 0.01$). Young people in the experimental group decreased sedentary hours.

CONCLUSIONS: We believe that the changes are attributable to the intervention and that the three behavior change strategies worked synchronously in favor of lifestyle modification.

Keywords: Promoting health, eating habits, behavior modification, juvenile diabetes type 2

OP10

Prism-Ado: Cluster Randomised Trial of a Brief Primary Care Intervention Addressing Excessive Substance Use in Young People

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OBJECTIVE: To assess the effectiveness of a brief intervention delivered by family doctors to reduce binge drinking and/or excessive cannabis use in young people.

METHODS: This was a cluster randomised trial involving 32 family doctors in the French-speaking part of Switzerland. The doctors were randomised to receive training in delivering the brief intervention or to provide usual care (control condition). Young people between the ages of 15 and 24 years consulting these doctors for any motive were invited to participate. Before the consultation they completed a confidential questionnaire about their health and substance use. During the consultation all patients were first offered usual care for the problem for which they had come. Depending on the random assignment of their doctor, they were exposed to the brief intervention in addition to usual care. Patients were followed-up by mobile phone 3, 6 and 12 months after the consultation. Main outcomes were excessive alcohol (≥ 1 binge drinking episode) and/or excessive cannabis use (≥ 1 joint/week) in the past 30 days.

RESULTS: 594 young people (48% male) were included in the trial between January 2009 and November 2010, 45% of which presented excessive substance use at baseline. Follow-up rates at 3, 6 and 12 months were 87%, 80% and 73%. Overall there was a 30% reduction in the proportion of excessive substance users at follow-up among those who were excessive users at baseline but no statistically significant differences between the intervention and the control groups.

CONCLUSIONS: Though excessive substance use decreased in the year following a consultation with a family doctor, this reduction did not seem to be related to exposure to the brief intervention.

Keywords: Randomised trial, primary care, binge drinking, cannabis, brief intervention

OP11

Youth Participation within the Chronic Illness Peer Support Program: Resolving Tensions Between Model and Experience

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OBJECTIVE: The Chronic Illness Peer Support program (ChIPS) is a health promotion program for young people (12-25 years) living with significant physical health conditions. It aims to reduce the burden of disease of this vulnerable group by enhancing wellbeing through a variety of mechanisms. Run by the Royal Children's Hospital (RCH) Centre for Adolescent Health for 20 years, the model draws heavily on the principles of peer support and youth participation, with a youth-driven consumer focus underpinning every aspect of the program. A formal program evaluation was completed in 2010-2011.

METHODS: Evaluation data included 49 in-depth interviews with: a) long-term and new ChIPS members; b) their parents; and c) a range of other stakeholders including program staff (current, former), mentors and volunteers. 36 young people and 31 parents completed written questionnaires, incorporating validated measures of psychosocial wellbeing. Thematic and simple statistical analyses were applied.

RESULTS: The program meets a range of social, emotional and self-development needs experienced by this population including adjustment to illness, mental health, skill development and friend/support networks. Interestingly, the results suggested that participants thought they were more 'in charge' of the programme than they were. This highlights challenges about operationalizing the youth participation model effectively, with some tension between staff and participant experiences of working together to run the program, the practical outcomes and experience of all involved.

CONCLUSIONS: Results of this evaluation were very positive. Lessons learnt about the need for careful negotiation, communication and management to successfully integrate young peoples' role with the roles and responsibilities of program staff have implications for youth participation programs more generally. This presentation will outline key components of the ChIPS program and the evaluation results, together with recommendations for future directions. Discussion will particularly focus on recent efforts to manage tensions identified in operationalizing the youth participation model.

Keywords: Peer Support, Youth Participation, Chronic Illness

OP12

Hiv Testing Uptake and Prevalence Among Adolescents in a Large Home-Based Hiv Testing Program in Western Kenya

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OBJECTIVE: To describe HIV testing uptake and HIV prevalence among adolescents in a home-based (HB) HIV counseling and testing (CT) program.

METHODS: In 2007, the Academic Model Providing Access to Healthcare (AMPATH) Partnership implemented HBCT in 7 catchments in western Kenya. Certified HIV counselors go door-to-door offering CT to all individuals aged ≥ 13 years and high-risk children. Included in this analysis were adolescents (13-18yrs). Multivariate logistic regression was used to calculate adjusted odds ratios (AOR) and 95% confidence intervals (CI) describing factors associated with testing uptake and HIV prevalence.

RESULTS: There were 34,733 adolescents eligible for analysis: 50% female, 24% single/double orphan, mean age 15.3 years. Of these, 10% had previously tested for HIV and 0.4% already knew they were HIV-positive. Testing uptake in HBCT was high (99%). Combined HIV prevalence (previously known plus newly testing positive) was 0.8%. Adolescents were more likely to accept testing if they were older (per year increase) (AOR: 1.56, 95%CI: 1.40-1.74), and less likely if they were orphans (AOR: 0.68, 95%CI: 0.52-0.88), had a secondary school education (AOR: 0.56, 95%CI: 0.33-0.95), and had ever previously tested for HIV (AOR: 0.07, 95%CI: 0.06-0.10). Adolescents were more likely to test HIV-positive if they were female (AOR: 2.83, 95%CI: 1.76-4.56), orphans (AOR: 2.30, 95%CI: 1.49-3.55), in a sexual relationship (AOR: 4.29, 95%CI: 2.16-8.53), or had previously tested for HIV (AOR: 2.97, 95%CI: 1.71-5.18).

CONCLUSIONS: These data suggest that adolescents are very willing to test for HIV in home-based settings. They also suggest that female adolescents, orphans, those in a relationship, and those who had previously tested for HIV are most likely to be HIV-positive. These findings have implications for adolescent HIV prevention and treatment programs.

Keywords: HIV, HBCT, Testing, Prevalence, Adolescents

OP13

Clinical and Virological Outcomes of Adolescents in a Rural HIV Treatment Programme in Kwazulu-Natal, South Africa**Nicoletta Mabhena, Tobias Chirwa, Portia Mutevedzi*, Ruth Bland***

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OBJECTIVE: To describe and investigate clinical and virological outcomes of adolescents (aged 10-19 years) initiating anti-retroviral treatment (ART) between June 2004 and December 2010, in the Hlabisa HIV Treatment programme, South Africa**METHODS:** A secondary data analysis of patient data, documented in paper-based clinic records, and entered into a dedicated database was done. Baseline clinical characteristics were examined; time to death and lost to follow up (LTFU), defined as no contact with the programme for >6 months, were quantified using Kaplan-Meier estimates. Factors associated with an unsuppressed viral load (>70 copies/ml) after at least 6 months on ART were investigated using multivariable logistic regression.**RESULTS:** 543 adolescents, median age 15 years (IQR 12-18), initiated ART; 368 (67.8%) were females. Age at treatment initiation showed a bimodal distribution, with a peak at 11 years followed by a further peak at 17-19 years; 61 (27.5%) of 222 females aged 16-19 years initiated ART whilst pregnant. At baseline, median CD4 count was 152 cells/µl (IQR 79-251), 103 (19%) were on TB treatment and 129 (23.8%) had a weight-for-age z-score (WAZ score) ≤ -2 (i.e. were under-nourished). Numbers of adolescents starting ART increased from 53 in the years 2004-2006 to 196 in 2010. Overall mortality was 36.5 per 1000 person years of follow-up (95% CI 27.2 - 48.8); LTFU was 98.8 per 1000 person years (95% CI 82.8-118) and differed significantly by gender and developmental stage. Of 364 adolescents with a viral load result, 119 (32.7%) were unsuppressed. Compared to those initiating treatment in 2004-2006, adolescents starting ART in the year 2010 had lower odds of an unsuppressed viral load (aOR 0.32 95% CI 0.13-0.82).**CONCLUSIONS:** With increasing numbers of adolescents initiating ART, attention needs to be paid to LTFU, and timely viral load monitoring to identify those in need of increased adherence support.**Keywords:** Anti-retroviral treatment, Lost-to-follow-up, mortality, unsuppressed viral load

OP14

Shifting HIV Risk Paradigms among Youth in Rural Uganda: An Outbreak of Perceived Risk**Zoe R Edelstein, Sanyukta Mathur*, John S Santelli*, Ying Wei**, Jenny A Higgins***, Neema Nakyanjo****, Nalugoda K Fred******

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OBJECTIVE: Perception of HIV risk may reflect self-appraisal of one's actual HIV risk; alternatively it may reflect heightened sensitivity due to HIV prevention efforts regardless of actual risk. We examined perceived HIV risk and risk and preventative behaviors, including trends over time, among youth in rural Uganda.**METHODS:** We used longitudinal data from young men and women aged 15-24 years from 1999-2011 enrolled in the Rakai Community Cohort Study in Uganda (n= 23,952). We conducted stratified trends analyses by age and sex on young people's self-assessment of the likelihood of HIV acquisition. We also used data from ethnographic interviews with youth (n=60) to examine perception of HIV risk.**RESULTS:** Over the last decade, risk-perception of HIV/AIDS dramatically increased among sexually experienced youth in Rakai. In young women, the proportion who think they are at high risk increased steadily from 5.2% in 1999 to 25.6% in 2011 ($p<0.001$); and, in young men from 2.2% to 12.2% ($p<0.001$). Concurrently, and paradoxically, actual HIV prevalence decreased. The trends in risk-perception of HIV/AIDS did not always coincide with trends in HIV risk or preventative behaviors. Consistent condom use remained relatively stable over time, while the reported number of sexual partnerships declined. Only a third of youth regularly accessed their HIV test results and many inflated their own risk of HIV. Our qualitative data highlight that condom use was constrained by partner preferences and relationship dynamics, rather than being influenced by perceived risk.**CONCLUSIONS:** High perceived risk of HIV among youth may not reflect actual risk and may have limited impact in reducing risk behaviors. There is a need to better understand how youth think about and respond to HIV risk. Prevention programs should be cognizant of the complex relationship between risk perception and actual risk, and avoid simplistic HIV-risk messaging to youth.**Keywords:** HIV, Uganda, Youth, Trends, Perceived Risk

OP15

Reproductive Health Educational Intervention on Pregnancy Rate among Selected Rural High School Students, Sw Nigeria

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OBJECTIVE: In Nigeria, many in-school adolescents engage in risky sexual behaviour, which predisposes them to social and health consequences, including unwanted pregnancy, school drop-out, STIs and HIV/AIDS. This study addressed pregnancy rate among female high school students in rural SW Nigeria.

METHODS: The study utilized quasi-experimental design which consisted of four experimental schools in one rural local Government Area (LGA) and four control schools in another rural LGA which were randomly selected from the 30 existing LGAs in Osun State (One of the six states in SW Nigeria). The experimental schools received the intervention strategies (reproductive health educational messages including contraceptive services) while the control ones did not.

The intervention strategies were implemented for two and half school calendar terms (a calendar term in Nigeria lasts approximately thirteen weeks), from November 2003 to June, 2004. Contraceptive use and pregnancy rate were collected in both groups at pre- and post- intervention using school attendance records and home visits.

RESULTS: The results showed an increase in contraceptive use and as well as a reduction in pregnancy rate among students in all the intervention schools compared with the control group which recorded a negligible change at the end of intervention strategy. The increase in contraceptive use was from 39.7% to 67.9% in the intervention group, while the control was insignificantly from 34.2% to 34.3%. In case of pregnancy rate, the drop was from 13.1% to 3.8% in the intervention group while the control was slightly increased from 10.1% to 11.2%.

CONCLUSIONS: The study showed that intervention strategies (i.e multiple strategies) could have an impact on increase in contraceptive use as well as reduction in pregnancy rate among in-school adolescents.

Keywords: Reproductive health education, Quasi-experimental design, Pregnancy rate, Contraceptive services

OP16

Reproductive Myths and Misconceptions among Egyptian Adolescents

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OBJECTIVE: Examine the impact and acceptance of school-based reproductive health (RH) education initiative in 22 governorates in Egypt and explore the RH misconceptions and concerns prevailing among adolescents.

METHODS: Quantitative study of the results of the pre and post-tests conducted at the beginning and end of the series of seminars evaluated the baseline information and misconceptions among the students and the impact of the education sessions on their knowledge. The sample of the study consisted of almost 7000 students who attended all seminars during that period. The qualitative part of the study examined the beliefs, trends and attitudes of samples of male and female students who attended the education sessions and those who did not attend along with a sample of parents.

RESULTS: The results of the study indicate that there was an obvious deficiency of knowledge on many aspects among the studied adolescents and also a marked improvement of their knowledge as a result of attending the seminars. There were plenty of misconceptions among many boys and girls. Most of those who attended thought that the seminars were very important and need to be conducted on a larger scale so as to serve a larger number of students. Many of the students preferred getting information through the seminars rather than being a part of the school curriculum. Almost all students agreed that physicians are more acceptable to them than teachers for providing such information. Parents on the other hand mentioned that they would encourage their children to attend such educational activities.

CONCLUSIONS: School-based SRH education is needed and very effective for providing adolescents with essential SRH information that they need and for addressing their prevalent myths and misconceptions. SRH educational sessions conducted in schools are well accepted by students and their parents specially when conducted by young physicians in an interactive approach.

Keywords: Adolescents, Egypt, Reproductive Health Education, School-Based Initiatives, Myth and Misconceptions.

OP17

Correlates of Higher-Risk Sexual Practices among Adolescents in Osun State, Nigeria

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OBJECTIVE: To examine factors associated with higher-risk sexual practices among adolescents in Osun State.

METHODS: Four hundred and fifty adolescents were selected using multi-stage sampling procedure. They were interviewed using a pre-tested, semi-structured questionnaire. Focus group discussions (FGDs) were also conducted among in- and out-of- school adolescents. Main outcomes of the study included inconsistent condom use and multiple sexual partners in the immediate past 12months. Qualitative data was summarized into Z-Y index tables and used to triangulate findings from the quantitative data which was analyzed using SPSS version 16. Statistical significance was set at $p < 0.05$.

RESULTS: The mean age was 15 ± 2.6 years. One hundred and thirty adolescents (28.9%) have had sexual intercourse and only 36 (27.7%) of these used condom consistently. Fifty-five respondents (42.3% of the sexually exposed ones) had multiple sexual partners in the last twelve months. Almost all the participants in the FGD agreed that adolescents in this environment were getting involved in high-risk sexual practices and this was mostly due to peer pressure and lack of proper parental care. Pornography, male gender and castigation of chastity among peers were some of the factors significantly associated with multiple sexual partners. Wrong perception about condom and sexually transmitted infections were implicated in inconsistent use of condom ($p < 0.05$). Pornography singularly increased the risk of multiple sexual partners by about 15 (95%CI= 7.8 – 36.1; $p < 0.05$).

CONCLUSIONS: The study concluded that high risk sexual practices is not uncommon among adolescents in Osun State. Pornography and wrong perceptions about sexual practices contribute significantly to this finding.

Keywords: adolescents, inconsistent condom use, multiple sexual partner

PP001

Surveillance Study: Incidence and Clinical Presentation of Gender Identity Disorder in Children and Adolescents

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OBJECTIVE: The incidence of childhood/adolescent Gender Identity Disorder (GID) is unknown. GID is an important condition where gender identity differs from biological sex. It is associated with significant distress, particularly with puberty, with much controversy internationally over the optimal timing of hormonal treatment. We examine the incidence and clinical presentation in UK and Irish children/adolescents.

METHODS: STUDY POPULATION: Children and adolescents aged 4-15.9 years in the UK and Republic of Ireland. DESIGN: Joint British Paediatric Surveillance Unit and Child and Adolescent Psychiatry Surveillance System study. Consultant Paediatricians and Child and Adolescent Psychiatrists are reporting all new cases of GID seen within the 19-month reporting period (01-Nov-2011 to 01-June-2013). Clinical information provided is used to validate cases against the authoritative DSM-IV-TR (2000). Exclusions include disorders of sexual differentiation and major psychosis. PRIMARY OUTCOME: Incidence of childhood/adolescent GID, calculated by dividing the number of validated cases by the base population of children/adolescents aged 4-15.9 years. Sources of denominator data: UK Office of National Statistics and the Central Statistics Office in Ireland. STATISTICAL ANALYSIS: Descriptive statistics and comparisons using two-sample t-tests or Mann-Whitney U tests for continuous data and Chi-squared or Fisher's exact tests for categorical data.

RESULTS: Preliminary descriptive data from the first nine months' surveillance (n=80 cases, 42 males) indicate that similar numbers of males and females are affected by this condition. There is a lag of several years between median [range] onset of symptoms (6y [1-14y]) and presentation to Paediatricians or Psychiatrists (13y [4-14y]), with high levels of psychiatric co-morbidity at presentation, particularly depression (n=15, 19%), Asperger Syndrome/autistic spectrum disorder (n=16, 20%) and previous self-harm (n=24, 30%).

CONCLUSIONS: We will present the first ever population-level data on the incidence and clinical features/presentation of childhood/adolescent GID. These data will inform clinical management, including the highly controversial debate around early pubertal suppression in this group.

Keywords: Adolescent, Child, Gender Dysphoria, Gender Identity, Mental Disorders, Comorbidity, Epidemiology, Incidence

PP002

Enacting Fertility Desires: Influence of HIV, Relationship Contexts, and Contraceptive Knowledge among Youth in Uganda

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OBJECTIVE: Individual, partnership, and normative factors influence pregnancy intentions and behaviors. However, few studies have examined the intersection of HIV and fertility among youth. We explored the influence of HIV on youth abilities to enact their fertility goals in rural Uganda.

METHODS: We used data from a population-based epidemiological cohort for 2001-2008 among young women aged 15-24 (n=15,242 person rounds) in Rakai, Uganda. Logistic regression assessed how HIV status impacts young women's desire for children and use of contraceptives. We also collected qualitative in-depth interview data among 18-24 year old men and women who had recently acquired HIV and their HIV-negative counterparts (n=60). For the qualitative analysis, we explored pregnancy desires and contraceptive use within the context of their current sexual partnerships.

RESULTS: Childbearing is highly desirable among youth in Uganda, though only a minority of young women were currently trying to get pregnant (4.6%). HIV-positive young women reported lower desire for children compared to their HIV-negative peers (OR: 0.47, CI: 0.38-0.50). However, only 33% were currently using any modern family planning method. The qualitative data confirmed that many HIV-positive young women wished to delay or stop childbearing. On the other hand, HIV-positive young men did not. Furthermore, contraceptive use was largely dependent on the nature and type of sexual relationships. Unlike their HIV-negative peers, most HIV-positive women were in relationships where they could not discuss or negotiate contraceptive use with partners. Finally, the qualitative data highlighted the preponderance of myths and misconceptions about family planning methods among all youth irrespective of HIV status.

CONCLUSIONS: HIV was an important influence on fertility goals among youth, but is layered onto relationship and gender dynamics. Limited use of contraceptive methods and the disconnect between young men and women's attempts to avoid pregnancies presents obvious implications for family planning and HIV prevention programs.

Keywords: Fertility desire, HIV, relationship context, contraceptive use, youth, Uganda

PP003

Treating Dysmenorrhea-Is There a Better Option?

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OBJECTIVE: The aim of this study is to determine the efficacy of a particular hormone regimen prescribed in treating dysmenorrhea in adolescent females.

METHODS: This is a retrospective chart review of adolescents attending an Adolescent Medicine and Adolescent Gynecology clinic, from January 1st 2008 until March 1st 2012. Charts with billing codes for dysmenorrhea, pelvic pain, and premenstrual syndrome were reviewed. Charts for analysis were included only if criteria for dysmenorrhea was met. Data regarding age, body mass index (BMI), hormone method chosen, reason for discontinuation and efficacy at 3 months were captured. SPSS was used to analyze data. This study was IRB approved.

RESULTS: 600 charts were selected based on billing diagnosis. 126 charts were randomly reviewed until 50 met inclusion criteria. Mean age was 15 years (range 11-18 years). Mean BMI was 24.4 (range 16.1-38.1). 47% of adolescents started an oral contraceptive pill (OCP), 7% started Ortho Evra Patch, and 2% started Nuva Ring. 28% of adolescents started on Depo Provera. 9% of adolescents did not start a hormonal method. At 3 month follow up, 23% of teens did not continue the original method, with 7% noted to have poor efficacy as a reason for discontinuation. 30% of adolescents who discontinued their original method gave reasons other than poor efficacy, with 25% of these adolescents changing to another hormonal method.

CONCLUSIONS: Overall, adolescents had good symptom relief with all hormonal methods. Surprisingly, adolescents were less likely to switch hormonal methods due to poor efficacy, but were more likely to switch because of dissatisfaction with the method. This study highlights the complexity of choosing a hormonal medication for treatment of dysmenorrhea as methods discontinued are less likely due to poor efficacy. Further exploration of this issue should measure personal satisfaction of the method versus relief of symptoms.

Keywords: Dysmenorrhea, adolescent, hormonal contraception

PP004

Which Contraceptive Methods Used among University Students, Turkey

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OBJECTIVE: Contraceptive choice's very important decision during the first sexual experience of life. Safe sexuality behaviors acquired at first sexual experiences're important at maintaining these behaviors for lifelong. Also, the dual effect of contraception methods are more important at adolescents. The aim of this study is to determine which contraceptive methods used among the sexually experienced young people.

METHODS: 1 and 4th grade students at three faculties (Literature, Education and Medical) of nine universities from different regions of Turkey of the cross-sectional study. Weighted sampling method had been used, 6038 students were reached. The data was collected under observation from 5221 students with a questionnaire. Ethics approval was taken from the universities ethical committees and written consents from participants.

RESULTS: Of the participants, 43.5% were male. Having sexual experience among first grades was 11.0% and 19.7% among fourths. Sexual experience was asked in a wide range of sexuality (kissing, hugging, vaginal intercourse). Most students have vaginal intercourse. Among the males, 65.4% of first, 68.6% of fourths have vaginal intercourse, these were 57.8% and 54.8% among females, respectively. The percentage of using contraceptive at the first sexual intercourse among males was 54.3% and 71.1% among the females. The percentage of contraceptive use among the fourth year male students was 57.9% and female students was 69.9%. The frequency of having sexual act at least once in a week was 16.5% in males, 20.0% in females at first grade, whereas these percentages in fourths were 19.8% and 24.3% respectively. Pregnancy is also declared (8.9% first, 13.7% fourth grade females; 2.9% and 4.9% in males).

CONCLUSIONS: It's important for adolescents to get healthy sexuality behaviors during their sexual experiences, however in this study only one thirds of the sexually active students had safe behaviors. Interventions for safe behaviors're needed, besides information of sexual life risks given students before they begin to their active sexual lives.

Keywords: Youth, sexual experience, contraceptive

PP005

Do Gender Attitude and Sex of Sexually Inexperienced Adolescents Influence Their Opinion of Sexual Intercourse?

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OBJECTIVE: Community Embedded Reproductive health Care for Adolescents (CERCA) in Latin America, is an on-going interventional research project financed by the FP7 program of the European commission. The project seeks to contribute to global knowledge about how primary health care can be more responsive to adolescents' sexual and reproductive health needs. The current study was performed within the CERCA project and aimed to reveal factors associated with adolescents' opinion of sexual intercourse.

METHODS: A cross-sectional interview survey was performed among secondary school students in two Latin American cities - Cochabamba (Bolivia) and Cuenca (Ecuador) between September and November 2011. A logistic regression model was applied to analyze predictors of adolescents' perception of sexual intercourse. The attitudes towards women scale for adolescents (Galambos and Petersen, 1985) were used as indicator for the gender attitude.

RESULTS: Globally 3519 and 3263 adolescents, aged 12-18, completed a questionnaire in respectively Cochabamba and Cuenca. From the sexually inexperienced adolescents in Cochabamba (n=2635) 17.5% had a positive impression about sexual intercourse, 9.6% reported a negative opinion of sexual intercourse; 12.4% had a neutral perception. Up to 56.6% had no opinion. Among sexually inexperienced adolescents in Cuenca (n=2753), 24.7% had the impression that sexual intercourse would be a pleasant experience, 8.4% - a negative experience and 12.0% as neutral while 51.4% respondents had no opinion. The logistic analysis of the data shows that boys and adolescents with a higher score on the gender attitude scale are more likely to have a positive perception of sexual intercourse. Other predictors are auto-esteem, alcohol use and the ease to communicate about sexuality.

CONCLUSIONS: Our study suggests that a more egalitarian attitude of adolescents is associated with a more positive perception of sexual intercourse. The authors declare no competing interests. This study was approved by the Bioethics Committees of the involved countries.

Keywords: Adolescents, sexual intercourse, gender attitudes

PP006

Improving Adolescent Sexual and Reproductive Health Care in Bolivia, Ecuador and Nicaragua: Health Providers' Perspective

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OBJECTIVE: The appropriateness and accessibility of sexual and reproductive health services for adolescents are widely recognized as factors that can contribute greatly to the improvement of adolescent sexual and reproductive health. The staff experiences, expectations and perceptions regarding the need for innovations are pivotal factors in determining whether changes will be effective. This study aimed to elicit the views of primary health care providers from Bolivia (Cochabamba), Ecuador (Cuenca) and Nicaragua (Managua) on how adolescent sexual and reproductive health care in their communities can be improved.

METHODS: 126 health care providers (46 from Bolivia, 39 from Ecuador and 41 from Nicaragua) took part in the study. They provided written opinions about the accessibility and appropriateness of sexual and reproductive health services for adolescents and suggestions for its improvement. The data were analysed by employing a content analysis methodology.

RESULTS: Study participants suggested initiatives within primary health care institutions that would address managerial and health providers' efforts to increase the friendliness of health services provided for adolescents. Initiatives beyond primary health care centres included networking with schools, parents and the community at large. Interventions at the policy level were seen as needed to ensure the implementation of previously mentioned measures.

CONCLUSIONS: Primary health care providers' suggestions for the improvement of adolescent sexual and reproductive health care services within primary health care institutions mainly targeted the increase of the youth friendliness of health settings. Thereafter initiatives should target key stakeholders like parents and schools.

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Keywords: Adolescents, sexual and reproductive health care, youth friendly health services

PP007

Ovarian Masses in Adolescents

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OBJECTIVE: The most frequent gynecological pathology seen in adolescent girls are the ovarian masses. The spectrum of ovarian masses in this group is different from that in adults, and most lesions are benign. This study was performed in order to create a retrospective documentation of adolescent ovarian masses.

METHODS: 123 patients between the ages of 11 and 21 were included in this study which were diagnosed in Pathology Department at Cerrahpaşa Medical Faculty of Istanbul University between 2000 and 2012.

RESULTS: 19 benign epithelial (17 benign serous cystadenomas, 1 mucinous cystadenoma, 1 benign serous cystadenofibroma), 2 malignant epithelial (1 mucinous adenocarcinoma, 1 serous papillary carcinoma), 5 borderline epithelial tumors (2 serous borderline tumors, 3 mucinous borderline tumors); 36 germ cell tumors (5 yolk sac tumors, 6 dysgerminomas, 22 mature cystic teratomas, 3 immature teratomas); 5 sex-cord stromal tumors (2 juvenile granulosa tumors, 3 mixed type sex-cord stromal tumor); 56 functional lesions (21 corpus luteum cysts, 24 follicle cysts) and 11 endometriotic cysts were retrieved from archives of our department.

CONCLUSIONS: Most of ovarian masses are functional or benign lesions. Most cysts are functional and adnexal torsion is the main complication. The tumors of the ovary are usually benign and the incidence rises with age. There are marked differences in the frequency of ovarian neoplasms (a much higher percentage of germ cell and sex cord-stromal tumors) in the first three decades compared with later years. The second decade is noteworthy for the acceleration of the frequency of all the primitive germ cell tumors with the average age of 18 - 19 years. Ultrasonography and MRI are necessary for diagnosis. Surgery and histopathological examination are needed for the definite diagnosis. It should be noted that conservative surgery is very important for preservation of future fertility.

Keywords: Adolescent, mass, ovary, tumor

PP008

Breast Lesions in Adolescents

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OBJECTIVE: The spectrum of breast disease in adolescents is different from that in adults, and most lesions are benign. This study was performed in order to evaluate the histopathologic results of the breast masses in our department and to pay attention to breast masses adolescents.

METHODS: 444 patients between the ages of 11 and 21 were included in this study which were diagnosed in Pathology Department at Cerrahpaşa Medical Faculty of Istanbul University between 2000 and 2012

RESULTS: Three invasive ductal carcinomas, 1 metastatic undifferentiated carcinoma, 315 fibroadenomas (17 juvenile, the others conventional fibroadenoma) 1 tubular adenoma, 2 lactating adenomas, 1 nipple adenoma, 37 gynecomastias, 12 benign phylloides tumors, 1 borderline phylloides tumor, 2 malign phylloides tumors, 17 fibrocystic disease, 6 intraductal papillomas, 2 capillary hemangiomas, 2 granulomatous mastitis, 3 nonspecific mastitis, 1 nodular fasciitis, 3 epidermal cysts, 6 accessory breast tissue and remaining 29 other nonspecific benign conditions (fibrosis, galactoceles, lipogranuloma etc.) were retrieved from archives of our department. Fifty six of the patients were male and 388 of the patients were female.

CONCLUSIONS: In our study, the most common cause of palpable breast masses in adolescents under 21 years of age are fibroadenomas as insicated previously and we also diagnosed 7 malignant tumors. Ultrasound is the primary imaging modality in adolescents with breast masses. Excisional biopsy and histopathologic examination is essential to rule out rare, but probable malignant, lesions in adolescents. Clinical awareness, as well as tissue sampling, is crucial for timely diagnosis. A multi-disciplinary approach with coordination of surgery, radiology, and pathology is essential for accurate diagnosis and treatment

Keywords: adolescents, breast disease, fibroadenoma, invasive ductal carcinoma

PP009

"It Just Happens": Norms, Attitudes, and Other Factors Influencing Pregnancy and Sexually-Transmitted Infection (STI) Risk in Foster Youth

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OBJECTIVE: Foster youth have 2-4x increased risk of early pregnancy and 3-14x increased risk of STIs compared with the general population. Effective interventions for other populations are not effective in this group. We sought to better understand factors influencing engagement in sexual risk behaviors to inform effective prevention strategies.

METHODS: We conducted semi-structured qualitative interviews with 20 diverse current/former foster youth (50% female; 15-21 years) to explore: perceived norms, attitudes, and behaviors in romantic/sexual relationships, self-efficacy to negotiate about sex, birth control and condom use, influences of experiences with early caregivers, and protective factors. We used theoretical thematic analysis to detect themes.

RESULTS: 1) Teen pregnancy was described as normative/inevitable regardless of personal behaviors or attitudes. 2) Use of condoms and birth control was variable, with most users describing inconsistent use. 3) Condom use was perceived to signify that a relationship wasn't serious, and re-initiation after non-use with a partner was viewed as unacceptable. 4) Negative attitudes towards birth control use were common, e.g. that it was "too much work" or "messed up your body". 5) Many participants described low self-efficacy to communicate assertively with partners in general and about sex. 6) Most participants reported exposure to unhealthy relationships/trauma during early childhood, and described compensatory strategies including avoidance, adopting a transactional approach, or attempting to do "the opposite" of their models. Many also described seeking corrective experiences in foster care or via the creation of a substitute "family" in early adulthood. 7) Protective factors included religion, educational goals, and being involved in sports or other activities.

CONCLUSIONS: STI/pregnancy prevention programs for foster youth should be trauma-informed and include content relevant to this population's unique early life experiences to: modify the "inevitability myth" and other pro-pregnancy/STI norms and attitudes, increase assertive communication skills, and promote other protective factors (e.g., engagement in structured, prosocial activities).

Keywords: Sexually transmitted infection, sexually transmitted disease, teen pregnancy, foster youth, foster care

PP010

Sexual risk behaviour in a Tanzanian adolescent cohort: a lifecourse approach

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OBJECTIVE: 40% of new HIV infections occur among youth(15-24 years). Improved understanding of sexual and lifestyle trajectories may improve the effectiveness of interventions among youth, by focusing on key transition periods and/or on higher-risk subgroups. This study analyses the association between adolescent exposures and subsequent sexual risk in early adulthood.

METHODS: In 1998, the MEMA kwa Vijana programme recruited a cohort of 9645 adolescents in rural Mwanza, Tanzania. 3630 also attended a 2007-8 follow-up survey. Logistic regression was used to investigate the association between socio-demographic characteristics, attitudes, intentions, knowledge and reported sexual behaviour in 1998, and self-reported number of recent sexual partners in 2007.

RESULTS: Among the 20% of females and 50% of males who reported having ever had sex in 1998, the mean reported age at first sex was 14 years and 12 years, respectively. In 2007, 10% of females and 49% of males reported >1 partner in the previous year, and among females this was associated with having reported >1 partner in the previous year in 1998 (females: adjOR=2.8, 95%CI:1.4-5.8). Reporting >1 partner in the previous year in 2007 was also independently associated with Muslim religion, mother being unemployed, not living in father-headed household, belief that low age at first sex is desirable and having ever had sex in 1998.

CONCLUSIONS: In this rural Tanzanian cohort of young people, females who reported >1 recent partner when they were adolescents were more likely to report >1 recent partner in young adulthood. Those who are more likely to become infected in adolescence are also those who are more likely to infect a large number of people in later life. Intervening to prevent the establishment of risk behaviours is an important HIV/STI prevention strategy. Limitations included the likelihood of reporting biases. Longitudinal studies of sexual risk across adolescence and adulthood can inform prevention efforts.

Keywords: HIV, young people, sexual behaviour, Tanzania

PP011

Knowledge of Values and Choice of Abstinence as Preferred Sexual Behaviour among Three Age Groups***Cordelia Omozechi Oluwatula***

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OBJECTIVE: To examine the differences in the relationships between the level of knowledge of values of three age groups (10-13 year olds, 14-16 year olds, 17-20 year olds) and choice of abstinence as preferred sexual behaviour among the three age groups.**METHODS:** 300 subjects were randomly selected from one junior high school, one senior high school and one university in southwestern Nigeria. A survey instrument that measures knowledge of values and choice of abstinence was administered to the subjects. Data analysis was carried out with analysis of variance.**RESULTS:** The result show some differences. The 17-20 year olds category show fairly higher level of knowledge of values but the strength of their choice was low.**CONCLUSIONS:** The study concludes that average level of knowledge will inform the decisions of the age groups in their acceptance or rejection of abstinence as the most preferred behavioural pattern for preventing HIV/AIDS. The implication of the study are discussed. Counselors and teachers are expected to help the subjects to receive more knowledge about values and its relationship with sexual behaviour.**Keywords:** Age groups (10-13, 14-16, 17-20), abstinence, level of knowledge, values, choice of abstinence, sexual behavior, counselors.

PP012

Adolescence and Pregnancy in Brazil: Where is the Risk?***Elder Cerqueira Santos***

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OBJECTIVE: Early pregnancy has been widely understood as a risk factor, moreover, in some cases, it has been considering as a protective factor, especially for low socioeconomic status population. The aim of this study was to investigate the consequences of adolescence pregnancy in impoverished areas in Brazil.**METHODS:** The sample was recruited from schools and institutions serving out of school youth. Participants were 1015 low SES young people from Brazil, aged between 14-24, males and females. A questionnaire with 109 questions was used asking about major domains of life: Drug use, sexuality, religiosity, school etc. There were more females 52.3% (527) than males 47.7% (480) in the sample.**RESULTS:** Most of the participants already had their first sexual intercourse 53.5% (531), most of them males (64.6%; $\chi^2=44.98$; $p<.001$). The mean age for first sexual intercourse was lower for males ($M=13.64$; $sd=1.7$) than females ($M=14.79$; $sd=1.4$). For the total sample 8.8% said they never use any kind of contraceptives method, 15.6% has a irregular use and 75.6% always use contraceptive method. More than 11% of the participants already had pregnant or had a partner pregnant, but 31% of them don't have any children alive. Regarding abortion, 21.8% had had a spontaneous abortion episode and 10.9% had had a surgical abortion. The impact of pregnancy for them was explored using a set of sentences about this episode. Pregnancy was an important and valuable episode for most of the participants.**CONCLUSIONS:** Besides the negative consequences of early pregnancy, some adolescents experience a social status change, having health service assistance, protection from the community in a violent environment and guaranty of basic social needs. This study tries to bring out a discussion on how early pregnancy can play different roles in low SES communities in Latin America.**Keywords:** Pregnancy, risk, sexual health

PP013

Trends in HIV Infection and Demographic, Behavioral, and Biological Risk Factors, Youth, Rakai, Uganda, 1999-2011

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OBJECTIVE: After remarkable progress in controlling HIV in Uganda since 1990, disturbing increases in HIV risk behaviors occurred among youth in Rakai District between 1994 and 2003. Significant changes have occurred in HIV prevention and treatment in Uganda over the past decade, as well as changes in national policies for universal education. We explored trends in new (incident) HIV infections and demographic, behavioral, and biological risk factors associated with HIV infection among youth (15-24 years).

METHODS: We used data from the Rakai Community Cohort Study from 1999-2011 (n=23,952). We examined change over time in HIV incidence and risk behaviors, controlling for changing age structure in the population. We also studied the change of the association over time between the contributable risk factors and HIV acquisition. We used Poisson regression to analyze trends in HIV incidence over time by subgroup using interaction terms. Demographic decomposition methods were used to assess attribution.

RESULTS: HIV incidence declined among teens, but not among 20-24 year-olds. Substantial declines occurred in marriage and sexual experience. Significant increases occurred in school attendance and male circumcision. Among sexually experienced youth, reporting of multiple partners and sexual concurrency declined. Condom use increased but only among primary partners. Exploring time by risk factor interaction terms, a statistically significant interaction by concurrent partnership was found but no differences by age group, marital status, rural vs. peri-urban, or number of partners in the past year. Much of the decline in HIV incidence among teens was due to increases in school attendance and decreases in sexual initiation.

CONCLUSIONS: Over the past decade, new HIV infections in Rakai declined, coinciding with remarkable change in school attendance, marriage, risk behaviors, and male circumcision. Increased access to schooling - in addition to HIV prevention measures - appears to have driven declines in HIV infection.

Keywords: HIV, trends, youth, education, abstinence

PP014

Risk and Sexual Relation in Adolescents: Differences in Gender and Ethnicity

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OBJECTIVE: To study the risk behaviours in sexual relation in adolescents of different ethnic groups (Spanish Roma, non Roma and Latin American) and gender, that belongs to areas of Spain (Andalucía and Madrid).

METHODS: We did a Secondary School Survey where the students had to identify themselves in one ethnic group. The sample was constructed from this ethnic identification. The questionnaire was collected in different schools where there were more Roma and Latin American adolescents. The survey had the approval of parents and school principals. Data were analysed by bivariate analysis with chi square and t student's statistic. The significance was in 0,05.

RESULTS: The sample obtained was 3,132 adolescents, belonging to Spanish Roma (n=483), Spanish Non Roma (n=1773) and Latin American (n=876), with an average of 15 years old (12-18 years). Roma and Latin American had more intercourse (39.2% - 41.9%) comparing with Spanish no Roma (26.3%); Roma did not use more condom (26.5%) than Latin American and Spanish no Roma Teenagers (14.8% - 11.3%). Roma and Latin American Teenagers had consumed more alcohol or others drugs in sexual relations (14.7%- 15.3%) than Spanish no Roma (8.6%). Somebody had intended sexual abuse more in Roma (12.6%) and Latin American (10.6%) than Spanish no Roma (6.1%). Girls had less risk behavior than boys.

CONCLUSIONS: Take risk in sexual relation varies in each ethnic group and gender, because the risk meanings are different in each of them. It is necessary taking into account gender and ethnicity to raise prevention programs.

Keywords: Sexual Relation, Roma, Latin American, Spain

PP015

Affective Mediators in Relation to Sexual Risk Behavior in Adolescents**Javier Gómez Zapiain, María Jose Ortiz*, Amaia Eceiza***

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OBJECTIVE: The main objective in this research was to study the relationship between sexual risk taking, attachment profiles and emotion regulation in sexually active and non-active adolescents.**METHODS:** The sample consisted of a total of 1911 subjects, 54.8% boys and 45.2% girls. The mean age was 16 years. Correlation analyses, ANOVA and discriminant analyses were performed.**RESULTS:** The analyses of variance indicated that adolescent boys and girls with greater attachment security showed less risk taking. The multivariate analyses of variance showed that there are gender and attachment styles differences. In the group of not sexually active subjects results indicated significant gender differences in each of the attachment styles. In the group of active subjects results show no significant differences in relation to gender in each of the styles, but significant differences between attachment styles. The discriminant analyses showed that the variable that most discriminates risks taking in sexual relationships in not active people is peer attachment, while among sexually active adolescents, the variable that best discriminates is emotion regulation. The second discriminating variable in both cases is the attachment to the mother.**CONCLUSIONS:** Both attachment security and emotion regulation predict risk taking sexual behavior. There are significant gender differences. The results obtained are valuable for adolescents' sexual health prevention programs.**Keywords:** Adolescent, attachment, emotional regulation, sexual behavior, sexual risk

PP016

Sexual Behavior and Sexual Experiences among University Students, Turkey**Hilal Özcebe, Bahar Güçüz Doğan, Burcu Küçük Biçer, Dilek Haznedaroğlu*, Münevver Bertan***

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OBJECTIVE: Sexual growth and development is very fast at adolescent period. Some adolescents begin to get sexual experiences at this period. Given the potential consequences, engaging in sexual behavior is considerably risky, particularly for adolescents. Health problems due to these risks can lead the youngs to health problems during all their lives. The aim of this study is to determine some sexual behavior and experiences of 1and4th grade university students.**METHODS:** The target population was defined as 1and4th grade students at three faculties (Literature, Education, Medical) of nine universities from different regions of Turkey. Weighted sampling method had been used, 6038 students were reached during the cross-sectional study. The data was collected under observation from 5221 students with a questionnaire form. Ethics approval was taken from the universities ethical committees and the written consent from participants.**RESULTS:** In the study, 62.8% were first grade and 43.5% were male. Among the first grade students, 70.8% of male and 59.8% of female students reported that they had dated in first; 76.6% and 73.1% in the fourth grade respectively. Sexual abuse during the childhood period was 6.3% among the first and 6.0% among fourth grades. 20.4% of the first, 20.9% of the fourth year students reported that they had cybersex experiences. On the other hand, 11.0% of first and 19.7% of fourth grades had sexual experiences. In both grades and sex almost half of the students' first sexual partners were their partners.**CONCLUSIONS:** Different types of sexual experience such as violence, cybersex, dating and sexual intercourse were determined. The limitation of this study's that the young people were not asked if they have the knowledge on the risks of different sexual behaviors. In Turkey, there is a need to increase awareness of the risks of sexual behaviors among the youngs. Safe behaviors're important for health prevention/promotion during sexual experiences.**Keywords:** University student, adolescent, sex, cybersex, experience

PP017

Sexually Transmitted Infections among Street Involved Youth in Eldoret, Kenya

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OBJECTIVE: This study evaluates the acceptability of self-collected swabs for sexually transmitted infection (STI) testing and describes STI rates among street-involved youth in Eldoret, Kenya

METHODS: Youth ages 12-21 years in Eldoret, Kenya who spend their days or days and nights on the street, were recruited by convenience sampling. A structured interview was conducted privately followed by phlebotomy and self-collected vaginal/urine (males only) and rectal swabs for STI screening (HSV-2, Syphilis, Chlamydia Trachomatis (CT), Neisseria gonorrhea (NG) and Trichomonas vaginalis (TV)). Verbal and visual instructions for self-collection were provided. Questions regarding self-collected swabs were asked following collection. Descriptive analyses of data were performed by calculating percentages of variables present in the study population.

RESULTS: 200 street-involved youth aged 12-21 enrolled, 41% female. 65% reported ever having sex. Only 6% (12/200) reported prior STI symptoms; of those only 7/12 had sought care. 88% of participants underwent phlebotomy, 91% provided self-collected vaginal/urine samples and 92% provided rectal samples. 90% considered self-collecting vaginal swabs and 76% considered self-collecting rectal swabs "very easy" to "neutral." 83% would use this method again, and 72% preferred future testing via self-collected over provider-collected samples. Only 3 participants reported active symptoms. 27% of all (54% of females) had any STI. 11% of all and 25% of females had more than 1 STI. HSV-2 was most common (17%) followed by Chlamydia (8%). Of those with any STI, 9/54 denied any sexual activity.

CONCLUSIONS: Street youth are a particularly vulnerable population, engaged in high risk behaviors. Few reported symptoms of STIs or sought care. Screening tests demonstrated that a large percentage had evidence of STIs, HSV and CT being the most common, conditions that are often asymptomatic but can cause increased susceptibility to HIV, and other consequences. Screening via self-collected swabs may facilitate broader testing and treatment in this population.

Keywords: Sexually Transmitted Infections (STI), Street youth, STI screening, STI testing methods

PP018

Factors Related to Depressive Manifestations in Teenage Mothers

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OBJECTIVE: To identify depressive manifestations in adolescent mothers; to identify personal factors related to mood and eating and sleeping habits; to describe mothers' emotional relationships with their families, partners and friends.

METHODS: Descriptive mainly qualitative exploratory study in 75 adolescents screened by the Edinburgh scale for depression. Socio-demographic information was processed in Excel. Twenty-one random interviews were processed in ATLAS-ti 5.0.

RESULTS: Adolescents were 16.5±1.6 years old; they belonged to socioeconomic strata 1 and 2 of 6. Just over half (39) had completed between 10 and 11 of 11 grades of schooling; 29 (38.6%) did not study. Thirty-nine (52%) were single and 35 (46.6%) lived with a boyfriend. They had initiated sex at 14.9±1.1 years. Pregnancy had been planned in 16 (21.3%) cases. Girls reported physical abuse in 11 (14.5%) cases, smoking in 21 (28%) and alcohol use in 25 (33.3%).

In the social context, families were reconstituted with more than one adult for sustenance and the adolescent girl was living with boyfriend's family. Pregnancy was a concern. Birth experience was generally a thankless memory.

Changes described in association with pregnancy and childbirth were: limited freedom, confinement to domestic space and limitation to role of caregiver, peer estrangement and alteration in relationships with parents and family. Child rearing generated insecurity, tiredness and guilt.

Depressive manifestations detected were: sleep difficulties, concerns about weight and figure, irritability, and sadness.

CONCLUSIONS: Elements of depression in teenage mothers can be overt and detected by screening tests; they can also be embedded in everyday life and manifest as changes in behaviour and interpersonal relationships.

Keywords: Teen pregnancy, depression, parenting

PP019

Adolescent Pregnancy in United States: Hispanic Paradox/ Implications for Reducing Birth Rates and Risk Factors**Janis Beth Feldman**

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OBJECTIVE: This study presents an innovative approach incorporating the Hispanic culturally based values of familismo, acculturation, and personalism that may account for lower birth risks and, in turn, be implemented in adolescent pregnancy programs to diminish the high rates within the Hispanic United States population. Implications for international populations and health care policy are addressed. The United States has the highest adolescent pregnancy rates of comparable developed nations. It has nearly twice the rate compared to the United Kingdom, the next highest (25 per 1,000), and ten times the rate compared to Switzerland, the lowest (4.1 per 1,000). Though rates decreased 45 percent between 1991 and 2010, they continue to be higher for minority groups of non-Hispanic Blacks and those of Hispanic-Mexican origin. The Hispanic population is the fastest growing overall group in the United States increasing 40% from 1990 to 2000 with the overwhelming majority being of Mexican descent. Of this group, adolescents living just north of the Texas-Mexico border have one of the highest pregnancy rates in the United States.

METHODS: Systematic secondary analysis of birth risk factors involving 1) aggregated quantitative analysis and 2) qualitative analysis to compare statistics of Texas to USA. Future research involves qualitative emphasis.

RESULTS: Paradoxically adolescent birth risk factors of lack of early prenatal care, low birth weight, prematurity, fetal death, and maternal weight gain of studied area were equal to or lower than national rates though region has one of the highest adolescent pregnancy rates, poverty rates, and least health care resources of the United States, factors usually accounting for poor birth risks.

CONCLUSIONS: Research to understand and use protective factors that diminish birth risks that may, in turn, be implemented to lower adolescent pregnancy rates.

Keywords: Adolescent pregnancy, Hispanic/Mexican-American paradox to diminish pregnancy rates, innovative approach to diminish adolescent pregnancy: implications for practice and policy

PP020

Adolescent Pregnancy

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OBJECTIVE: Adolescent pregnancy is a major public health issue.

METHODS: We conducted a retrospective chart review of the adolescent pregnancies aged 15 to 19 years old in our hospital between January 2010 and December 2010. The demographic characteristics of the adolescent mothers, the natal and postnatal outcomes were evaluated.

RESULTS: A total of 241 (7.03%) adolescent pregnancies were delivered out of 3427 pregnancies during the study period. The mean age of the adolescents mothers were 18.21±0.9 years. 2.5% (n:6) of adolescents had no formal education. 93.4%(n:231) were married. The consanguinity rate was 36.9% (n:89). Prenatal care was reported in 69.7% (n:168). The maternal complication rate was 19.4% (n: 47) including gestational diabetes 5.8%, preeclampsia 3.7% (n:9), eclampsia 1.2% (n:3), oligohydramnios 3.3% (n:8), premature rupture of membrane 2.1% (n:5), placenta previa 1.6% (n:4) and psychological issues 1.6% (n:4). 44.8% (n:108) of adolescents delivered by C-section. The rate of preterm birth was 26.9% (n:65) which was significantly higher in adolescents compared to adult pregnancies 11.7% (n:372) (p: 0,043). The mean birth weight was 3.070±566 grams (range 830-4430). Among the babies born to adolescent mothers 3.7% (n:9) was small for gestational age and 1.6% (n:4) had intrauterine growth retardation and 0.8% (n:2) was stillbirth and 0.8% (n:2) had congenital anomalies. Although neonatal intensive care admission rate was higher in adolescent pregnancies compared to adult pregnancies, it was not statistically significant (p:0,46). The most common indications for NICU admission were prematurity 28.11% (n:9), feeding intolerance 25% (n:8), respiratory distress 15.6% (n:5), transient tachypnea of newborn 15.6 % (n:5), congenital anomalies 6.25% (n:2), meconium aspiration syndrome 3.15 % (n:1), polycythemia 3.15% (n:1) and asphyxia 3.15% (n:1) respectively.

CONCLUSIONS: We plan to continue to review adolescent pregnancy charts in 2011 and 2012.

Keywords: Adolescent, pregnancy

PP021

Sex, Sexual Relations and Sexual Surrender: Body, Pedagogies and Reproductive Technologies in a Group of Adolescent Mothers

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OBJECTIVE: To describe knowledge, meanings and practices related to sexuality, reproduction and motherhood in adolescent mothers.

METHODS: Out of a group of 199 teenage mothers, aged 16.1 ± 1.6 years, three focus groups were formed for a total of 27 voluntary participants. An instrument was designed by the research group to explore five main analytical axes (body; pedagogies; contraceptive techniques; notions of protection, vulnerability and risk in sexual and reproductive health; social networks).

RESULTS: Body is conceived as a tool for relations; it is built as part of self-perception, also to be appreciated by the "other." Female body is built in a specular way, under scrutiny and observation, while male body is more defined from emotions and character. Girls believe that men have sex for pleasure and instinct, while they do it in conscious loving surrender. Information acquired in school as well as that provided by their mother, friends and health staff are identified pedagogies. Contraceptive methods are recognized and chosen according to the kind of relationship established. Relations with the opposite sex are categorized differently before and after pregnancy. Marriage is seen as a ritual that involves commitment and difficulty in ending the link. Social relations are modified by motherhood. Vulnerability is focused on the physical sphere.

CONCLUSIONS: Sexuality, reproduction and motherhood conform a network of multiple concepts, with different actors and agents involved in shaping sexual behavior of adolescents. Sexuality is an interactive process of emotions, traditional knowledge and images transmitted by adults. Ignoring such elements may denote gaps in local contraceptive guidelines that result rigid.

Keywords: Teen pregnancy, sexual behaviour, contraception.

PP022

Neonatal Prognosis of Adolescent Pregnancies

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OBJECTIVE: We evaluated neonatal outcomes of infants born to adolescent mothers, compared them with infants born to non-adolescent mothers.

METHODS: Women gave birth at ages 15-18 were compared with whom gave birth at ages 20-35 years. Demographic data, marriage and pregnancy histories, comorbidities, delivery method, obstetric complications of mothers were recorded besides physical findings, neonatal problems and outcome of babies were recorded.

RESULTS: Mean age of adolescent ($n=641$) and control ($n=309$) groups were 17.2 ± 0.8 and 27.0 ± 4.3 years, respectively ($p > 0.001$). Mean gestational weeks were similar (37.8 ± 2.3 vs. 37.7 ± 2.1 months; $p = 0.540$). Marriage duration ($p < 0.001$), number of pregnancy ($p < 0.001$) were higher in control group. Duration of hospitalization were similar ($p = 0.062$). 5.5% of adolescents and 0.3% of control group weren't married ($p < 0.001$). Educational status was lower ($p < 0.001$), ratio of housewives ($p < 0.001$), birthout of wedlock ($p < 0.001$) and caesarean section ($p = 0.003$) higher in adolescents. Groups were similar regarding smoking rate ($p = 0.64$), intermarriage ($p = 0.095$) and comorbidities ($p = 0.098$). Twin pregnancy was more frequent in adolescents ($p = 0.04$) while premature births were similar (15.3% vs. 16.8% ; $p = 0.542$). Most frequent obstetric complication was bleeding which was less frequent in adolescents ($p < 0.001$). In adolescent's babies ($n=666$), mean height (49.2 ± 3.5 vs. 49.9 ± 2.7 ; $p = 0.002$), head circumference (34.0 ± 2.1 vs. 34.7 ± 2.1 ; $p < 0.001$), weight (3033 ± 660 vs. 3202 ± 587 ; $p = 0.001$) were lower, Ballard score was higher (37.8 ± 2.3 vs. 37.3 ± 1.8 ; $p = 0.001$) than control babies ($n=313$). Groups were similar regarding oligohydramnios ($p = 0.917$), early membrane rupture ($p = 0.161$), resuscitation ratio ($p = 0.143$). Rate of neonatal loss in adolescent group was higher (1.2% vs. 0.6% ; $p = 0.516$). APGAR scores at first and fifth minute were lower in adolescent group ($p < 0.001$). Problems seen after birth were more frequent in adolescent group ($p < 0.001$) while congenital abnormalities ($p = 0.032$) and delivery trauma were more frequent in control group ($p < 0.001$). Hospitalization rate in neonatal period was higher in adolescents (16.8% vs. 12.8% ; $p = 0.104$) while duration of hospitalization, medical therapies, need for intensive care were similar. Death rate among hospitalized patients were higher in control group (2.7% vs. 5% , $p = 0.002$).

CONCLUSIONS: This study in which we searched numerous adolescent pregnant showed hospitalization rate and neonatal problems after delivery were higher and APGAR score was lower in adolescent pregnant.

Keywords: Adolescent, pregnancy, neonatal, outcome, hospitalization

PP023

Teenage Termination of Pregnancy in Nottingham

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Department of Contraception and Sexual Health, United Kingdom**OBJECTIVE:-** Ensure local termination of pregnancy (TOP) services for young people (YP) adhere to UK guidance

- Describe this group's demographics, TOP choices, vulnerabilities and contraceptive use.

METHODS:A retrospective audit of medical notes of YP <19y presenting to the Nottingham Unplanned Pregnancy Assessment Centre (UPAC) between January - June 2012. Standards were set in accordance with guidance from the Royal College of Obstetricians and Gynaecologists, including timing of assessment and termination, recognition of vulnerable patients, legal documentation and post-termination contraception.**RESULTS:** In the 6 month period, 52 YP aged 14-18y requested TOP, 22 were seen within 5 days of the referral. 43 patients underwent TOP, 10 patients were under 16 years of age. In 26/43, TOP was performed within 5 days of the decision. 30/43 chose surgical TOP. No contraception was used in 17/52 cases, the majority used condoms. 6 teenagers underwent at least one previous TOP and 3 had delivered babies. Safeguarding concerns were highlighted in 9 YP, 2 were referred to social care. Post-termination contraception was not discussed in 5 cases; if it was discussed, 3 YP declined ongoing contraception.**CONCLUSIONS:** In Britain, Abortions are legal under the terms of the 1967 Abortion Act. Health professionals must be aware of local TOP services, be able to signpost appropriately, discuss contraceptive options and recognize vulnerable YP eg. sexually abused or exploited. UPAC provides a confidential, accessible, information-giving and non-judgmental service assisting YP with making the best personal choice when faced with an unplanned pregnancy. It adheres to national guidance, although in a few cases, assessment and procedures could happen in a more timely fashion. Universal and work targeted at vulnerable/high-risk groups is needed to improve contraception use in YP to reach the UN 'Millennium Development Goal' of reduced global teenage pregnancy rates by 2015.**Keywords:** Teenage pregnancy, abortion, termination of pregnancy

PP024

The Determination of Pregnancy Labor and Postpartum Complications in Adolescence Pregnancy

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OBJECTIVE: About 16 million adolescent girls aged 15-19 give birth each year, roughly 11% of all births worldwide. According to the data of Turkish Statistical Institute the adolescence birth rate in Turkey 7.5%.The objective is to designate the pregnancy rates, pregnancy, labor and neonatal complications in adolescence age group in the chosen study area.**METHODS:** The article is based on descriptive research. This study was conducted in a hospital to which lower socio-economic status patients go in Istanbul. The Participants are 370 puerperas that gave birth in between March and November in 2012. The data was collected using data collection form developed by the researcher and literature.**RESULTS:** The adolescent pregnancy rate was %6.2 and average age of adolescent pregnant women were found to be 18.39±0.8 years (15-19 year-old). Those who graduated from the secondary school have, furthermore all the participants were housewives. When the pregnancy complications are assessed, in 2 of the cases hypertension and in 1 of the cases gestational diabete are seen. When the pregnancy stories of them 21 cases are primiparas, 1 case experienced abortus and in other 1 case stillbirth are determined. 15 of the cases make normal spontaneous labor, 5 of the cases have preterm labor and 1 of them is resulted in stillbirth. When postpartum complications are evaluated, in 1 of the 22 live births intrauterine growth retardation is seen, in 2 of the cases dislocation of hip is diagnosed. In 3 of the cases pathological jaundice is seen, however the mothers never have health problems.**CONCLUSIONS:** Our study does not demonstrate any increase adolescent pregnancy rates; nevertheless, more extensive studies are needed in order to reduce the number of such pregnancies and minimise perinatal complications.**Keywords:** Adolescent pregnancies, obstetric complications, fetal complications

PP025

Adolescent Pregnancies with Neonatal Aspect

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OBJECTIVE: Adolescent period defined by world organization (WHO) between 10-19 years. In literature maternal and neonatal complications determined in adolescent pregnancies with several studies. The purpose of the study is to determine sociodemographic and clinical features of adolescent pregnancies gave birth in our clinic.

METHODS: Adolescent pregnancies between January 2009- December 2011 assessed retrospectively from medical records. Sociodemographic and clinical features of mothers and early outcomes of babies was evaluated.

RESULTS: In our hospital between January 2009- December 2011, 10674 births have been made. 7.5% of these births (n:801) were adolescent pregnancies. Mean age of adolescent mother's was 18.05±1.1 years. 78.1% (n:626) of mother were between 18-19 years old and 21.8% were between 14-17 years. 91.5% of cases were married. Consanguinity rate was 34.5%. 505 of mothers (63%) had health insurance and 545 of mothers (68) had antenatal follow-up. Pregnancy related complication rate was 18.85% (n:151). Cesarean section rate was 44.5% (n:360), and indications for cesarean delivery was elective (40%), fetal distress (20.8%), and abnormal presentation (12.5%). Mean gestational age of babies was 37.2±2.1 weeks. (25-40 weeks) and 93 of babies were premature (25.8%). Premature delivery rate of adolescent mothers was significantly higher than babies born prematurely in our hospital (11.7%). Mean birth weights of babies was 3020±500 grams (830-4450), small for gestational age rate was 4.2% (n:34) and intrauterine growth retardation rate was 1.6% (n:13). Babies hospitalized to newborn intensive care unit was 13.4% (n:108). Most common reason for internalization was prematurity.

CONCLUSIONS: In adolescent pregnancies, natal and postnatal complications higher because of antenatal and postnatal care deficiency. These affects mother and child health, therefore community health affected negatively. National policies must be developed and first step health services must be enabled more effectively.

Keywords: Adolescent, pregnancy, newborn

PP026

Mobile Phone Use and New Zealand Adolescents

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OBJECTIVE: Problematic (including 'addictive') mobile phone use has been given increasing attention by the research community internationally. It has been linked to physical harm, as well as social and psychological consequences. However, most evaluations of this emerging phenomenon have been quantitative in nature, which may lead to a limited perspective on the subject. This study aimed to qualitatively explore the relationship between young people aged 13-19 and their mobile phones, with a specific focus on problematic use.

METHODS: Focus groups were used for data collection, as they create a more relaxed atmosphere, and produce richer data. Thirty four participants were recruited from several youth-oriented organisations in the Auckland area. They were divided into groups according to age and gender (male 13-15, male 16-19, female 13-15, female 16-19), and one intermixed group. The discussions were audio recorded and transcribed verbatim. The data were then thematically analysed using a general inductive approach.

RESULTS: The analysis of focus groups revealed five main themes. Participants primarily spoke of the practicality of using a mobile phone, and all its features. They then elaborated, identifying socialisation as the primary purpose of using a mobile phone. The subject of harm was discussed, physical as well as psychological and social. Participants finally explored the idea of attachment to one's mobile phone, and it may differ from addiction to a mobile phone.

CONCLUSIONS: The findings of this study suggested that "addictive" behaviour towards mobile phone technology in young people has been recognised by the community in question as a potential concern. Such behaviour has been linked by the participants to physical, social and psychological consequences. A previously unexplored distinction between addiction and attachment was identified, which warrants further investigation. This study provides a solid platform for further qualitative inquiries into the subject of problematic mobile phone use.

Keywords: Youth, mobile phone, problematic use, addiction

PP027

Outcome of Health Communication Technology in Dissemination of Contraceptive Use among Teens in Africa**King Odor, Ngozi Iwuji*, Uchenna Eziefula****

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**Sure Health Organization

OBJECTIVE: Health information dissemination is an activity that ensures behavior change among most risk population relating to risk practices that promote ill health. This activity is adopted in formal and non-formal settings. Facilities and personnel are employed to provide health information for behavior change, which aims at preparing teenagers to contribute socio-economically to the society they live. However, evidence-based studies in Nigeria involving the use of information and communication technology (ICT) have been limited to the dissemination of arts and dramas with limited attention paid to health information. This study therefore, determined the effect of communication technology in dissemination of contraceptive use among Nigeria teenagers.

METHODS: A total of 202 participants in four youth-friendly centres in Owerri, Imo State of Nigeria were used. Six null hypotheses were formulated and tested. Four instruments namely: DVD machine, Projector, Displayer Screen and DVD (MP3disc) were used for the study at each of the four centres.

RESULTS: The results revealed there was significant behavior change on teenagers' attitude and behaviour. It also showed there was significant behavior on teenagers' knowledge in contraceptive use. ($P < .05$). There was significant result on attitude of teenagers to contraceptive use and education ($P < .05$). However, there was no significant gender difference on teenagers knowledge and development contraceptive use ($P > .05$). There was also no significant gender difference on teenagers' attitude to contraceptive use and education ($P > .05$).

CONCLUSIONS: Government at all levels should support the establishment of youth-friendly centres equipped with communication technology facilities, in order to improve teenagers' behaviours on contraceptive use especially in the face of risky practices. They should be encouraged to adopt this strategy.

Keywords: Youth-friendly centres, communication technology, teenagers' behaviours, contraceptive and risky practices

PP028

Using Technologies to Promote Young People's Wellbeing: A Better Practice Guide for Services**Fiona Robards, Andrew Campbell*, David Bennett****

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OBJECTIVE: Responding to a need for evidence-based guidance on the safe and effective use of information communication technologies, this project encourages the use of technologies in clinical settings, (including health promotion, SMS appointment reminders and as a clinical and research tool) through the provision of better practice guidelines. This project aims to develop the capacity of youth health and related services to use technology. It also aims to provide an evidence-base for unlocking structural barriers to achieving practice change. The audience therefore includes service providers as well as policy makers and managers.

The project involves a meta-review of relevant Australian and international literature to identify effective models for the use of technologies in engaging young people in health service design and delivery. Research questions include:

- What technology and functions exist that appeal to young people?
- What best practice examples exist?
- What does the research tell us?
- What relevant guidelines and policies exist?

METHODS: This project includes participation by young people and service providers through a consultation workshop and project reference group to shape the guide's contents. The guide will be disseminated via an online wiki content management system so it can be readily updated.

RESULTS: A cost-effective way to reach large numbers of young people, the use of technology is innovative, efficient and engaging. As a result, young people and their families will be able to gain better access to health care and related information, thereby promoting young people's health and wellbeing.

CONCLUSIONS: Young people face many barriers in accessing health and other services. With the growth in the use of computers and mobile phones comes the opportunity for health practitioners and services alike, to engage young people in a space where they are most comfortable: online.

Keywords: Health, policy, knowledge translation, youth health, information communication technologies

PP029

To Have a Parental Filter or Not: Does it Make a Difference?

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OBJECTIVE: To determine to what point having a parental filter has an influence on Internet use among adolescents in Switzerland.

METHODS: Survey among 3067 8th graders (mean age 14 years, 50.3% females). Subjects not knowing whether they had a parental filter (N=705) or not having a computer at home (N=20) were excluded. The final sample consisted in 529 (22.6%) youths having a parental filter and 1813 (77.4%) not having one. Groups were compared on socio-demographic, school and Internet-related variables. All variables significant at the bivariate level were included in a logistic regression.

RESULTS: Youths having a parental filter were significantly younger, more likely to be girls, living in an intact family in rural areas, being better students, and practice sports. They were also less likely to use Internet frequently, to be problematic Internet users and to use the Internet for leisure both on schooldays and vacations. At the multivariate level, those having a parental filter were younger (Odds ratio [OR]: 0.81), females (OR: 1.80), and less likely to live in the city (OR: 0.69). They were also less likely to be daily (OR: 0.27) or weekly (OR: 0.44) Internet users and to use it for their leisure on schooldays (OR: 0.63), but not on vacation.

CONCLUSIONS: The vast majority of adolescents do not have a parental filter in their home computer. However, our results indicate that having a parental filter is associated to better Internet use among 8th graders in Switzerland. An explanation for our results could be that parents who put a filter on their home computer might be more aware of the risks of internet use and more closely monitor their children. Up to what age such a filter should be in place and why is it more frequent among females warrants further study.

Keywords: Internet use; parental filter;

PP030

For Leisure or for Work: Does the Type of Internet Use Make a Difference among Users?

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OBJECTIVE: To determine whether using the Internet mainly for work or for leisure during schooldays makes a difference among adolescent users in Switzerland.

METHODS: Survey among 3067 8th graders (mean age 14 years, 50.3% females). We asked participants whether they spent most of their time on the Internet for work or for leisure and divided them depending on their answers in: Work group (N=520; 20.3%) and Leisure group (N=2038; 79.7%). Participants reporting an equal amount of time for both activities (N=509) were excluded from the analyses. Groups were compared on socio-demographic, school, and Internet related variables. All variables significant at the bivariate level (plus age and gender) were included in a multiple regression using STATA 12.

RESULTS: At the bivariate level, those in the Leisure group reported a poorer wellbeing (16.9% vs. 11.1%), and were more frequently poorer students (9.8% vs. 3.7%), problematic (14.1% vs. 4.5%) and daily Internet users (80.7% vs. 54.8%), and slept fewer hours (mean: 7.9 vs. 8.4).

At the multivariate level, adolescents in the Leisure group were younger (Odds ratio [OR]: 0.76), more likely to be males (OR: 1.21), poor students (OR: 2.39), problematic (OR: 2.18) and daily Internet users (OR: 2.92), and to sleep fewer hours (OR: 0.79).

CONCLUSIONS: The vast majority of adolescents use the Internet mainly for leisure, and this fact is associated with some adverse effects. Internet use should be part of the psychosocial screening of adolescents but not limited to the time spent online but also to the types of activities which were performed online.

Keywords: Internet use, online activities

PP031

Problematic Internet Use and Adolescent Health

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OBJECTIVE: To determine to what point problematic Internet use is associated to poor health among adolescents in Switzerland.

METHODS: Survey among 3067 8th graders (mean age 14 years, 50.3% females). Using the Internet Addiction Test (IAT), we divided the sample into regular users (RU: IAT<50, N=2708), at risk users (ARU: IAT>49 and <70, N=306), and problematic users (PU: IAT>69; N=53). Groups were compared regarding age, gender, nationality, residence, family structure, socioeconomic status, emotional wellbeing, overweight, having a chronic condition and reporting backache, weight problems, headaches, musculoskeletal pain, sleeping problems or sight problems at least weekly. All variables significant at the bivariate level were included in a multinomial logistic regression using STATA 12. Results are given as Relative Risk Ratios (RRR).

RESULTS: PU were more frequent among females. Prevalence rates of poor emotional wellbeing, overweight, chronic conditions and all other analyzed conditions increased with increasing Internet problematic use.

At the multivariate level, compared to RU, ARU reported poorer emotional wellbeing (RRR: 1.67) and sleep problems (RRR: 1.26), while PU also reported poorer emotional wellbeing (RRR: 2.43) and more sleep problems (RRR: 1.32) and headaches (RRR: 1.23) than RU.

CONCLUSIONS: Excessive Internet use is associated with several health problems that increase as Internet use becomes more problematic. Internet use should be inquired as part of the psychosocial assessment to all adolescents, and especially those presenting poor emotional wellbeing and complaining of headaches or sleep problems.

Keywords: Internet use, adolescent health

PP032

Internet Addiction in High School Students: It's Relation with Depressive Symptoms, Self-Esteem and Peer Bullying

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OBJECTIVE: Internet addiction is a relatively new phenomenon receiving an increasing amount of attention in recent years by the mental health professionals. In this study, our aim is to investigate its relation with depressive symptoms, self-esteem and peer bullying.

METHODS: From high school students in the city center of Muş, the sample of this study was selected by using a multistage sampling method. Data were gathered from the selected students by administering the Internet Addiction Scale, Peer Bullying Questionnaire, Beck Depression Inventory Scale and Coopersmith Self Esteem Data obtained from 1150 students were analyzed using IBM SPSS Statistics 20.0.

RESULTS: 11.7% of the students in our sample meet the diagnostic criteria for internet addiction. Internet addiction scores correlated negatively with self-esteem scores and positively with depression scores. Students involved in the bullying cycle have a statistically significantly higher mean internet addiction score than those who are not involved in the cycle. Results of a binary logistic regression analysis show that, students who are both bully and victim are more likely to be addicted to the internet (odds ratio=1.68) than students who are not in the bullying cycle. Every unit increase in the depression score is associated with a %3.8 increase in the odds of being addicted to the internet. For every unit increase in the self-esteem score, the odds of internet addiction decreases by %1.7.

CONCLUSIONS: Results show that a multitude of factors are associated with internet addiction including the mental health of the individual. Mood disorders like depression as well as involvement in the bullying cycle as a bully or victim are associated with pathological use of the internet. Self-esteem on the hand is a protective factor for internet addiction.

Keywords: internet addiction, depression, self esteem, bullying, victimization

PP033

Which Eating Habits Prevail among Young Internet Users?

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OBJECTIVE: To determine to what extent problematic Internet use is associated to unhealthy eating habits among adolescents in Switzerland.

METHODS: Representative survey among 3067 8th graders (mean age 14 years, 50.3% females). Based on the Internet Addiction Test (IAT), we divided the sample into two groups: regular users (RU: IAT < 50, N= 2708) and problematic users (PU: IAT > 49; N=359). Participants were asked about the frequency of their consumption of 15 different foods which was classified as: High Food Frequency (those consumed 5 to 6 days per week or more) and Low Food Frequency (4 days or less). For each food category, a logistic regression was performed controlling for age, gender, overweight and being on a diet to lose weight. In a second step, regressions were done separately by gender.

RESULTS: Compared to RU, problematic users were significantly more likely to be girls (57.6% vs. 49.3%), overweight (15.8% vs. 10.6%), on a diet (14.5% vs. 10.1%), and eating less well.

At the multivariate level, when controlling for gender, age, overweight and diet, PU reported higher consumption of calorific food, such as soda (adjusted Odds Ratio [aOR]: 2.12), chocolate (aOR: 1.58) or French fries (aOR: 3.03), and less likely to eat fruits (aOR: 0.58) or vegetables (aOR: 0.56). Furthermore, they were more likely to drink coffee (aOR: 1.33) or energy drinks (aOR: 3.33). When analyzed separately by gender the most striking finding was that female PU were more likely to use energy drinks (aOR: 4.56) than their male counterparts (aOR: 2.53).

CONCLUSIONS: Adolescents spending excessive time on the Internet seem to eat healthier than their peers and are more inclined to be overweight and on a diet. Practitioners should pay particular attention to the nutritional balance of adolescents with problematic Internet use. Moreover, these youths could benefit from online nutrition prevention strategies.

Keywords: internet

PP034

Perceived Effects of Electronic Media Use among Youths of a Tertiary Institution in South Western Nigeria

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OBJECTIVE: To assess the pattern of use of electronic media and its perceived effects among youths in a tertiary institution.

METHODS: A semi structured, pretested, self administered questionnaire was administered to 420 students, selected through a multi-stage sampling technique, in a Nigerian tertiary institution. Univariate and bivariate analysis were done using SPSS version 17 with p-value of <0.05 accepted as significant.

RESULTS: One third of respondents were adolescents. More than 70% of the respondents mostly use telephones while 15.2%, 6.9% and 6.2% of them mostly use computer, radio and television respectively as electronic media of communication. Majority of the students use telephones because it is easily accessible (58.1%) and interesting (21.91%). Internet services are used by 87.1% of them for academic issues while 39.8% of them utilize it to get lovers. Perceived effects of media on the respondents include reduced concentration at study (31.67%), distraction in class (19.1%), visual disturbances (30.9%) e.t.c. A third of the respondents (30.5%) believed that media use has had negative effect on their academic performance while about 40% believed that they are addicted to the media. Media use is believed to cause significant reduction of study time among males than females. (p=0.001).

CONCLUSIONS: Mobile phones are the most commonly used form of electronic media among the youths and use of media is believed to exert some negative effects on their life. Youths should be guided on healthful use of electronic media.

Keywords: Electronic media, perceived effects, youths

PP035

UK Government's Teenage Pregnancy Strategy for England: Lessons Learned***Alison Hadley***

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OBJECTIVE: To halve England's historically high rates of teenage pregnancy and reduce the negative impact on adolescent health and wellbeing, child poverty and health inequalities.

METHODS: In 1999 the UK Government published a ten year Teenage Pregnancy Strategy to halve England's under 18 conception rate by 2010. The Strategy set out a 30 point action plan on four themes: joined up action; improving sex and relationships education and access to effective contraception; support for young parents; and a national communications campaign to reach young people and parents. A national Teenage Pregnancy Unit led the Strategy. Each local government area (150) implemented their own strategy to meet an agreed reduction target. Reaching all local targets would achieve the national 50% goal. A mid-strategy review compared the progress of areas with similar levels of deprivation and identified that those implementing the strategy actions effectively were reducing rates. As a result Government published more prescriptive guidance and focused on accelerating progress in poor performing areas. Additional funding was also provided to increase access to effective contraception and develop a TV contraceptive awareness campaign.

RESULTS: By 2010, England's conception rate had fallen by 25% to the lowest level for over 40 years, with conceptions leading to birth down by 35%.

CONCLUSIONS: Implementation of the ten year strategy identified some important lessons:

Concerted effort with a clear goal makes a difference. High teenage pregnancy rates in England are not inevitable. Effective delivery brings down rates, even in deprived areas. Senior leadership is essential, nationally and locally. Evidence needs to be translated into practical actions with each agency understanding and monitoring their contribution. Building consensus between young people, parents, professionals and politicians is key to progress. The lessons are important for making further progress in reducing England's rates but are also relevant to addressing other complex adolescent health issues.

Keywords: Teenage pregnancy, sexual health, health inequalities, adolescent health and wellbeing

PP036

Working Model with an Impact on Regulations Regarding the Sexual and Reproductive Health of Adolescents***Maria Casado, Albert Royes, Itziar De Lecuona, Blanca Bórquez***

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OBJECTIVE: The protection of sexual and reproductive rights of adolescents (SRR) is a complex issue that needs to be addressed both from specialized professional work practices and on a political and regulatory level. In many countries the regulatory task has not been successful in promoting comprehensive and multidimensional sexual and reproductive health care in adolescence. In Spain, the Observatory of Bioethics and Law (OBD) has helped to further the consolidation of a legal framework that respects the SRR of adolescents by creating Documents which have an impact on regulations.

AIMS: To propose a Working Model with an Impact on Regulations to Protect SRR in Adolescence (WMIR) based on the experience obtained by the OBD that can be reproduced by other interdisciplinary groups to enable them to positively influence the creation or improvement of legislation of their respective countries.

METHODS: A retrospective review of the work conducted by the OBD which has led to the formulation, dissemination and republishing of the Documents on Sexual and Reproductive Health in Adolescence and Voluntary Interruption of Pregnancies (2002, 2008, 2011).

RESULTS: The analysis carried out by the OBD regarding the social, cultural and historical context enabled us to identify weaknesses in relation to the protection of the SRR of adolescents in the Spanish legal system, leading us to propose a consensus of recommendations for legislators, legal practitioners and policymakers in public social and health matters, which involves disseminating this information through the media to improve the quality of information to make an impact on public opinion.

CONCLUSIONS: To create a WMIR whose main aims are to protect the human rights of adolescents considering them as persons at a stage in their life which requires harmonious development through a multidimensional model of sexual education, with an integrated approach that includes balanced contents and a focus on reflective dialogue.

Keywords: Sexual and reproductive health, sexual and reproductive rights, adolescents, working model, impact on regulations

PP037

**Sexuality Education in Schools and Junior Colleges in India
– Novel Methods to Overcome Barriers from the Parents and
Administration**

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OBJECTIVE: Research world over has shown that those adolescents who are imparted sexuality education are capable of making informed choices that result in delay in sexual debut, reduction in teenage pregnancy and sexually transmitted infections etc..This education is also very important to make adolescents aware about sexual abuse and exploitation which empowers them to protect themselves.

METHODS: However many parents oppose sexuality education with the apprehension of their children indulging in promiscuity. Most principals are also afraid to start sexuality education in schools or colleges as they are afraid of backlash from the parents. In India and other SE Asian countries that have a traditional and conservative culture, openly discussing issues related to sex and sexuality is often a taboo. Under this situation it becomes necessary for those interested in working on sexuality education to devise different approaches to broach this topic to the parents to get their permission and novel methods to conduct programs in schools and colleges.

RESULTS: The author has been working in this field over last two decades and has created a number of write-ups, power points and training modules for sexuality education. In this paper she will share her experience of the various approaches used with success to deal with the barriers from parents and school and college administration and use of, novel methodologies like “gender debate” etc.. With the accumulated experience - the do's and don'ts in approaching the stake holders and in imparting this education will also be discussed.

CONCLUSIONS: This paper is a qualitative analysis of the recent experience which covers over 10 school and colleges in over 5 cities in India over the period 2008-12.

Keywords: Sexuality education in schools, barriers from administration and parents, novel methods

PP038

**What Teens Want to Know in Sexuality Education? Results of
the “Question Box Methodology “From Teens in Schools and
Colleges**

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OBJECTIVE: Sexuality education in schools and colleges is extremely important to empower adolescents to make informed choices regarding their sex related activities. Association of Adolescent and Child Care in India- AACCI is group of doctors and Para medical health professionals who conduct programs on various issues for students, parents and children in schools and colleges since last 5 years. Open sessions make the children understand that sexuality is an important part of human life and there is no shame in openly discussing these issues Many myths and taboos can be scientifically dealt with removing a lot of fears and misconceptions from the impressionable minds of teens

METHODS: Many extrovert children are capable of asking questions openly in these sessions, but most children feel very shy of asking questions in front of a group. For such children the best way to elicit their doubts is the use of the “Question Box methodology “ A sealed box with a slit to insert their questions without putting their name is kept in the school or college between 2-5 days prior to the session if permitted by the administration. It can also be kept on the day the session where children can put their questions during tea and lunch breaks. All the questions are collected and categorized according to the topic and scientifically answered in the question answer session by a panel of experts. This gives a good idea of what questions are uppermost in teen mind.

RESULTS: We share our experience of dealing with the results of the questions boxes from a large number of workshops AACCI has conducted in various schools We tips for the body language of the facilitators' and some guidelines to answer unusual questions.

CONCLUSIONS: Sexuality education is a very sensitive subject and needs to be handled with care

Keywords: Sexuality education in schools, question box approach, sensitivity of the facilitator

PP039

The Effectiveness of Life-Skills Training Programme for Adolescent Girls in Turkey***Gizem Arikan, Asiye Kumru****

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OBJECTIVE: Adolescence period brings changes to individual's life (i.e., growth in height, hormonal changes with menarche and weight gain). These changes can affect females' psychological well-being and self-esteem more negatively compared to males (Kling et al., 1999; Nolen-Hoeksema & Girgus, 1994). To reduce the negative effects of adolescence period on young girls, we developed a life skills' training programme which targets improving self-esteem, self-care skills, and gender identity.

METHODS: Following ethical approval of Ministry of Education the training which consists of self-exploration, self-care agency and gender identity modules, were delivered to 495 female high school students (Mage = 16.47, SD = 1.26) residing in Husnu M. Ozyegin Foundation halls. The control group includes 478 girls (Mage = 16.20, SD = 1.14) with the same age range and similar SES. To measure effectiveness of the modules, Coopersmith Self Esteem Inventory (Coopersmith, 1967), The Exercise of Self-Care Agency Scale (Kaerney & Fleischer, 1979); Occupations, Activities, and Traits Scale for young adolescents (Liben & Bigler, 2002) were administered twice to both training and control groups.

RESULTS: The results showed that girls' self-esteem has increased after the training compared to pre-training, $F(1, 364) = 5.28, p = .022, \eta^2 = .014$. Training group also reported higher self-esteem than control group after the training, $F(1, 364) = 11.36, p < .001, \eta^2 = .030$. The control group showed lower ratings for self-care agency than training group after the training, $F(1, 656) = 12.02, p = .001, \eta^2 = .018$. Training group scored higher on gender identity scale for girls; $F(1, 458) = 23.49, p < .001, \eta^2 = .049$ as well as for boys $F(1, 446) = 13.48, p < .001, \eta^2 = .029$ than control group after training.

CONCLUSIONS: The training enhanced self-perception, self-care practices and gender awareness of adolescent girls. The study was funded by Husnu M. Ozyegin Foundation.

Keywords: Self-esteem, self-care, gender identity, intervention

PP040

Challenges of External Evaluation of New Educational Programs: Implementing Health Education in Croatia***Ines Elezovic***

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OBJECTIVE: Health Education is a fairly new concept in modern educational arena in Europe and it represents only one piece of the puzzle in improving public health in general. The new EU health strategy, White Paper – Together for Health: A Strategic Approach for the EU 2008-2013 (2007), calls for partnership with stakeholders at all levels, i.e. European Union institutions (Parliament and Council, regional committees), national governments, economic and social policy makers, local authorities, health-related agencies and all other interest groups and individual citizens.

METHODS: Croatia's accession to EU membership requires introduction and harmonization with new concepts in educational system, as well as for their successive evaluation and monitoring with standardized procedures. The overall idea of more organized institutional bridges building between education and public health thrives to develop, manage and assess the production of targeted knowledge, its practical application and related skills reflected in young people informed and healthy life style. According to the Croatian National Curriculum Framework (2011) Health, Safety and Environmental Protection is one of the six new cross-curricular subjects, along with: Personal and Social Development; Learning to Learn; Entrepreneurship; Use of Information and Communication Technology and Civic Education.

RESULTS: Present ongoing implementation represents a second attempt to introduce Health Education in Croatian primary and secondary education. Organized education of children about health issues has a long term projections on demographic trends, shared health values and society's long-term goals in education, well-fare and labour policies. Different groups of experts are involved in implementation, monitoring and evaluation of these processes. External evaluation of new experimental programs is hence one of the leverages of decision making process and perpetual quality assurance in teaching these values.

CONCLUSIONS: Two-year implementation and evaluation process of Health Education in Croatia (2012-2014) is expected to have great impact on policy making decisions in this field.

Keywords: Educational policy, health Education program, education and public health connections, external evaluation methodology

PP041

Multisectoral Approach to Healthy Lifestyle Promotion among Youth in Bosnia and Herzegovina

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METHODS: In September 2011, 59 professionals in contact with young people (family medicine doctors and nurses, gynecologists, psychiatrists, psychologists, teachers, NGO's, social workers and young people) were invited to attend joint workshops on adolescent health issues (confidential care, youth friendly service characteristics, psychosocial screening using HEADSSS) followed by subsequent project activities to maximize transfer of learning into practice.

RESULTS: 55 health and non-health workers (93% of invited) participated in training and created a youth support network. They are currently implementing the acquired knowledge and skills in practice; a promotional pamphlet for young people was developed.

CONCLUSIONS: There is an interest of professionals in contact with young people to get training and create a youth support network in Doboj and Sarajevo municipalities. The network is a first step to improve the quality and scope of the services available to young people.

Keywords: Multi-sectoral approach, healthy lifestyle promotion, young people

PP042

Reaching out to Young People Through Poyo: A Malaysian Experience

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OBJECTIVE: To provide young people easy, cheap and immediate access to health information and advice, and to facilitate them to make decisions. It is also a long term measure aimed to reduce the incidence of unplanned pregnancies in Seremban.

METHODS: Professional Opinion for Youth (POYO) was initiated in township of Bandar Seri Jempol in June 2007 and expanded to Seremban through the local health clinic on 29 October 2010. The system consists of telecommunication between anonymous respondents seeking information on health issues from trained volunteers through SMS on handphones. Subsequently volunteers answered by sending timely SMS which are precise, objective and nonjudgmental. Personal handphone numbers of volunteering professionals were disseminated to young people in schools and the community through school health talks, health camps, Facebook and website. The number of volunteers had increased from a single primary care doctor to include other professionals such as a lawyer, medical social worker, pharmacist and engineer. All messages received from 2011 and 2012 were downloaded, compiled and analyzed using Microsoft Excel.

RESULTS: There were 86 SMSs received in 2011 and 2012 from 62 respondents. The 3 main topics addressed were sex, 55.81% (48), sexually transmitted diseases 8.13% (7) and HIV infections 6.98% (6). Two SMSs were pranks and were not included in the analysis. 3 SMSs were from married individuals and 3 were from adults. In 2012, the POYO website received a total of 11,855 visits. It was observed that there was a reduction of 68.42% in the number of registered cases of unwed pregnancy in the 2 year period after the initiation of POYO in the Seremban Health Clinic, from 76 cases in 2010 to 24 cases in 2012 (Jan-October).

CONCLUSIONS: POYO was well received by young people. More analysis is required to associate POYO with its impact in reducing the incidence of unplanned pregnancies.

Keywords: POYO, Unplanned pregnancies, SMS, website

PP044

The Health of Adolescents When Policies and Regulations are Unclear. The Chilean Case**Blanca Bórquez, Adela Montero*, Verónica Gaete****

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OBJECTIVE: Making adolescents aware of health is not an easy task given the characteristics of this age group and their stage of development. This requires that health workers have special skills such as empathy, respect for them and to be good communicators. However, this may not be enough to provide sufficient care when this is administered in conservative social contexts with confusing policies and regulations that do not clearly authorize this care while guaranteeing confidentiality and full recognition of adolescents as independent individuals.

AIMS: To determine whether the current Chilean regulations help health workers provide care for adolescents while guaranteeing confidentiality, independence and non penalization, particularly in the context of sexual and reproductive health.

METHODS: Current Chilean legal regulations regarding health that were passed following the ratification of the Convention on the Rights of the Child (CRC) were collected, analyzed and interpreted.

RESULTS: Of all the regulations analyzed, it was seen that these regulations and particularly Laws 19.927 (2004), 20.418 (2010) and 20.584 (2012) on sexual and reproductive health, do not clearly regulate the adolescent's involvement in his or her health care enough to guarantee their confidentiality, autonomy and non penalization, and certain aspects were even contradictory.

CONCLUSIONS: The existence of an unclear regulatory framework may be a highly determining factor for professionals when providing health care to adolescents in Chile. To protect themselves from possible claims or from their being reported to the authorities and faced with uncertainty regarding the possibility to provide health care while respecting confidentiality, autonomy and non penalization, professionals may prefer to not provide this, or even limit this treatment when a third party, such as the parents or guardians, are present, and this may constitute a clear violation of the rights of adolescents recognized by the CRC.

Keywords: Health of adolescents, Chilean case, policies, regulations, law, sexual and reproductive health

PP045

Navigating Gangland: Community-Level Influences on High School Dropout in The Cape Flats**Benjamin W. Fisher**

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OBJECTIVE: The purpose of this paper is to explore community-level risk factors for the high dropout rate (around 70%) at Gardenia Valley High School (GVHS) in Cape Town, South Africa. Specifically, it examines the impact of gangsterism, violence, and feelings of safety on young people's ability to remain in school.

METHODS: In this study, seven current students and one former student participated in an activity where they created maps of Gardenia Valley and labeled them according to several features, including where they spend time, where they feel safe/unsafe, and how they travel to and from school. Researchers facilitated the mapmaking process and critical conversations around the content of the maps. The data used in this study consist of the maps themselves and the recorded conversations that took place during the activity.

RESULTS: Students reported that they felt unsafe almost everywhere in Gardenia Valley, with the exception of home and school. However, several students explained that they found ways to negotiate their perceived lack of safety in such ways as: participating in the local informal economy; being familiar with multiple routes to and from important places; and earning the respect and protection of important community members.

CONCLUSIONS: Although there were several strategies that helped students feel safer while navigating their environment, some strategies may simultaneously encourage students to drop out of school. For example, befriending gang leaders helped students feel safer in the community, but was also identified as a risk factor for dropout. This study suggests that students' socio-spatial experience of their community is a crucial component for understanding the high dropout rate at GVHS. Although this study examines the particular context of Gardenia Valley, similar methodologies could be used to help understand school dropout in other communities that deal with extensive gangsterism and violence.

Keywords: Community violence, school dropout, fear of victimization, safety, youth, gangs, community mapping

PP046

Students as Lifestyle Activists Taking Action in Schools

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OBJECTIVE: The SALSA (Students as Lifestyle Activists) program is a peer education program for high schools, based on sound theoretical framework and community consultation, to increase physical activity and improve nutritional intake in students. The purpose of the study was to evaluate the impact of the program on the SALSA Peer Leaders.

METHODS: We trained 2nd Year medical students (n=11) from The University of Sydney as SALSA Educators, who then visited three high schools in Sydney. They coached volunteer students from Year 10 as SALSA Peer Leaders (n=64) to deliver four SALSA lessons to Year 8 students (n=324) in their schools. The Peer Leaders completed a nutritional and physical activity questionnaire on the day of the workshop and four months later. Medical students and Peer Leaders completed process questionnaires following the workshops.

RESULTS: Medical students found the experience of community engagement and learning through teaching rewarding. They learnt how to educate and communicate with young people about healthy lifestyles. The Peer Leaders were inspired to adopt a healthier lifestyle and enhanced their communication and leadership skills. They reported increased intake of fruit and vegetables and decreased consumption of soft drinks. However, 87% of students believed that healthier options are not affordable. Two-thirds of students engaged in some form of organized sports and activities and 98% of students engaged in some form of physical activity during the week. While the amount of TV/DVD viewing decreased, the amount of time spent using the computer increased.

CONCLUSIONS: The SALSA program was well received and valued by the medical and high school students. The program had moderate impact on the eating habits and amount of physical activity in Peer Leaders. Further research needs to be done to see how we can make healthier options more affordable.

Keywords: Healthy lifestyle, peer education, adolescents

PP048

Exploring Gender Differences in the Relationship between Future Expectations and Bullying in Early Adolescence

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OBJECTIVE: Hope for the future has been linked to positive developmental outcomes in adolescence, however, the association between future expectations and bullying has received less attention. We examined the relationship between future expectations and bullying perpetration, tested a mediation model that linked future expectations with bullying through attitudes about violence, and examined gender differences in these relationships.

METHODS: A sample of U.S. 7th grade students (mean age = 13 years; N = 196; 60% female; 60% African American) were recruited to participate in a paper-pencil survey. Participants responded to items examining future expectations, attitudes towards aggression, and past 30-day bullying (i.e., physical and relational bullying). Multivariate regression analysis was conducted separately for males and females. The Sobel-Goodman test and bootstrap 95% confidence intervals (CI) for indirect effects were computed to test for mediation.

RESULTS: Among the 196 youth, 88% reported acts of relational bullying and 36% reported acts of physical bullying in the past month. Future expectations were negatively associated with relational bullying for females and males, and with non-physical bullying among females. Future expectations were negatively associated with attitudes towards aggression for females, but not for males. Attitudes towards aggression were positively associated with relational bullying and physical bullying for females, but only with physical bullying for males. For females, attitudes towards aggression mediated the relationship between future expectations and physical bullying (Sobel test = -2.54, $p < .01$; 95% CI: -1.28, -.09) and relational bullying (Sobel test = -2.54, $p = .01$; 95% CI: -4.96, -.45). Mediation was not found for males.

CONCLUSIONS: Differences in the model existed by bullying type and gender. Overall, our findings suggest that future expectations can play a role in reducing attitudes towards aggression and bullying among youth. Interventions that help support the development of future goals and aspirations could play a vital role in bullying prevention efforts.

Keywords: Bullying, future expectations, protective factors

PP049

Supporting Generosity and Resilience in Troubled Youth: The Effects of Unesco School Projects

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OBJECTIVE: Aim of this study was to investigate the concept of interpersonal generosity in troubled youth and to examine the association between group projects and this generosity and also the adolescents' resilience.

METHODS: In a longitudinal study we followed a residential facility for troubled youths undergoing an initiation process to become a member of the UNESCO Associated Schools Project Network (ASPnet). Over three years about 60 youths filled out standardized questionnaires every 6 months, and 6 adolescents were interviewed every 12 months. To assess interpersonal generosity, the persistent willingness to put oneself out for others, a questionnaire by Smith and Hill (2009) with six subscales was translated into German. Resilience was measured by a questionnaire with 11 items (Schumacher et al., 2005).

RESULTS: The project can draw on precious resources. Adolescents' generosity and resilience was rather high from the beginning. Results show that adolescents with high levels of generosity also show high resilience. Furthermore, generosity is associated with a better evaluation of the UNESCO-related group projects and with estimating higher effects. This is true for five of six facets of generosity, i.e., attention, empathy, readiness to give away, willingness and engagement. Thus, generosity seems to be a basis for adolescents' motivation and their appreciation of the projects but not necessarily for their actions. Additionally, youths' level of engagement is correlated with their levels of resilience.

CONCLUSIONS: Overall results suggest that the concept of interpersonal generosity is worthwhile being investigated in troubled youths. Furthermore, the benefits of group projects found in past research can be generalized to adolescents in institutions working with troubled youths undergoing a UNESCO ASPnet initiation process.

Keywords: Generosity, resilience, troubled youths, residential facility, group projects

PP050

Teens in School: How Different from the Ones Also Followed in Outpatient Clinic?

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OBJECTIVE: Filling a questionnaire at the first medical appointment is a quick method to evaluate biopsychosocial profile of adolescents and to screen health problems. This study aimed to evaluate how different is the biopsychosocial profile of a "healthy" adolescent sample from school with a sample accompanied in a hospital appointment.

METHODS: An analytical retrospective study was performed to 10-17 years old adolescents, from a school (school group-SG; January 2012) and from our Outpatient Adolescent Unit (hospitalar group-HG; between 2006 and January 2012).

A confidential questionnaire was applied to both groups to assess: social-demographic data, psychosomatic complaints, body image, dietetic features and risk behaviors. Statistical analysis: PASW Statistics18®(p<0,05).

RESULTS: Inclusion of 674 questionnaires: 191 SG (median age:12,7+-1,7 years-old, 57% females) and 483 adolescents HG (median age: 13,6 +- 1,9 years-old, 62% females).

Similar results in both groups: a bad relationship with parents in 14% SG and 19% HG (p=ns); had tried smoking 16% SG and 22% HG(p=ns); regular smoking in 7% SG and 6% HG(p=ns). Thoughts of death in 27% of both groups (p=ns) and dissatisfaction of their own body: 39% SG and 44% HG(p=ns).

Differences by group: sleep problems were less frequent in SG (28%) than HG (41%): p=0,005, as well as >1 somatic complaint: 15% SG and 37% HG(p<0,001). Restriction dieting was less prevalent in SG(7%) than HG(19%): p<0,001. School performance was bad in 18% SG and in 56% HG (p<0,001). Six percent SG and 18% HG drink alcoholic drinks regularly (p=0,003); 2% SG and 6% HG had already tried illicit drugs.

CONCLUSIONS: In "healthy" adolescents important problems like dissatisfaction with their body, risk behaviors and death thoughts were similarly identified. Subsequently, a project has been developed and an appointment is currently taking place at school to evaluate the adolescents identified with the questionnaire as being in risk.

Keywords: Risk behaviors, adolescents, school, hospital, biopsychosocial profile

PP051

Bullying and School-Based Violence in LGB Youth

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OBJECTIVE: Evaluate role of sexual orientation in violence experienced by youth in school settings, independent of other demographic variables.

METHODS: The YRBS was conducted in 62 randomly selected public Illinois high schools in the spring of 2009 and completed by 3,051 students. Eight percent (n=184) described themselves as gay, lesbian, bisexual or unsure. Bivariate analysis was conducted to determine if risk of violence-related experiences and related behavior varied by both sexual orientation and gender. Logistic regression was conducted on the variables of interest to determine the degree to which LGB youth experience violence-related risk compared to heterosexual peers, controlling for race, gender and geography. Additional logistic regression analyses were conducted among the sub-sample of LGB youth to identify predictors of experiences and risk behavior beyond the youth's LGB status.

RESULTS: There was no difference in mean grade level for LGB respondents, but significantly more representation of Blacks and Latinos, with 31% Black and 33% Latino (P<0.05). LGB female participants reported more school-based violence across all variables (p<0.05), whereas LGB male participants reported missing more school, and feeling threatened at school (P<0.05). After controlling for the effects of gender, race, and geography, LGB youth were 3.4 times as likely to be threatened at school and more than twice as likely to carry a weapon to school, miss school because of feeling unsafe, be bullied and have had a fight at school. LGB residents of Chicago were 3.4 times more likely to miss school. Conversely, non-Chicago students were 2.8 times more likely to be bullied than their Chicago counterparts. There were no statistical differences among examined variables by race.

CONCLUSIONS: Our results confirm previous findings that LGB youth are at increased risk of school-based victimization. Our findings suggest that there may be important gender and geographic-specific factors germane to school-based violence experience by sexual minority youth.

Keywords: Bullying, school based violence, lgbt youth

PP052

Online Parenting: Creating Credible and Snackable Info-Bytes for Parents of Teenagers

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OBJECTIVE: The project aims to protect teenagers from life's 'ups and downs' by increasing their wellbeing and improving their health outcomes through the development and uptake of accessible evidence-based online parenting resources. Parents are provided with skills and materials to interact and communicate with teenagers, promote nurturing parenting, navigate health care systems and support families with teenagers who have a long-term illness.

METHODS: This project utilised working alliances between young people, parents, researchers, adolescent health clinicians and policy makers to investigate key parenting research questions. A collaborative approach to content and 'product' development was employed, with evidence-based practice and research findings being exploited during the content development phase.

An extensive quality assurance process was integral to the project outcomes, informing the refinement of major messages and translating parenting strategies into credible 'online bytes' of parenting information.

RESULTS: Utilising new media platforms to disseminate parenting skills and materials is an effective way to reach 21st century families. Audio visual products are an accessible medium for improving young people's social and emotional wellbeing, particularly for families with low literacy skills. Text based information continues to provide trusted information and printable resources.

CONCLUSIONS: Innovative audio-visual and text-based media 'products' which draw on data, evidence-based best practice and research, point to how online environments can be harnessed to promote and model effective parenting strategies for the benefit of individual young people, and the broader ecological systems with which they interact.

Keywords: Teenagers, online, resources, wellbeing, parenting skills, health care

PP053

Parenting and Social Development in Early Adolescence: How Parental Autonomy Granting Influences Early Adolescents' Self-Regulation, Internal Causal Attributions for Success/Failure and Future Expectations

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OBJECTIVE: Self-regulation and causal attributions have remained popular subjects of interest in the psychology literature, while factors influencing these constructs have not been researched extensively by developmental psychologists. Early adolescence is the period when self-regulatory skills and causal attributions become fairly stabilized, as success, evaluation and goal-setting also become salient in the immediate environment of the individual. Parents, as the most important agents of socialization in a child's life, have been found to influence children's internal attributions, as well as their level of self-regulation. However, autonomy, as one prominent concept that underlies these constructs, has not been particularly analyzed as a parenting variable in the attributions and self-regulation literature. The proposed study aims to look at the relationship between parental promotion of autonomy and the internal attributional style and self-regulatory skills of early adolescents. The outcomes, in turn, are expected to influence early adolescents' future expectations, such that those who attribute success/failure to internal and changeable causes and have better self-regulation will have a more hopeful outlook on their future. Findings are expected to have policy-relevant implications by revealing the level of importance of parenting in the formation of an adolescent's self-regulatory skills, internal attributions, and ultimately their level of hope. The proposed study will also make use of well-known theories such as Kagitcibasi's Theory of Family Change and Dweck's Implicit Theories.

METHODS: Questionnaires will be used to assess early adolescents' perceptions of their parents' level of autonomy granting and parental control, their causal attributions, level of self-regulation, and expectations for the future.

RESULTS: The proposed study is a part of an intervention program aiming to promote the social development of early adolescents, currently being developed at Koc University, under the supervision of Prof. Cigdem Kagitcibasi. Results will be available, once the assessments have been completed in early 2013, prior to program implementation.

Keywords: Parenting; autonomy; internal attributions; implicit theories; self-regulation; future expectations; future orientation; family models; hope; intervention; social development; early adolescence

PP054

The Conception of Risk in Young Adolescents

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OBJECTIVE: This study examines the conceptualisation of risk behaviour held by 26 Franco-Ontarian young adolescents (12-14 years of age) who participated in Lions Quest, a program specially designed to promote physical and mental health and to prevent drug and alcohol use. More specifically, it seeks to better understand the participating adolescents' conception of risk and protective factors in linguistic minority context, with the eventual purpose to prevent or delay alcohol and drug use.

METHODS: A qualitative methodology mainly based on semi-structured interviews generated discussion around a variety of dimensions related to risky behaviour, extreme and dangerous risks, positive and negative risks, social and physical risks.

RESULTS: The adolescents, aged 12 to 14 years, hardly mentioned drug, alcohol, and cigarette use. However, they were aware of the risks of consumption and dependence.

CONCLUSIONS: Early adolescence is a suitable lifetime period to introduce preventative programs with regards to drug and alcohol abuse

Keywords: Risk taking, adolescence; prevention alcohol and drug abuse

PP055

Knowledge about the Choking Game in Adolescents in The City of Cali, Colombia

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OBJECTIVE: General objective

To determine the prevalence and knowledge Choking game in a group of adolescents in the city of Cali, Colombia.

Specific Objectives: 1. To characterize the population surveyed

2. To quantify the prevalence of Choking game in a group of adolescents in the city of Cali, Colombia.

3. Characterizing knowledge on the practice of game Choking on a group of teenagers in the city of Cali, Colombia.

METHODS: Survey of 350 students from two public schools and two private schools in the last 3 years of high school, aged between 12 and 17 years in the city of Cali - Colombia.

RESULTS: Most of the respondents were women. 260 knew about this practice and 190 of them had practiced. Curiosity is the most common cause for which began this practice yet occupies an important place on bullying.

The technique used is the hanging caused two people and group. Although it is considered the most dangerous technique almost 89% have performed more than once. 42% did not get the expected response. Headache and dizziness are the symptoms presented after the procedure.

The 87% practical outside the home and 74% do not use any kind of stimulant for its realization. It is worrying that 68% of respondents recommend practicing this game.

CONCLUSIONS: The Choking Game or otherwise known as the choking game is a dangerous, potentially deadly. His knowledge is important for prevention and early detection of risk behaviors among adolescents.

Recommendations

Definitely recommended surveillance of this practice and start from instances of Public Health and Scientific Societies to discuss and establish preventive actions given the high prevalence suggests that the present study.

Keywords: Game Choking, choking, adolescents.

PP056

Improving Identification of Young People at Risk of Sexual Exploitation: Using Red Flags in Heeadsss***Amma C.K. Oppong-Odiseng***

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OBJECTIVE: Background

Victims of sexual exploitation frequently do not recognise that they are being exploited, and do not disclose abuse, resulting in significant unidentified and unmet need.

Young people at risk of sexual exploitation may have contact with a variety of professionals in a range of agencies, including health.

Objectives.

To raise awareness about the Red Flags which may alert clinicians and other professionals to the possibility that a young person may have experienced sexual exploitation, by incorporating them into the HEEADSSS framework for taking a psychosocial history (Home, Education/Employment, Eating, Activities, Drugs, Sexuality, Suicide, Safety).

METHODS: The contents of published HEEADSSS frameworks in use in a number of countries including the UK, USA, Australia and India were reviewed.

Potential indicators of child sexual exploitation, (called Red Flags in this article), identified through research carried out by the Child Exploitation and Online Protection Centre UK, were identified and compared with the HEEADSSS frameworks.

RESULTS: Although the internationally used HEEADSSS frameworks cover the key topics for discussion with a young person at risk of sexual exploitation, some specific Red Flags are not routinely incorporated into the psychosocial history.

CONCLUSIONS: Young people at risk of sexual exploitation may be slipping through the nets as professionals in contact with them may be taking a psychosocial history using HEEADSSS, but may not be asking the specific questions that would raise awareness about potential indicators of sexual exploitation. Specifically incorporating Red Flags into the HEEADSSS psychosocial history could lead to an increased recognition of the vulnerability of young people and identification that they are potentially at risk of sexual exploitation, so that appropriate multiagency input can lead to disruption of perpetrators and improved outcomes for the young person.

Keywords: Adolescent health, HEEADSSS, child sexual exploitation

PP057

Exploring the Intersections of Exposure to Violence and Healthy Adolescent Development: Implications for Comprehensive Community Development Initiatives***Bernadette Doykos, Joanna D. Geller, Krista L. Craven***

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OBJECTIVE: In highly impoverished communities, exposure to numerous risk factors is likely to have a multiplicative impact on healthy development. Extensive research shows that exposure to violence has a stark influence on health and wellness among adolescent populations, including increased rates of emotional distress (Farrell & Bruce, 1997), aggressive behaviors (Gorman-Smith & Tolan, 1998), and instances of depression (Westbrook & Harden, 2010). For youth, these cumulative effects often deleteriously affect their educational outcomes (Bowen & Bowen, 1999). In this presentation, we aim to unpack how precisely violence impacts healthy outcomes for adolescents.

METHODS: Over the course of two months, members of the research team conducted focus groups to help inform the development of a community needs assessment. Stakeholders included service providers (2), school administrators (2), high school students (2), parents of children who participate in local programming (2), and parents of students who attend a zoned elementary school (1).

RESULTS: Our findings reveal that stakeholders universally identified various issues affiliated with personal safety and threats of violence that confronted children and families throughout their surrounding communities. The data show that youth are exposed to persistent violence across multiple domains, including their neighborhood, schools, and homes. Specifically, focus group participants spoke about the omnipresence of community violence, domestic violence, access to guns, and the impact that violence has on perceptions of childhood (such as losing one's childhood).

CONCLUSIONS: With a more holistic understanding of violence and adolescent development, future intervention initiatives can help address both the associated risks and target the institutional roots of violence. These findings have substantial implications for future research and practice, as they can help to develop approaches to violence prevention that are integrated into the planning and implementation of comprehensive community change initiatives, such as Promise Neighborhoods.

Keywords: Ecological development, violence, safety, community development

PP058

Willingness, Obligation and Belief: Effects of Dating Commitment Types and Religiousness on Adolescents' Life Satisfaction

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OBJECTIVE: Research shows that close relationships contribute to psychological well-being and happiness. Extending this finding, previous studies found that adults' life satisfaction benefits from a relationship when people want to maintain their relationship (i.e., personal commitment), but suffers when people think that they have to stay in their relationship (i.e., structural commitment). The first aim of this study was to investigate whether the same associations exist among adolescents, for whom the meaning and the effects of relationship commitment may be different than adults. Given that religious values affect both relationship dynamics and life satisfaction, the second aim of this study was to examine the moderating role of religiosity on these associations.

METHODS: The sample of this survey study consisted of 126 late adolescents at the ages between 18 and 21 ($M = 20.21$, $SD = .80$).

RESULTS: Consistent with the findings on adults, regression results revealed that adolescents' life satisfaction was positively associated with personal commitment ($\beta = .22$, $p = .009$), whereas it was negatively associated with structural commitment ($\beta = -.30$, $p = .001$). More importantly, results yielded an interaction effect between personal commitment and religiosity on life satisfaction ($\beta = .25$, $p = .003$). Simple slope analyses revealed that personal commitment was positively associated with life satisfaction only among highly religious adolescents.

CONCLUSIONS: It is possible that highly religious adolescents value loyalty and fidelity, and therefore their life satisfaction suffers if they do not want to continue a relationship. Not observing an effect of personal commitment among less religious adolescents, on the other hand, suggests that these adolescents are less likely to perceive their relationships as serious as to have an effect on their life satisfaction. This study shows that the effect of close relationship on life satisfaction depends on the commitment types and the religious beliefs of adolescents.

Keywords: Relationship commitment, religiosity, life satisfaction

PP059

If You are able to Control Yourself, I will Forgive You: The Role of Perceived Self-Control in Forgiveness in Family Relationships

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OBJECTIVE: In families forgiveness is a key factor for harmonious relationships. Forgiveness among parents and children is associated with lower depression, anxiety, and aggression, and predicts greater relationship quality. Previous research has mainly focused on how forgiveness varies across different family relationships and dispositional characteristics that make people more or less prone to be forgiving. Nevertheless, because forgiveness is an inherently interpersonal phenomenon, the question raises why family members forgive certain partners more than others. This study examined a primary factor that family members may use to gauge whether to forgive others: their perception of the other person's level of self-control. Self-control is the capacity to alter or override unwanted responses so as to bring them into agreement with personal or social standards. Therefore self-control should be diagnostic of people's ability to prevent a repetition of the offense and to take the victim's perspective into consideration. Thus, we propose that family members use the perception of others' self-control as an indicator to forgive a transgression.

METHODS: Eighty-four families (two parents and two children) participated in a round-robin questionnaire study. The older and younger children were 12.37 ($SD = 1.87$) and 10.04 ($SD = 1.77$) years old, respectively.

RESULTS: Consistent with our hypothesis, Social Relations Model analyses yielded a main effect of perceived self-control on forgiveness, $b = .15$, $t(842) = 5.53$, $p < .01$. Neither actors' (i.e., person who forgives) nor targets' (i.e., person who is forgiven) family position yielded an interaction effect with perceived self-control on forgiveness.

CONCLUSIONS: These results indicate that all family members similarly used their perception of others' level of self-control in forgiveness, and all family members who were perceived as having high self-control were more likely to be forgiven by other family members. These findings highlight the role of perceived self-control for pro-relationship behavior not only among adults but also among children.

Keywords: Self-control, forgiveness, family relationships

PP060

Accumulated Risk: Adult Outcomes of Multiple Risk Behaviours in Adolescence***Daniel Robert Hale, Russell Mark Viner***

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OBJECTIVE: Health risk behaviours (HRBs) including substance use, sexual risk and other dangerous behaviours are of growing public health concern due to clear negative outcomes associated with each. HRBs often cluster in adolescence yet little is known about the outcomes of multiple HRBs. This study examines adolescent and adult outcomes of increasing adolescent risk behaviour.

METHODS: We used data from the longitudinal 1970 British Birth Cohort (n=16,571) focusing on data collected at age 16, 30 and 34. We defined an index of adolescent risk based on summation of the following HRBs: smoking, alcohol use, illicit drug use, early sexual initiation, and having been in an accident by age 16. Missing age 16 data was handled using multiple imputation. Separate logistic regressions were conducted to assess the association of the risk index (with 0 as comparator) with key outcomes at age 16 and in adulthood.

RESULTS: Clear associations with adolescent risk score were evident for adult risk behaviour and poor academic outcomes. A number of health outcomes including general health and mental health were also associated. For most outcomes, odds ratios grew incrementally with increasing risk score. For example, while one age 16 HRB almost doubled the odds of using drugs at 30 (OR: 1.83; 95% CI: 1.08-1.79), 4 or more risks increased odds almost sevenfold (OR: 6.92; 95% CI: 4.22-11.36). Furthermore, for many health and occupational outcomes, involvement in only one risk behaviour was unassociated; only multiple risk behaviour conferred significant risk for negative outcomes.

CONCLUSIONS: The association between adolescent risk behaviour and key health and psychosocial outcomes operates on a clear gradient. The results suggest that much of the risk for negative outcomes attributed to any given HRB may be more accurately attributable to accumulated co-occurring HRBs. This has public health implications regarding the importance of reducing co-occurring risk behaviours in adolescence.

Keywords: Multiple risk behaviour, adolescent, longitudinal survey, health, substance use, unsafe sex, accidents

PP061

Road Safety and Violence Related Behaviour among Adolescents in a City in South India***Mona M Basker , Arunkumar G , Roshni Rajan***

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OBJECTIVE: To assess prevalence of road safety and violence related behavior among school going adolescents in Vellore district.

METHODS: Six schools were chosen from Vellore district, Tamilnadu, India, including private, government and government-aided schools. A survey was conducted among 9th and 11th grade students of these schools, using a questionnaire adapted from the YRBS and CRAFFT questionnaires.

RESULTS: Majority of students (84.9%) never or rarely wore a helmet while traveling on a motorcycle, of whom 61.2% were boys and 38.8% were girls. Only 5% of the students reported using helmets regularly, 83.3% being boys. Similarly 71.4% of students never or rarely wore a seat belt while traveling in a four wheeled vehicle, 64.2% being boys and 35.2% girls. 10.6% students wore seat belt regularly, 56% being boys and 44% girls.

23.2% students reported being engaged in physical fights occasionally, while 7.5% students were involved more frequently. 20.9% students reported being injured during violence occurring at home. 8.7% students had been witnesses to violence at home between parents or other adults. With regard to bullying, 25% reported having been victims of bullying at school. 21% students admitted to have engaged in bullying other students.

CONCLUSIONS: Measures need to be taken to increase awareness among adolescents regarding the use of helmets and seat belts. At school more education and empowerment needs to be done to prevent the practise of bullying and to deal with domestic violence.

Keywords: Adolescents, road safety, helmet, seat belt, bullying, domestic violence

PP062

Perceived Social Support among Children with Externalizing Symptoms and Their Siblings

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OBJECTIVE: Previous studies have shown that there is a relationship between the social support children get from their environment and symptomatology in children. The current study is aimed to explore children and adolescents displaying externalizing symptoms (i.e., antisocial conduct, delinquency, aggression, and hyperactivity) in terms of their perception of social support.

METHODS: Approximately 200 children aged between 10 to 18 will be included in the study. The children in the study will be categorized into three groups: Study group composed of children with externalizing symptoms, and two comparison groups including non-symptomatic siblings of children with externalizing symptoms and randomly selected non-symptomatic children. The data will be gathered by the use of self report questionnaires, namely Achenbach Youth Self-Report Questionnaire, and the Social Support Appraisals Scale. These three groups will be compared for their perceived social support.

RESULTS: The data gathering process is expected to be completed by the end of April, 2013.

CONCLUSIONS: Based on the previous research findings, it is expected that children with externalizing symptoms will report worse perception of social support than the comparison groups. The findings of the study would offer clues for interventions for enhancing psychological functioning of children with externalizing symptoms.

Keywords: Externalizing symptoms, social support

PP063

Youth, Risk, and the Alcohol Purchase Age in New Zealand

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OBJECTIVE: This research sought to develop understanding of stakeholder perspectives on youth alcohol consumption, and explore discourses underlying the debate regarding a minimum alcohol purchase age.

METHODS: Critical discourse analysis was applied to transcripts and public submissions to the Alcohol Law Commission. Transcripts from personal interviews and focus groups of tertiary students, and 25 purposively selected submissions were analysed for discourse themes.

RESULTS: Three discourse themes were found to constitute areas of debate: the social construction of youth, the policy focus needed to address alcohol harm, and the anticipated level of effectiveness of an increased alcohol purchase age. The social construction of youth as immature, deficient, and vulnerable supports efforts to strengthen legislation to protect youth from alcohol, such as increasing the purchase age. This poster presentation will focus on the conflicting perspectives regarding the riskiness of alcohol consumption by youth. Many health experts construct youth as risk-taking, but there are alternative perspectives. Alcohol consumption by youth is of concern to experts due to health-related risks, whilst lay ideology views risks differently.

CONCLUSIONS: Raising the alcohol purchase age, particularly as a stand-alone intervention, may achieve very little towards harm-reduction. It is necessary to address the adult population groups, including family members, parents and liquor retailers, who continue to provide or facilitate access to alcohol to underage youth. Whether youth alcohol consumption should be a primary focus for alcohol policy, or change in cultural and environmental factors, is another key issue of debate to resolve.

Keywords: Alcohol, Youth, Policy, Health, Risk

PP064

Drinking Alcohol in Roma, Non Roma and Latin-American Adolescents in Spain***Jorge Uroz, Carmen Meneses, Eugenia Gil****

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OBJECTIVE: This work describes drinking alcohol in adolescents of different ethnic groups (Spanish Roma, Spanish non Roma and Latino American), in two areas of Spain (Andalucía and Madrid).

METHODS: We did a Secondary School Survey where the student had to identify themselves in one ethnic group. The sample was constructed from this ethnic identification. The questionnaire was collected in different schools where there were more Roma and Latin American adolescents. The survey had the approval of parents and school principals. Data were analysed by bivariate analysis with chi square and t student's statistic. The significance was in 0,05

RESULTS: The sample obtained was 3,132 adolescents, belonging to Spanish Roma (n=483), Spanish Non Roma (n=1773) and Latin American (n=876), with an average of 15 years old (12-18 years). The last year drank alcohol the 56,1% with difference by ethnicity (p=0,000) (Roma 64%; non Roma 53%; Latin A.58,2%); 10,6% drank alone the last year; 33,5% got drunk the last year, higher in Roma; 21,8% drank in the familiar context, and 48,5% outside; the most Roma teenagers drank with family, and the non Roma and Latin American was without family (p=0,000).

CONCLUSIONS: The cultural differences found were based on parents model and/or peer group of each ethnic group. The family cohesion is more important for group Roma and the alcohol use is produced in familiar events. It is essential to address the health and development needs of adolescents to make a healthy transition to adulthood.

Keywords: Alcohol, Roma, Latin American, Spain

PP065

Is Substance Abuse a Problem among School Going Adolescents in Southern India***Mona M Basker, Arunkumar G, Roshni Rajan***

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OBJECTIVE: To assess adolescent behavior regarding substance use among school going adolescents in India.

METHODS: Six schools were chosen from Vellore, Tamilnadu including private, government and government-aided schools. Students from 9th and 11th grade in all these schools were included. A YRBS based questionnaire was used to conduct this survey.

RESULTS: Experimentation with tobacco was reported in 4.8% of the participants, of which 90% were boys. 40% of those who tried did so between 15-16 years. 25% became regular smokers. Nearly half of them acquired tobacco themselves from a shop. Chewing tobacco was seen in 3.8%.

3.6% had experimented with alcohol, 82.4% of those were boys and 17.6% girls. 29.4% consume alcohol regularly. 38% began alcohol consumption at 15-16 years of age. Again 41% bought alcohol themselves. Experimentation with other substances was seen in 1.5% of the participants.

CONCLUSIONS: Substance abuse is a growing problem among adolescents living in India, among both girls and boys. Indian adolescents seem to have easy access to tobacco and alcohol, which has probably led to increased experimentation and abuse at a younger age. Larger studies need to be done to highlight the actual magnitude of the problem and to prevent harmful health behavior among adolescents.

Keywords: Substance, abuse, tobacco, alcohol, adolescents, school going

PP066

Caregivers and Teenage Smoking in French Hospitals

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OBJECTIVE: Smoking is forbidden in French hospitals since 2007. However, smoking cessation may be gradual for certain patients. The ambiguity of the legislative framework, the ambivalence of adolescents face to tobacco consumption and the individual sensitivity of caregivers make difficult the emergence of a unitary attitude, explain the tensions that arise within teams and create differences in practice between hospitals.

AIMS: To assess how caregivers are dealing with teenagers requesting to smoke while admitted in a pediatric unit.

METHODS: We interviewed all health care providers working in a 5 beds pediatric unit receiving "in crisis" adolescents, aged between 12 and 18 years.

RESULTS: 31 of 41 persons answered an anonymous questionnaire. 87% considered themselves concerned by the problem of smoking in patients under 18 in hospitals. Few caregivers (16%) felt adequately trained in smoking cessation services. The majority of caregivers (65%) were against the complete interdiction of smoking while the adolescent was in psychological distress. 87% of the medical staff felt that the teenager should be permitted to go to smoking area accompanied by the nursing staff or a parent. Many of the caregivers who completed the questionnaire (56%) felt that the teenager should also be allowed to go to smoking area alone. In most cases the caregivers were involved in the evaluation of the tobacco dependence of the adolescent and accompanied him in the management of the addiction throughout his stay in the ward.

CONCLUSIONS: A complete ban on smoking for hospitalized teenagers would be difficult to implement. It is important to formulate a policy on teenage smoking within every hospital and to improve training in providing tobacco cessation.

Keywords: Smoking, hospital, teenager

PP067

Risk Factors for Tobacco Use among Adolescents in Saudi Arabia: Findings from Jeeluna

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OBJECTIVE: Adolescence is known to be a time of experimentation and onset of risky behaviors. Unfortunately, many premature deaths that occur during adulthood are related to behaviors that are initiated during adolescence. Adolescents in Saudi Arabia have only been recently recognized as a distinct age group, as attention is primarily given to younger children and older adults. Information such as health risk behaviors among adolescents in the country are therefore lacking and evidence to support program implementation is unavailable. JEELUNA (Arabic for 'Our Generation') is a national study carried out with the aim of identifying the health status of adolescents in Saudi Arabia. The objective of this study is to identify the prevalence of tobacco use among adolescents in Saudi Arabia and their risk factors.

METHODS: This cross-sectional study was conducted in Saudi Arabia during 2011-2012. Multistage, stratified, clustered random sampling was carried out to select intermediate and secondary schools from all regions in the country. Participating students responded to a self-administered questionnaire designed for the sake of the study and which included questions related to frequency of use, age of onset, and access to tobacco. Using Statistical Analysis System (SAS), descriptive, bivariate and multiple regression analyses will be conducted.

RESULTS: A total of 12,384 students participated with weighted representation from each of the 13 regions of the country. Fifty-one percent were males and mean age was 15.8 years. Seventeen percent of adolescents had history of cigarette smoking and 10.6% had history of sheesha (hookah/narghille) use. Gender and age differences were found. Analysis is currently ongoing. Risk as well as protective factors for tobacco use will be presented.

CONCLUSIONS: Tobacco use is prevalent among adolescents in Saudi Arabia. Local prevention programs targeting this age population are needed. This novice national data will help inform health policy and direct and design health programs and services.

Keywords: Adolescents, tobacco, health risk behaviors, Saudi Arabia

PP068

Empowerment of Adolescents Skills in Alcohol Use: An Innovative Experiential Program for High School Students***Nava Stoffman, Daniel Hardoff****

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OBJECTIVE: To describe an innovative experiential project that empowers adolescent students to avoid negative alcohol related outcomes and to analyze students' feedback to the project and its effect on their drinking behaviors. This project augments alcohol use prevention programs already implemented by the Israeli Ministry of Education throughout all school grades.

METHODS: 11th grade Students participated in a one-day program which included: a lecture on alcohol related risks; enacted scenario of violence related to alcohol use followed by discussion and re-enacting with a non-violent outcome; meeting with a disabled road accident victim; discussion of 2 video movies regarding consequences of alcohol drinking – sexual assault and emergency room management of alcohol overdose. Evaluation: a pre-intervention questionnaire on alcohol use knowledge attitude and practice; a feedback questionnaire on the one-day program and a 3 months post-intervention questionnaire on alcohol related behaviors.

RESULTS: 665 students from 26 eleventh grade classes participated in the project. The pre-intervention questionnaire revealed adequate knowledge on alcohol related risks and alcohol use by 60%. The feedback questionnaire revealed that the program added knowledge about alcohol consumption consequences, and made students consider changing their alcohol use behavior. The 3 months post-intervention questionnaire revealed that 81% of the students would not refrain from alcohol drinking, however 47% felt that they consumed alcohol in a safer way and 24% decreased the amount of alcoholic beverages. Most students recommended this program to be included in high schools educational curriculum.

CONCLUSIONS: An experiential educational program regarding negative outcomes of alcohol consumption empowers adolescents to a more prudent alcohol use.

Keywords: Empowerment, alcohol use, education, adolescents

PP069

Shifting Perceptions of Race and Incarceration as Adolescents Age: Addressing Disproportionate Minority Contact by Understanding the Ways in Which Social Environment Informs Racial Identity and Well-Being***Lauren Brinkley Rubinstein, Krista Craven, Mark McCormack***

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OBJECTIVE: Thus, we aim to understand the ways in which race and incarceration are conceptualized differently by younger and older youth. Within these age categories we also how perceptions of incarceration and crime inform racial identity among African American adolescents and how a program grounded in an operating framework that extolls an achievement ideology and designed to decrease DMC among African American adolescent males shapes participants' attitudes about race and incarceration and their perceived future trajectories and well-being.

METHODS: We conducted one-on-one semi-structured interviews with 10 of the younger participants (aged 8-13) and conducted a focus group with six of the older, high school aged participants (aged 14-18). Semi-structured interviews lasted between 30 minutes and one hour and were conducted in a private room in the community center. The focus group lasted over one hour and was conducted in a private room in the high school library. A focused interview guide for both the interviews and focus group was developed and used by the authors and included broad themes related to adolescence, race, crime, incarceration, and school. In both the interviews and the focus group, participants explored their experiences with RDCME, their feedback on the program, experiences in their schools and broader communities, hopes for the future and views on race, racial equity, crime and incarceration in their lives and broader society. Data analysis was conducted with Nvivo.

RESULTS: Our findings suggest the older participants were less likely to embrace achievement ideology and more likely to be aware of the structural barriers related to race.

CONCLUSIONS: Thus, a more culturally responsive, critically engaged intervention may be more appropriate for minority youth.

Keywords: Race, Identity, Youth

PP070

Trends in Mobility among Youth in Rakai District, Uganda: 1999-2011

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OBJECTIVE: Mobility among youth in sub-Saharan Africa could have important implications for HIV transmission. Trends in mobility over time could provide insight into the relationship between mobility and HIV and other STI risk. In Uganda, these trends are largely unstudied among youth. This study analyzes trends in mobility among youth aged 15-24 years in Rakai, Uganda from 1999-2011 and the relationship between mobility and sexual experience.

METHODS: Survey data was collected from youth participants (15-24 years) in the Rakai Community Cohort Study (RCCS) between 1999 and 2011 (n=25,265). RCCS is a population-based cohort that covers 50 communities in Rakai. We analyzed data on mobility, specifically examining travel outside of Rakai and participation in a highly mobile occupation (e.g., fishing, trading). We used STATA software to analyze trends over time and compare patterns using demographic and behavioral characteristics.

RESULTS: Factors associated with travel outside of Rakai district include male gender, older age (20-24 years) and attainment of secondary education. Increasing mobility over time was found. Factors associated with a highly mobile occupation included male gender and older age, as well as current marriage and attainment of primary education. Increasing trends over time are seen among older male youth, married youth and those with primary or secondary schooling. After controlling for age, young men and women who are mobile are more likely to be sexually experienced, placing them at increased risk for HIV.

CONCLUSIONS: Trends between 1999 and 2011 indicate greater mobility over time among youth in Rakai, which could influence HIV risk. We examined two aspects of mobility, both of which showed important distinctions by age, gender, marital status, and educational attainment. Greater examination is needed to fully understand the relationship between mobility and HIV risk among youth.

Keywords: Youth, Uganda, mobility, migration, travel, sub-Saharan Africa

PP071

Our Sexuality, Our Health – Findings from the Multi-Country Study on Well-Being of Adolescents in Vulnerable Environments (Wave): Phase 1, Ibadan Site

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OBJECTIVE: Adolescence is a period during which many people become sexually active. This two-phased study is being conducted in six sites: Baltimore, MD; Ibadan, Nigeria; Johannesburg, South Africa; New Delhi, India; Rio de Janeiro, Brazil; and Shanghai, China. The first phase of the study in Ibadan was conducted in selected communities in Ibadan North Local Government Area, Oyo state. This paper presents the sexual and reproductive health problems of disadvantaged adolescents residing in cities and describes their connections to SRH services.

METHODS: Qualitative research methods (key informant interviews, in-depth interviews, community mapping, focus groups discussions and photovoice sessions) were utilized. Twenty key informants and 112 adolescents (aged 15 – 19 years) participated in the study in Ibadan North.

RESULTS: Adolescents generally perceived themselves to be healthy. Sexual and Reproductive Health (SRH) challenges experienced by adolescents were unsafe sexual behaviours and inadequate knowledge of SRH issues. Key informants and adolescents perceived girls to be more at risk than boys in terms of unwanted solicitations for relationships and sex and also in terms of the consequences of these such as rape and unwanted pregnancy, and disruption in education. Many of the adolescents had their own cellphones and were knowledgeable about the use of the internet for accessing information. However, they rarely accessed information on SRH issues from the internet. Many of them identified major hospitals within the LGA and some faith-based youth organizations as good sources of SRH information and services. However, many adolescents felt that the hospitals were not readily accessible because of the high cost of treatment.

CONCLUSIONS: The first phase of the study highlighted the fact that SRH challenges are a major problem faced by adolescents in cities and that vulnerable adolescents are also able to access modern technologies although they rarely use these to seek for health information.

Keywords: Sexuality, Sexual and Reproductive Health, Adolescents

PP072

The Quality of Health Research for Young Indigenous Australians: Informing Health Priority, Intervention and Future Research Need**Peter Azzopardi, Elissa Kennedy*, George Patton**, Robert Power*, Robert Roseby**, Susan Sawyer**, Alex Brown*****

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OBJECTIVE: The health of Indigenous people is a growing global-health priority, however young Indigenous people have not been central to this focus. In Australia, young people represent a third of the Indigenous population and provide opportunities for socioeconomic development and modification of health-risk behavior. The evidence base to inform health priority and intervention is unclear.

AIMS: To assess the quality of the evidence base around the health and wellbeing of young Indigenous Australians.

METHODS: Systematic literature review (1994 – 2011) of peer-reviewed literature reporting data for Australian Aboriginal and Torres Strait Islander young people aged 10-24 years. The quality of evidence was graded and mapped against demography and the estimated burden of disease.

RESULTS: 360 peer-reviewed publications reported health-data for Indigenous Australians aged 10-24 years; 90 (25%) exclusively sampled Indigenous young people. 250 studies (69%) were of good-quality design; around half (124) focused on health outcome and half (116) focused on health-risk exposures. Less than a fifth (41) evaluated an intervention. Only 20% of research focused on urban populations despite almost three-quarters of Indigenous young people living in urban areas. Less than a third of good-quality studies focused on mental health and injury despite these conditions accounting for almost 60 % of the burden of disease. Data on mortality, especially cause-specific, was limited. There was good data on some health-risk exposures such as tobacco, obesity, alcohol and adolescent pregnancy.

CONCLUSIONS: This study documents the current evidence base and critical gaps, and should provide a useful framework for Indigenous communities, governments and researchers in considering health programs and future research needs. The study points to the need for greater investment in urban settings, research into mental disorders and injury, and a further emphasis on trials of preventive and clinical intervention. This study also serves as an example of evaluating the evidence base for a population.

Keywords: Indigenous, burden of disease, australia, quality of data

PP073

Youth Health in Custodial Facilities: Beyond Cold and Scratches?**Yasmine Ratnani, Valérie Bélien Pallet, Jean Yves Frappier, Yves Lambert*, Manon Duchesne**, Ronald Chartrand*****

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OBJECTIVE: Studies reports that a large percentage of youth admitted in custodial facilities have health problems, usually not taken in charge. Health services provided in custodial facilities are variable, even if organizations like the AAP recommend an evaluation upon admission with comprehensive health care. The aim of the study was to: 1) evaluate the health of teens in custodial facilities; 2) evaluate if a self-administered questionnaire by youth and by a staff would provide same information as an evaluation by nurse/MD (could be useful for facilities without nurses); 3) to test comprehensive assessment tools to be used by all centres; 4) to provide data so resources could meet the health needs of youth.

METHODS: Seven facilities participated in the study (large / small urban areas). A total of 300 youth 14-17 y.o. were evaluated. A self administered questionnaire was completed upon admission by the teen and a staff. A health evaluation followed with the nurse/MD using a comprehensive standard data collection form/check list.

RESULTS: Data collection is nearly over, and we have preliminary analysis for 90 teens. 82% had at least one health problem (mean, 3.9). 73% reported chronic health problems, 45% an acute one, 45% needed an investigation and 29% a specialist referral. While 29% of the teens felt they needed health information, staff reported that 68% of the adolescents needed so. Only 35% reported their health to be very good/excellent.

CONCLUSIONS: The results of the study confirm the necessity of an early and comprehensive health evaluation of youth in custodial facilities in order to optimize their rehabilitation. It also shows the importance of organized health services in custodial facilities in order to answer their needs and insure a transition when they leave the facilities. Further analysis will provide answers as to the usefulness of a self-administered questionnaire.

Keywords: Youth health, custodial facilities, rehabilitation

PP074

Preventing Tobacco Smoking in Disadvantaged and Aboriginal Young People

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OBJECTIVE: Asthma and smoking are significant risk factors for chronic lung disease. The Triple A (Adolescent Asthma Action) program is an evidence-based, peer education initiative to improve asthma self-management and to prevent smoking. Our aim was to assess the feasibility and acceptability of a new tobacco prevention strategy as an extension of the Triple A program for disadvantaged and Aboriginal young people.

METHODS: Trained university students led peer leader workshops for volunteer senior students from disadvantaged and Aboriginal backgrounds in four schools. Students learnt about asthma, were given peer pressure resistance training on how to say "no" to smoking and were asked to take a pledge to remain smoke free for one month. A small incentive was offered to those who took and kept the pledge. Peer Leaders completed pre and post smoking and feedback questionnaires.

RESULTS: University students (n=11) trained senior school students (n=54) as Peer Leaders. Of the Peer Leaders, 22% were Aboriginal, 31% had a diagnosis of asthma and 30% reported ever smoking. Following the program, 93% of students signed and kept the pledge for one month, with one student becoming a non-smoker. Peer Leaders' reasons for signing the pledge included wanting to 'make a commitment to stay smoke free', 'smoking is not worth it' and 'encourage their family and friends not to smoke'. Only a few students stated they signed 'for the incentive'.

CONCLUSIONS: The smoke free pledge is well received and accepted by high school students as an extension of the Triple A program. A longer duration of observation for the pledge is required for future studies.

Keywords: Adolescents, smoke free pledge, asthma, peer education

PP075

The Health Status of Street Children in Low- And Middle-Income Countries: A Systematic Review

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OBJECTIVE: The health of the tens of millions of street children globally is understudied. We undertook a systematic review of the existing quantitative literature regarding the health status of street children and youth in low- and middle-income countries to summarize available knowledge, identify underexplored areas of research, and inform the future research agenda regarding the health of this population.

METHODS: A systematic search of 18 databases for the keywords homeless youth and street youth was performed for articles published from Jan. 2005-Sep. 2011. A total of 108 papers met our inclusion criteria of English, French, or Spanish papers and included quantitative measures of the health of street children and youth up to 24 years of age in low- and middle-income countries. Demographic data and structural factors associated with street life are summarized.

RESULTS: Youth's survival behaviors and the exposures associated with poor shelter have resulted in disproportionate morbidity in the areas of infectious illness, psychiatric disease, reproductive health, and perhaps to a lesser extent, growth. Vast areas of health that may disproportionately affect street children in childhood or later on as adults have not been investigated, including chronic diseases and cognitive deficits. Studies of specific diseases or conditions vary considerably by region.

CONCLUSIONS: Street children serve as a compelling example of the global disparity in child health. However, current data are sparse and insufficient for developing evidence-based approaches.

Keywords: Street children; low- and middle-income countries; health status

PP076

Ethical Approaches to Consent in Research with Street-Involved Children and Youth in Low Income Countries

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OBJECTIVE: Street-involved children and youth (SICY) in low income countries are a marginalized population with a unique set of vulnerabilities related to research consent, including lack of a parent/guardian, uncertain cognitive capacity, vulnerability to coercion, substance use, lack of basic necessities, and limited access to healthcare. The purpose of this abstract is to describe research procedures to address these vulnerabilities and relevant findings in studies of SICY in western Kenya.

METHODS: We designed research procedures to address the vulnerabilities related to consent. These consisted of identifying safe ways to recruit and consent adolescents by working with the District Children's Officer and through "mabaraza" (traditional community meetings), use of a Child Advocate to support the adolescent during consent, and performing an assessment of comprehension on what study participation entails. If potential participants failed the comprehension test, they were not enrolled in the study that day; however, they were offered care and invited to return another day depending on the circumstances of the failure. To address issues related to coercion and access to care, we used non-monetary compensation, community engagement and partnerships, and the use of street outreach workers.

RESULTS: We conducted 3 studies with SICY in Uasin Gishu County, Kenya. The Substance Use Survey was conducted in 2011 with 146 SICY aged 10-19; 4 SICY were ineligible to participate and 1 failed the comprehension test. The Sexual Health Survey (SHS) was conducted from 2011-2012 with 200 SICY aged 12-21; 1 participant was ineligible. OSCAR's Health and Well-being project is a 5 year longitudinal cohort following 100 SICY scheduled to end in 2015. No participants in the SHS or OSCAR Project failed the comprehension test. No potential participants declined to participate in any of the studies during the assent/consent process.

CONCLUSIONS: Although a vulnerable population, the vulnerabilities of SICY can be supported through innovative procedures.

Keywords: Consent, assent, research ethics, street youth, street children, homeless youth, Kenya

PP077

Disparities Associated with Gender and Daily Street Involvement among Street Youth in Eldoret, Kenya

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OBJECTIVE: This study characterizes the support systems, material resources, and priorities of street children and youth in Eldoret, Kenya, in terms of gender and daily street involvement.

METHODS: Participants were recruited using the following inclusion criteria: (1) age 12-21, (2) lives in Eldoret, Kenya, (3) spends days only, or nights and days on the street and (4) is able and willing to consent or assent. Data were collected using a standardized interview conducted in English or Kiswahili, as per participant's preference. Dependent variables were having been arrested, having been jailed, major support source (family vs. other), major reason for leaving home (poverty vs. other), and first priority for spending money (food vs. other). Survey data were entered into EpiInfo and analyzed using SAS (v9). Individual logistic regression models examined the impact of a) gender and b) full-time or part-time on the streets, adjusted for age and length of time on street.

RESULTS: The study enrolled 200 street youth aged 12-21, 41% female and mean age 16.3 years. Compared with females, males were more likely to have ever been arrested (Adjusted Odds Ratio, AOR: 2.4, 95% confidence interval, 95%CI: 1.0-5.5), and to have ever been jailed (AOR: 3.4, 95%CI: 1.5-7.4). Males were half as likely as females to leave home because of poverty (AOR: 0.5, 95%CI: 0.2-0.9). Compared with part-time street youth, full-time street youth were more likely to have been arrested (AOR: 2.52, 95%CI: 1.11-5.34), leave home due to abuse (AOR: 6.20, 95%CI: 2.03-18.91), and name food as first spending priority (AOR: 2.62, 95%CI: 1.05-6.53).

CONCLUSIONS: These results emphasize the heterogeneity of street children and highlight distinct vulnerabilities of subgroups within the larger population. There exists an urgent need for organizations seeking to intervene on the behalf of street children to address the unique issues restricting the social reintegration of these diverse subgroups.

Keywords: Street children, street youth, Eldoret, Kenya, gender, spending, priorities, resources

PP078

Healthy Parts of The Self: Group Music Therapy for Adolescent Inpatients with Eating Disorders

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OBJECTIVE: The Melbourne Royal Childrens Hospital (RCH) Eating Disorders Program is a collaboration between the RCH Centre Adolescent Health, RCH Integrated Mental Health Programs, The University of Melbourne and The University of Chicago. Group Music Therapy is a standard component of the program for the adolescent inpatient and has been for 12 years. In the acute medical setting, patients with eating disorders are often medically unstable with the focus on re-feeding and gaining medical stability. Patients are often highly distressed and cognitively compromised, therefore unable to participate in depth personal therapy.

METHODS: The patients participate in compulsory group music therapy twice weekly held immediately after lunch in the purpose built music room. Therapeutic techniques used in the group are both musical and non-musical and are directly used to decrease distress following lunch, provide normalised peer interaction, decrease negative talk and provide a creative form of expression. Focus is heavily placed on developing the healthy parts of the self and remembering that they exist despite the eating disorder. Techniques used include: group drumming, song choice and lyric analysis, song collage, instrument playing and structured discussion.

RESULTS: Outcomes of the group music therapy that will be discussed include patients' experience periods of reduced distress following lunch, increased ability to stay still and rest while being engaged in music therapy, increased positive peer connection and participation in a successful and enjoyable therapeutic intervention. In addition, the music therapist reports back to the team how the patient interacts in a group setting contributing to the assessment of the patient.

CONCLUSIONS: The paper will include clinical case studies to illuminate the findings of this program stated above and highlight how music therapy has a unique and effective role in developing the healthy parts of the adolescent self parallel to the experience of having an eating disorder.

Keywords: Music therapy, Eating disorders, Adolescents

PP079

Short Case-Reports of Three an Patients

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OBJECTIVE: Anorexia nervosa (AN) is a well known, complex, disease. Caloric intake is insufficient and leads to weight loss and various biological and biochemical changes in affected patients.

METHODS: We report three AN patients, who were found to have other illnesses (two) and one with exceptional abnormality in laboratory test. they were treated in the Helsinki University hospital during 2010-2011. Patients' physical condition was evaluated by a paediatrician.

RESULTS: Case1 was taken into a ward through emergency because of weight loss, inability to eat and bradycardia. Case1 was physically and emotionally petrified, barely speaking. Patients heartbeats were audible only from the right side of the sternum. An x-ray revealed pneumothorax which was successfully drained surgically. Case2 was treated in a psychiatric ward. Laboratory tests revealed relative leucopenia and anemia, both typical in AN. Despite adequate calories and iron substitution, the haemoglobin did not improve (92 g/L). P-creatinine (120 umol/L) and urine betha2-mikroglobulin were elevated (>6 mg/L) and kidney biopsy revealed a transient interstitial nephritis. Case3 was hospitalised after BMI had fallen to 12. Case3 presented anaemia, leucopenia, hypophosphatemia, hypokalemia, hyponatremia, and elevated amylase-values. Caloric intake was resumed and other values, except amylase, started to turn normal. During follow up plasma amylase rose and stayed over a 1000 U/l for a week. The ultrasound ex-aminations of the pancreas and salivary glands were normal. The acid-base balance was normal. No pain was reported.

CONCLUSIONS: Although, in AN, most symptoms and biochemical abnormalities subside once malnutrition is treated, one has to keep in mind other medical conditions as well. A basic medical evaluation and follow-up done by a pediatrician revealed accompanying illnesses. We suggest that the origin of the plasma amylase in case3 were the salivary glands, a finding underlining the wide variety of biochemical abnormalities a severe malnutrition, followed by re-feeding, can cause.

Keywords: Anorexia nervosa, amylase, transient interstitial nephritis, TIN, pneumothorax,

PP080

Nutrition and Health among School Going Adolescents in Southern India***Mona M Basker , Arunkumar G, Roshni Rajan***

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OBJECTIVE: To assess the dietary intake, physical activity and eating behaviour among school going adolescents in Vellore district in southern India.**METHODS:** Grade 9 and 11 students from six schools were chosen including private, government and government-aided schools. A questionnaire which was a modified version of the YRBS questionnaire was used to conduct this survey.**RESULTS:** 86.4% of the adolescents had normal BMI, 8.8% were overweight, 4.8% were obese and 0.1% thin. 59.5% students had adequate meals and snacks. 8.8% students had less than 3 meals a day. 32.5% students consumed fruits daily and 46.4% ate vegetables regularly. 74% consumed junk food at least once a week, while 7.5% consumed soft drinks daily. There was no significant difference in prevalence of obesity between children who had snacks in between meals and those who did not. Prevalence of overweight or obesity was 14.1% in those who consumed junk food at least once a week and 11.6% in those who had less.

70.9% of the participants engaged in regular physical activity. Screen time for more than 2 hours, in the form of TV watching and video games was reported in 40%. Predictably, prevalence of obesity was higher in those who did not exercise regularly.

In the assessment of body weight perception, among those who felt they were "very thin", 86.2% had normal BMI, and 13.8% were overweight or obese. 31.4% of all the subjects had tried some weight-loss method.

CONCLUSIONS: This survey on high risk behaviour adolescent, is being tried for the first time in India and in a small scale. A larger population needs to be studied for arriving at a significant conclusion regarding nutrition related health among adolescents living in India.**Keywords:** Dietary intake, physical activity, eating behaviour, BMI centile

PP081

Medical Evaluation of Male Adolescents with an Eating Disorder***Sinem Akgül, Orhan Derman, Nuray Ö Kanbur***

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OBJECTIVE: Studies on eating disorders (ED) in adolescents generally focus on females. This case series aims to describe medical and clinical features of adolescent males with an ED.**METHODS:** Forty two patients (32 females, 10 males) were diagnosed with an ED between 2010-2012 in our clinic. Medical charts of male patients were re-evaluated.**RESULTS:** Nine patients were diagnosed with AN (mean age 14.6, range 11.6-18 years) and one with BN (17 years). Mean period of application after symptoms began was 8.6 months. Seven patients were malnourished with a mean BMI of 15.26kg/m². Only one aged 11.6 yrs was pre-pubertal.

Five engaged in over-exercise. Five with AN had severe food restriction with either bradycardia, hypotension or hypothermia. All were medically stable after 2 weeks of hospitalization. Mean presenting heart rate was 60.3/min (min- max: 40-80/min). Five were hypotensive (mean BP: 88/50mmHg). 3 were hypothermic (mean temperature 35.9oC).

Two patients with AN had hypophosphatemia during refeeding. The patient with BN had generalized seizure due to hypokalemia. Low T3 Syndrome and low bone mineral density were seen in 4 and, 3 patients respectively.

There was a high prevalence of co-morbid disorders. The patient with BN had renal failure due to cystinosis. Of AN patients, one had refractory epilepsy, one was a strict vegan. Three were morbid obese before AN. Four had obsessive compulsive disorder, two had major depression, and one had anxiety disorder.

CONCLUSIONS: The female to male ratio for ED is 10:1 in post-pubertal patients. Until 2010 it was similar in our division. The most striking finding of this study is that in the last 3 years this ratio has decreased to 3:1. Despite the small number of patients, the proportion of male ED's with co- morbid conditions is also a strong finding. We suggest a higher index of suspicion for males with a co-morbid condition.**Keywords:** Medical Evaluation, Male Adolescent, Eating Disorder, Anorexia nervosa, Bulimia nervosa

PP082

Self Diagnose of Bigorexia

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OBJECTIVE: Alert healthcare professionals to this little known entity more frequent among males

METHODS: Case study review.

RESULTS: A 17 years old boy was sent to Adolescent Medicine Consultation because of generalized body pain predominantly at shoulders with 1y of evolution. He had stopped the practice of weightlifting 2 months before with few relief. He presented very sad and concerned with his body shape (thin arms, loss of muscular mass, flaccid abdomen, weight gain). Consumption of dietary supplements and anabolic drugs was denied. Organic disease was excluded (ultrasonography, radiographies and blood samples). The subsequent consultations, with family involvement, revealed a boy with low self-esteem, an obsession in body shaping (looking in internet for exercises), social isolation with long time at gym. The adolescent himself evoked the diagnose of bigorexia. Improvement was achieved with stimulation of his social skills and return of his physical activity.

CONCLUSIONS: Bigorexia or Reverse Anorexia or Muscle Dysmorphia does not present like other psychobehavioral conditions such as anorexia or bulimia nervosa.

The primary issue is identifying the disorder and healthcare professionals need to become more familiar with the common signs and symptoms in order to assist in providing appropriate care.

Keywords: Reverse anorexia, bigorexia, muscle dysmorphia, body images disorders, male

PP083

History and Physical Examination at Admission in Young People Attending an Eating Disorder Treatment Program

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OBJECTIVE: To determine the frequency and type of biomedical symptoms and physical abnormalities at admission, in patients of a private ambulatory eating disorder (ED) treatment program.

METHODS: The admission records to a prospective treatment study of patients attending the ambulatory ED program of Clínica Las Condes' youth center were analyzed. Entry into the study was conducted in the 2 or 3 initial medical visits and included, among other things, a full history and physical examination. The history assessed ED behaviors and symptoms, and biomedical symptoms associated with ED and their complications. The physical examination included vital signs; anthropometry; BMI calculation; determination of BMI percentile, percentage median body weight and height percentile in those under 20 years; pubertal development and abnormal findings associated with ED and complications.

RESULTS: 22 patients (21 women) entered between April 2011 and August 2012. Their median of age was 16,7 years and diagnosis were: AN in 2, BN in 4, EDNOS in 14 and BED in 2. All of them showed biomedical symptoms. The most frequent were dizziness, fatigue, cold intolerance, menstrual abnormalities, constipation and polyuria. Average symptoms per case were 3,8: 3,5 in AN, 7 in BN, 3,4 in EDNOS and 2,5 in BED. Two were underweight, 5 overweight, 1 obese and 14 had normal weight. All showed normal height and one abnormal pubertal development (delayed). 12 patients had other physical abnormalities. The most frequent were orthostasis, red swollen throat, bradycardia and dry skin. Average abnormalities per case were 1,0: 0 in AN, 1,5 in BN, 1,1 in EDNOS and 0,5 in BED.

CONCLUSIONS: Biomedical symptoms were highly frequent in these patients and distributed in the various types of ED (predominantly BN). While physical examination abnormalities were less frequent, they occurred in a significant number of patients with different ED. This last finding differs from what is usually described.

Keywords: Eating disorders, signs and symptoms, adolescents

PP085

Biomedical Complications and Laboratory Abnormalities at Admission in Young People Attending An Eating Disorder Treatment Program

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OBJECTIVE: To determine the frequency and type of biomedical complications and laboratory abnormalities at admission, in patients of a private ambulatory eating disorder (ED) treatment program for youth.

METHODS: The admission records to a prospective treatment study of patients attending the ambulatory ED program of Clínica Las Condes' youth center were analyzed. Entry into the study was conducted in the 2 or 3 initial medical visits and included, among other things, a full history and physical examination, and laboratory tests for the detection of abnormalities related to the ED and/or complications. Some tests were universal and other selective, depending on the type of ED and clinical findings.

RESULTS: 22 patients (21 women) entered between April 2011 and August 2012. Their median of age was 16,7 years and diagnosis were: AN in 2, BN in 4, EDNOS in 14 and BED in 2. 18 showed biomedical complications: 8 constipation, 6 bradycardia, 5 orthostasis, 5 overweight and one pubertal delay. One of them had probably esophagitis and a Mallory-Weiss syndrome. Average complications per case were 1,1: 1,5 in AN, 1,3 in BN, 1 in EDNOS and 1,5 in BED. 16 cases had laboratory abnormalities. In those tests performed universally the most frequent were borderline or high total cholesterol, metabolic alkalosis, hypochloremia, and elevated urine density. The most prevalent selective tests abnormalities were ECG alterations (sinus bradycardia, low QRS voltage), decreased T3 and increased post load insulin. Average tests abnormalities per case were 2,9: 2,5 in AN, 1,8 in BN, 3,5 in EDNOS and 2 in BED.

CONCLUSIONS: Biomedical complications were very common in all types of ED. Laboratory abnormalities were also prevalent, especially in EDNOS. This last finding differs from what is usually described.

Keywords: Eating disorders, complications, laboratory abnormalities

PP086

Relationship between Feeding Knowledge and Nutritional Status of a Group of Primary School Children

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OBJECTIVE: Poor nutrition affects the entire population. In Mexico, according to the latest statistical information, the prevalence combined overweight and obesity affects 36.9% of children and 32% of girls between 5 and 11 years. It is essential to learn how to select a correct diet, and the school of basic education is the ideal place to teach children about this issue, although but several authors have shown that students have little opportunity to implement their knowledge and skills. The aim of this paper is to analyze the relationship between the nutritional status of a group of schoolchildren, their nutritional status and food consumption.

METHODS: The sample consisted of 202 children from third to sixth grade in a public school in Mexico City (Mexico). A questionnaire was designed for this study, consisting of 23 questions concerning the adequate food. Was a measured and weighed to child, and applied frequency scale food consumption.

RESULTS: The results no gender differences were attributable to gender children although slightly better than girls. As expected, the number of correct answers is higher depending on the grade. We found that 31.68% of children had a BMI for their age and gender, 32.67% were obese and 9.9% thinness. Although no significant difference was observed that eating fried foods, soft drinks, and red meat was higher among obese children than among normal weight.

CONCLUSIONS: The knowledge and consumption practices are related to the nutritional status of schoolchildren, to improve is essential to design intervention strategies consistent with the age and interests of the children.

Keywords: Feeding knowledge, obesity, schoolchildren,

PP087

Clinical Pathways for Optimal Transition from Adolescence to Adulthood

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OBJECTIVE: Youth with cerebral palsy (CP) face special challenges during transition to adulthood, requiring extra guidance and support. They also struggle with educational and career choices, independent living, money management and health care. Habilitation Services see the need for a multiagency approach to transition and in 2008 we began a project approved by the Norwegian Directorate of Health. Our aim was to design, try out, and evaluate a systematic multidisciplinary transition program for youth with mild CP.

METHODS: Review of research literature, visits to habilitation and rehabilitation institutes, and clinical practice were the basis for program design. The program targets youth ages 15-25 with mild CP (GMFCS I-II), excluding IQ<70. We included assessment by neurologist, neuropsychologist, OT and special educator, with follow up. Youth and parents were informed about assessment results. Life skills and educational and career plans were discussed. Retrospective studies on patient journals were conducted to ascertain services previously offered youth with CP.

RESULTS: Our goal is to assist youth in promoting independence and self-reliance through active participation in development of life skills, and increase quality of life (QoL) through communication and cooperation with family and school/community services. Follow-up interviews indicate increased QoL for most of the youth.

CONCLUSIONS: Literature focuses mainly on GMFCS III-IV. Mild CP and cognitive issues are less conspicuous, but present challenges during transition. Explaining practical implications of assessment results to youth, parents, teachers/employers, is beneficial during transition. Accommodations at school and work may increase performance and enable an active social life. Parents gain knowledge about necessary life skills. Clinical pathways are also important for a good transition. The model may be useful for other disabilities.

Keywords: Youth, cerebral palsy, transition, clinical pathways

PP088

Am I on Trac for Adult Care: Assessing Adolescents Readiness to Transition

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OBJECTIVE: Successful transition to adult care is critical for adolescents with special health needs, but there are no well-validated measures to assess readiness for transition. This study validated the updated Am I On TRAC for Adult Care? questionnaire, a 26-item measure that assesses adolescents' level of knowledge and self-care behaviours as a basis for readiness to transition from pediatric to adult medical care.

METHODS: During clinic appointments 200 participants, ages 12-19 years, from four outpatient clinics at BC Children's Hospital, Vancouver, completed a study package that included demographic information, the On TRAC questionnaire, and two subscales of the Psychosocial Maturity Inventory (PMI). We used principle components analysis (PCA) of the 17 knowledge items with parallel analysis and scree plots to determine significant components. The behaviour items were summed as an index to measure consistent patterns of behaviour; theorized cut-off scores for behaviour items were set at minimally accepted frequency of behaviours required for successful transition to adult care. Relationships between participant age, psychosocial maturity and On TRAC scores were examined.

RESULTS: 57.5% were male, and youth were distributed across clinics, with 36% from diabetes, 27% cardiology, 27% gastroenterology, and 10% neurology. The PCA identified a 14-item unidimensional knowledge scale with a Cronbach's $\alpha=.84$. On TRAC knowledge and behaviour scores both increased with participant age, but age had a stronger relationship with knowledge ($r=.43$, $p<.01$). Psychosocial maturity correlated with both On TRAC scores, but had a stronger association with behaviour ($r=.39$, $p<.01$). Psychosocial maturity and age had a weak but significant correlation ($r=.16$, $p<.05$) suggesting age is a loose proxy for maturity. Only 27% of 17-year-olds but 62% 18-year-olds scored above the behaviour cut-off for transition readiness.

CONCLUSIONS: The On TRAC questionnaire is a psychometrically sound measure with strong internal consistency, and has potential to be used as a readiness assessment tool in clinical practice.

Keywords: Transition to Adult Care, Adolescents, Psychometrics, Factor Analysis

PP089

Love and Hope in the Context of Hiv - Youth Transitions in Rakai, Uganda

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OBJECTIVE: Research on adolescent developmental transitions to adulthood in the sub-Saharan African context is limited; and how young people's developmental trajectories may influence risk for HIV infection remains largely unexplored. We examined the developmental trajectories of HIV-positive and HIV-negative youth in rural Uganda.

METHODS: We used data from life history interviews, comparing 30 HIV-positive and 30 HIV-negative men and women aged 18-24 years. Youth who recently acquired HIV were selected from a population-based, epidemiological cohort and matched to HIV-negative peers on gender, age, marital status, and village. Using grounded theory techniques, we explored aspirations for school and work; desire for love, marriage, and relationships; transition to sexual activity; and expectations of relationships.

RESULTS: Most respondents, regardless of HIV status, were unable to reach their aspirations for school, work, or marriage. Limited personal or familial financial resources prompted the school dropout and the inability to have a formal religious marriage. HIV-negative youth had more positive ideation of marriage than HIV-positive youth. Respondents, regardless of HIV status, believed youth should wait to become sexually active until age 18, perhaps reflecting the legal age to consent. HIV-negative respondents used the concept of "spoilt/spoiled" to describe early or promiscuous sexual activity by their peers. HIV-positive respondents described less communication and trust, and more suspicion, multiple partnerships, and shorter term partners. Young men expected sexual exclusivity from their partner, but not of themselves.

CONCLUSIONS: HIV-positive and HIV-negative youth were similar in terms of school, work, and marriage aspirations, but differed with respect to communication, social norms, and expectations about sexual partnerships. Understanding how adolescents navigate developmental transitions in the context of HIV/AIDS can help us to better understand risk behaviors and developmental trajectories leading to HIV infection.

Keywords: HIV/AIDS, youth, developmental transitions, Sub-Saharan Africa

PP090

Chronic Illness and Physical Health in Adolescents Who Are Homeless or At Risk of Homelessness

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OBJECTIVE: In homeless adolescents, basic needs and psychological issues often dominate presentations to service, and little is known about their physical health. This study aimed to examine the physical health concerns and chronic illness present in adolescents accessing two youth focused services targeting marginalised 12-24 year olds in Sydney, Australia.

METHODS: A retrospective review was conducted of medical consultations at two Youth Health Services (YHS) which are community-based one-stop-shops. Case notes were reviewed to extract presenting issues, physical symptoms, conditions and accommodation status for the first and last presentation in 2011, and also the initial YHS presentation if that was prior to 2011.

RESULTS: 7365 occasions of service were recorded by 644 people (face-to-face, phone calls, case management). 68 clients consulted a medical practitioner in 2011; 47.1% were in supported or temporary accommodation and 50% identified a specific physical health condition at their first medical assessment. Presenting issues included emotional health (41%), relationships (35%), accommodation/homelessness (38%), access to a youth friendly service (27%) and general physical issues (27%). Chronic physical conditions were present in 24 (35%), most commonly asthma, migraines, epilepsy. Other physical conditions were nutrition and gastrointestinal (9%); genitourinary (6%); dermatological (6%), and ear, nose and throat conditions (2%). 45 young people were referred to other services including primary care (27%), mental health (13%), sexual and reproductive health (12%), medical specialists (10%), pediatricians (6%), and allied health (9%).

CONCLUSIONS: This study provides specific information about adolescents unlikely to access mainstream primary care who accessed a 'soft entry point' into health care. Our study shows that the lack of current data about the physical health of young homeless people does not imply an absence of such health concerns in this population. Rather, it emphasizes a need for accessible services, catering for physical and mental health issues to promote healthier trajectories.

Keywords: Homelessness, chronic illness, service access

PP091

From Transfer to Transition

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OBJECTIVE: To improve and standardize the clinical pathway of transition to adult services for adolescents with chronic conditions and for their families.

METHODS: 1. Review of the literature on transition

2. Assessment of the starting position based on two focus group interviews with nurses working in the paediatric ambulatory service, a questionnaire for doctors holding executive positions in different specialties of paediatric medicine (Cystic Fibrosis, Cardiology, Diabetes, Endocrinology, Gastroenterology, Haematology and Oncology, HIV, Nephrology, Neurology, Metabolic Disorders and Rheumatology) to assess their current practice in adolescent transition (n = 11), a questionnaire for parents (n = 49) and another one for their adolescent children (n = 53) who have been treated for various chronic conditions in the paediatric ambulatory service for many years.

RESULTS: Firstly, we now have a written concept for an individual and flexible transitional care of adolescents without severe cognitive impairment. Secondly, we have a checklist to assess their skills and needs every year during early, middle and late transition as well as a letter informing the parents about our goals in matters of independence and self-efficacy of chronically ill adolescents. Thirdly, we have a checklist for the various teams of specialized fields to keep track of what has been discussed, organized and completed during the transition of a respective patient. Finally, the project was evaluated to find out how successfully the newly implemented instruments had been applied.

CONCLUSIONS: The written concept is accepted and applied in all our specialties of paediatric medicine. The new instruments are generally considered to be helpful. In addition, adult services report a noticeable improvement in patients' and families' acceptance of the transfer process.

Keywords: Adolescents, chronic illness, parents, transition

PP092

Bridging The Gap: The Extended Roles of Paediatric and Adult Liver Transplant Coordinators within Transition

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OBJECTIVE: In relation to transplantation, adolescents and young adults have the lowest patient and graft survival, this finding being consistent whether they are transplanted in a paediatric or adult service. This presentation describes a successful model of joint working between paediatric and adult coordinators in King's College Hospital Liver Transplant unit. Combining knowledge and expertise from two specialist areas we aim to provide a seamless transition from paediatrics to adults, supporting young people to take responsibility for their own health and encouraging engagement with adult services.

METHODS: Our model utilises expertise and knowledge from both services forming a unified collaborative approach sharing these different experiences. Two cases illustrate this well.

RESULTS: A boy (18 years) reluctant to move services; and a girl (23 years) with learning needs refusing transplant having struggled with the adult education. Through sharing skills and experience an individualised plan was agreed with the boy to ensure a safe and supported transition using defined goals; and for the girl we agreed weekly education sessions for 6 weeks following cognitive assessment to guide us with her specific learning needs. Both cases allowed sharing individualised experience from paediatrics with knowledge and understanding from adults around the challenges of being on an adult ward and topics such as alcohol and sexual health.

In our cohort of young people, currently there are 5 listed for transplant. Since 2010, 5 have been transplanted and remain within the transition service and 8 patients have transferred to adult services. Two patients died (medical reasons).

CONCLUSIONS: This presentation describes a successful model for sharing expertise to enable improved health outcomes. A number of different measures have been utilised but there is not one specific unified way to measure success. However a unique approach is required to ensure engagement with services to promote adherence and a seamless transition.

Keywords: Transition, paediatric, adult, transplant, coordinators

PP093

Clinical Outcomes in Adolescents with Hiv after Transfer from Paediatric Services: A Systematic Review**Rebecca Hope, Russell Viner**

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OBJECTIVE: With improved survival of children with perinatally acquired HIV, increasing numbers of adolescents are transitioning from paediatric to adult services. It is agreed that these young people with complex needs require careful management during transition, however there is little empirical evidence to guide the design of services. This systematic review evaluates the effect of transfer from paediatric services on clinical outcomes for adolescents with perinatally acquired HIV.

METHODS: A systematic literature search of databases, including PubMed, PsychINFO, EMBASE, HMC, IBSS and CINAHL, for studies evaluating the impact of transfer or transition from paediatric to adult or young adult services on outcomes including CD4 and viral load, mortality, morbidity, adherence and clinic attendance in adolescents (11 to 25 years) with perinatally acquired HIV.

RESULTS: One conference abstract met the inclusion criteria. This cohort study of 17 patients showed a statistically significant increase in non-attendance after transition. Pre-existing adherence difficulties in eight patients continued after transition and one further patient became non-adherent. No significant difference was found in CD4 and viral load before and after transfer. Two study protocols described ongoing cohort and case-control studies in France and the UK which may provide further information in future.

CONCLUSIONS: This is the first systematic review to evaluate the effect of transition on adolescents with HIV. Limited evidence available suggests non-attendance and adherence problems may increase after transfer. More research is needed to understand how to best manage transition for adolescents with perinatally-acquired HIV, a population that, with improved access to antiretrovirals, is likely to increase over the coming decades.

Keywords: Adolescent, Adolescent health services, Adolescent medicine, Paediatrics, Pediatrics, Continuity of patient care, Transition, Transfer, HIV, AIDS, Acquired Immunodeficiency Syndrome, Systematic review

PP094

Young Adults on a General Paediatric Ward: Extending Facilities for transition**Paul Heaton, Christine Routley, Siba Paul**

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OBJECTIVE: We report the successful introduction of an in-patient facility for young adults, aged from 17 to 24 years, on a general paediatric ward in a small District General Hospital.

METHODS: From December 2010 an 8 bedded area (2 cubicles and a 6-bedded unit), within a 24-bedded ward, was allocated to patients aged 17-24 years. Medical care was provided by adult medical, surgical and orthopaedic teams, and nursing by ward staff all of whom were trained in the care of young adults. Policies regarding admission criteria, safeguarding, patient choice, visiting and "House Rules" were drafted, implemented and modified as necessary. Discussions with adult clinicians and site managers were held to ensure smooth running of the system and to address any concerns or difficulties. Paediatric patients had priority of admission at times of bed crisis.

RESULTS: Oct 2011- Nov 2012 there were 3072 admissions, 406 (13%) aged 17-24 with 169 (42%) under care of surgical teams, 87 (21%) orthopaedic and 75 (18%) medical. 65 patients were admitted under paediatrics, 46 (71%) aged 17 years. There were 140 admissions aged 17 years and 13 aged 23. Median length of stay 2.0 days for patients 17-24 years, 1.0 days for patients ≤16 years. Patients choosing admission to the paediatric ward tended to be younger, in transition from paediatric to adult services for chronic conditions, and those with special needs. Patient surveys consistently showed a high level of satisfaction with the facility.

CONCLUSIONS: Young adults can be cared for safely and effectively on a paediatric ward. Additional cost is minimal, and the facility is popular with patients and staff alike. Essential ingredients for success include discussion with affected parties to address specific concerns, and establishment of a clear, simple and unambiguous admission policy. Appropriate training of staff, development and implementation of relevant policies, and an ability to respond rapidly to unforeseen difficulties or challenges are also necessary.

Keywords: Young adults

PP095

Using a Tablet Screening Tool (Tickit) in Adolescent Health Care

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OBJECTIVE: To determine the feasibility of using an electronic psychosocial screening tool with adolescents receiving care at British Columbia's Children's Hospital (BCCH) and McMaster Children's hospital. This tool, delivered on a tablet platform, used a graphic interface program named TickiT™. The study documented length of time taken to complete the questionnaire, questions skipped, ease of interpretation of the questionnaire and both patient and physician satisfaction with the tool including the usefulness of this tool in clinical decision making.

METHODS: The target population were 14-18 year old females and males (n=90) presenting to BCCH and McMaster Children's hospitals from the following settings:

o Cystic fibrosis outpatient clinic BCCH (n=15)

o Youth Health Clinic BCCH (n=15)

o Two BCCH inpatient wards (n=30)

o Gastroenterology outpatient clinic, McMaster Children's Hospital (n=30)

Subjects were initially identified by nurses in all settings. Youth under 14 years or those who were unable to speak or read English were excluded. Physicians of the patients agreeing to take part in the study were asked to participate in the survey. Data collected electronically included length of time taken to complete the questionnaire, and skipped questions. A follow up paper based survey was used to determine ease of interpretation and satisfaction with the tool by both patient and health care provider.

RESULTS: Descriptive analyses of the time taken to complete the survey, number of questions skipped and youth perceptions of ease of completeness were collated, along with an analysis of the feasibility and acceptability of the tablet platform tool by the responsible physicians.

CONCLUSIONS: A tablet screening tool was found to be useful and acceptable by youth and physicians in a clinical setting, and did not take long to complete.

Keywords: Psychosocial screening tool, inpatients, outpatients, tablet

PP096

Confidentiality In Adolescent Health in a Hospital Outpatient Setting: What Do Singapore Parents and Adolescents Think?

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OBJECTIVE: To quantitatively investigate (1) adolescent and parental understanding of what a confidential consultation between the adolescent and physician mean, (2) topics that adolescents and parents believe should be disclosed following a confidential consultation between the adolescent and the doctor, and (3) harms/benefits that parents and adolescents associate with adolescents seeing doctors alone in Singapore.

METHODS: 80 adolescents, aged 13-16 years old, and 80 accompanying parents were interviewed separately in the outpatient clinics of a children's hospital in Singapore.

RESULTS: Most adolescents understood the general concepts of confidentiality, but a significant proportion of parent did not. 66.3% of parents had the misconception that "the doctor will tell the parent about all conversations the doctor had with the adolescent", while 55% of adolescents had the misconception that "the doctor will not tell the parent anything that the adolescent prefers the parent not to be told". Depression/ other mental health illnesses" (P:98.8% A:76.3%) and "suicidal thoughts" (P:91.3%; A:70.0%) were chosen by both parents and adolescents as common disclosure topics that the doctors will tell the parents about, irrespective of adolescents' wishes for confidentiality. The most common concerns and benefits parents and adolescents associated with if the adolescent sees the doctor alone were similar.

CONCLUSIONS: Majority of parents and adolescents recognised the limits of confidentiality for adolescents in healthcare but a significant proportion failed to recognise the protection confidentiality can offer. This may lead to unwillingness among adolescents to discuss sensitive health concerns and may be a source of conflicts in doctor-parent relationships. More needs to be done to improve the parental and adolescent understanding of confidentiality in Singapore. We recommend for physicians to have a short discussion with adolescents and their parents to explain about confidentiality for adolescents in healthcare during the first consultation with an adolescent.

Keywords: Confidentiality, Adolescent, Understanding, Concerns, Benefits

PP097

'Showing We Care': Reducing Clinic Non Adherence Rates Using a Brief Telephone Intervention**Marianne Samyn, Sonia Fihosy*, Anna Hames***

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OBJECTIVE: Patient adherence, including clinic attendance, is critical for the effective management of chronic conditions however more problematic in the adolescent population and during transition to adult services, leading to poorer medical outcomes. Increased incidence of non-attendance (NA) to new appointments compared to follow up appointments has been reported.

METHODS: The Liver Transition (LT) Service at King's College Hospital is part of a supra-regional Paediatric Liver Centre for children and young people (YP) with liver disease and after liver transplantation. After recording high NA rates for new appointments in the LT clinic, an intervention study was set up between November 2011 and April 2012 (period 2). All newly referred YP and/or carers/parents were contacted 2 weeks prior to their appointment by telephone using a semi-structured interview (SSI). The aim was to introduce the LT team, provide practical information and confirm attendance. Further written information was sent out by post. The outcome of the appointment and feedback from SSI were recorded and compared with a same period in 2011 (period 1).

RESULTS: Sixty new appointments were scheduled in period 1 and 46 in period 2. 39/46 patients were contactable by phone for SSI. Following intervention NA rate decreased from 25% (period 1) to 8.7% (period 2) (5% in SSI group). In period 2, 10 appointments were rescheduled compared to 3 in period 1. Clashing employment or educational commitments were the most common reasons given. No NA has been documented for the rescheduled appointments. YP/carers/parents found the intervention useful for purpose of reminding, information provision and social support.

CONCLUSIONS: Our study has shown that a brief telephone intervention with YP and/or parents/carers prior to first appointment in the LT clinic significantly reduced NA. The combination of a sensitive approach, personal reminder supported by appropriate written information appears effective in encouraging attendance and might improve overall outcome.

Keywords: Non-adherence, liver transition

PP098

Missed Appointment in Adolescent Clinic; Perspective from Tertiary Care Hospital, Thailand**Thanyalak Intachote, Supinya In Iw*, Tidarat Choowong*, Jessada Suwanwaree*, Boonying Manaboriboon***

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OBJECTIVE: To evaluate the factors related to appointment adherence in adolescent patients, based on the patients' characters and services provided.

METHODS: All medical records in adolescent clinic at Siriraj hospital during the year of 2004-2009 were reviewed. Patients at least once attended the clinic with the follow-up visit order were recruited. Data analyses were performed by Chi-square test, Fisher's exact test, Mann-Whitney U test, and One-way ANOVA, where were appropriate.

RESULTS: 126 patients were met the inclusion criteria. A third had missed appointment at least once. Patients' mean age were 14.3(SD= 2.7) years old and the majority (95%) were studying. Three-fourths (71.5%) of principle diagnosis related to behavioral problems while 90% had at least one risky behavior found. Two thirds were referred from other in-hospital services, the rest were from schools. Comparing between missed and non-missed appointment groups, only the acute illness and the history of appointment cancellation were the most significant different factors between groups ($p<.001$), while type of diagnosis, education, number of behavioral risks were less significant (p 0.039, 0.04, 0.045 respectively). Of total 429 visits, 409(95.3%) got telephone reminder a few days prior the appointment date, 48(11.2%) were remained non-complying and 40(9.7%) had rescheduled. Only 18(4.2%) of the visits that the patients were responsible to self re-appointments, which all were complied with the new visit. Having rescheduled after being reminded and having history of missed a previous appointment were the most significant factors for next appointment non-compliance. ($p<0.01$ and $p=0.02$ respectively).

CONCLUSIONS: In adolescents, histories of previous missed or cancelled appointment were the strongest predictors to be an appointment non-adherence patient and having rescheduled after being reminded were also the predictor for missed the next appointment. Surprisingly, telephone-reminders didn't show any impact for appointment compliance. More innovative strategies were needed to promote the continuity of care in this population.

Keywords: Outpatient, missed appointments, adolescents, appointment adherence, appointment compliance

PP099

**Causes of Admission among Taiwanese Adolescents:
Analysis of Population-Based Insurance Claims**

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OBJECTIVE: Adolescents have their unique health needs; however, they may forego regular health service due to some barriers to access. Their wide-ranging health problems are mostly attributed to behavioral etiologies and amendable if timely and appropriate preventive measures are taken. Little is known about the trends of admission causes in the recent decade. The aim of this study is to describe the characteristics of hospitalization among Taiwanese adolescents.

METHODS: A subset of Taiwan National Health Insurance (NHI) Research Database, which contains complete inpatient data for one million beneficiaries randomly drawn from the national population of 23 million, was used for analysis. The categories of interest included main reasons for hospitalization, defined by the International Classification of Disease, 9th Revision, Clinical Modification (ICD-9-CM) code, and specialties of healthcare providers for adolescents aged 10 to 21 years from year 2000 to 2009. A standardized annual admission rate with 95% confidence interval (CI) by the calendar year 2005 was calculated to describe the trends over the study years.

RESULTS: The lowest annual rate of admission (0.94%) was found among young adolescents aged 12 years. The annual admission rate increased with age, where those aged 20 years had the highest rate (2.93%). Over the ten years, adolescents aged 10-14 years had a rising admission rate, whereas adolescents aged 18-21 years had a decreasing admission rate. A large proportion of admission was attributed to "injury or poisoning (24.6%)" and "pregnancy (14.5%)". However, the proportions of both reasons declined with time. In 2000, surgery comprised of the highest percentages (25.4%) of overall admission, followed by obstetrics (19%). However, pediatrics comprised of 25.3% of overall admission, which was the highest in 2009.

CONCLUSIONS: The causes of admission and specialties of providers varied with age and years. Understanding these epidemiological features may help create effective healthcare strategies for adolescents.

Keywords: Adolescent, health insurance, hospitalization cause, Taiwan

PP100

**"Do You Think We Should Talk to Your Parents?":
Case-Studies from Psychologists about Breaching
Confidentiality with Adolescents**

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OBJECTIVE: The current study aimed to explore the experiences of Australian psychologists about managing confidentiality with adolescent clients. Confidentiality is recognised as a critical part of effective adolescent-friendly health practice, yet managing the limits to confidentiality can be ethically fraught. This is especially true with minors, where assessments of competence often need to be made in addition to assessments of risk.

METHODS: In-depth interviews were conducted with 20 psychologists who were each asked to describe one of their most difficult cases concerning confidentiality with adolescents. These cases were then used to explore aspects of confidentiality and young people more broadly.

RESULTS: Psychologists experienced a range of challenges associated with confidentiality for adolescents. These included: how to maintain the therapeutic relationship when a breach of confidentiality is required; tension between legal obligations and young people's best interests; a lack of clarity in guidelines about limits to confidentiality; and disagreements between colleagues about the right course of action. Several psychologists also spoke about making a choice not to breach confidentiality in order to uphold a young person's best interests, despite the professional risks that this brought.

CONCLUSIONS: Psychologists who work with young people appear to be regularly challenged by ethical dilemmas of confidentiality, with conflicting priorities leading to difficult decisions. More support, training and guidance are recommended.

Keywords: Confidentiality, Adolescent, Risk-Behaviour, Psychology

PP101

Why are Parents Concerned about Confidentiality for Adolescents?

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OBJECTIVE: The current study aimed to describe parents' concerns regarding confidential healthcare for adolescents and, specifically, the beliefs that underlie these concerns. Confidentiality is understood to be a vital component of effective adolescent healthcare and international guidelines recommend confidential care for young people. However, little is known about parental views regarding confidentiality for adolescents.

METHODS: This study was conducted in two phases. In phase one, a quantitative survey was given to parents attending the Royal Children's Hospital in Melbourne with their adolescent children. A total of 225 parents at three separate departments within the hospital were surveyed about their views regarding confidential healthcare for adolescents. In phase two, in-depth interviews were conducted with 17 parents attending the Royal Children's Hospital in order to explore what influences parental views about confidentiality for adolescents.

RESULTS: Although parents were able to articulate a range of benefits associated with confidential healthcare for adolescents, they often held a simultaneous desire to be informed about a wide variety of information about their children, even when their children did not want them to know. Topics that the majority of parents wanted to be informed about included alcohol use, STIs, drug use and mental health issues. Factors that appeared to influence parents' views about confidentiality included the way in which they conceptualised their role as a parent (for example, as an expert, or as a legal guardian) and also the level of trust they had in their child's healthcare provider and health professionals more broadly.

CONCLUSIONS: Parental views regarding confidentiality for adolescents differ from current guidance provided to health professionals. Consequently, the provision of confidential care for young people may be more successful if health professionals invest in building trust with parents, as well as with adolescents, to facilitate parental acceptance of confidential healthcare for adolescents.

Keywords: Parents, Confidentiality, Adolescents, Privacy, Qualitative, Quantitative, Interview, Survey.

PP102

The Development of a Clinic-Based Interactive Behavioral Health Screening Module for Adolescents

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OBJECTIVE: Despite preventable adolescent morbidity and mortality, clinicians inconsistently screen adolescents for risky behavior. Technology has tremendous potential to improve health care quality; yet few health information technology interventions are integrated into adolescent care. The aims of our research are to: 1) develop an interactive behavioral/emotional health screening module; and 2) pilot-test the iPad module in primary care.

METHODS: The first phase of research involved module development and baseline data collection. This included: selecting 2 U.S. pediatric clinics as pilot sites; meetings with clinicians, clinic staff, and teens for input into the screening module; and an iterative process of pilot testing involving diverse teenagers and providers. Baseline data was collected in each pilot clinic. Following a routine visit, 107 adolescents, ages 13- to 18-years, completed surveys reporting on whether their provider screened and counseled them for risky behavior. This adolescent-report will comprise data to assess changes in provider behavior post- module implementation.

RESULTS: Clinicians preferred that the tool cover multiple risk areas and be incorporated into the electronic medical record. The tool takes about 7 minutes for teens to complete and includes a customized printout with prompts and cues for providers. Baseline data indicates that teens report being screened an average of 74% across risk areas, ranging from 54% for seatbelt use to 91% for physical activity.

CONCLUSIONS: Health information technology to assist with preventive screening and counseling appears acceptable to teens and providers and has potential for increasing the consistency of behavioral health screening in primary care. The next phase of research involves integrating the module into pilot clinics, and assessing the impact on provider screening rates, as well as additional clinician, adolescent and system outcomes.

Founding: Agency for Healthc are Research&Quality Approved by UCSF Committee on Human Research

Keywords: Adolescent clinical preventive services, Health information technology, Primary care, Adolescent risk behavior

PP103

Independent Visits and Confidential Care at a Tertiary University Hospital

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OBJECTIVE: Several studies have highlighted young peoples' wishes for independent visits and confidential care. However, the Danish Health Act states that parents should be actively informed about their child less than 18 years of age i.e. no confidentiality. The aim of this study was to examine how young patients experience independent visits and confidential care.

METHODS: We conducted a questionnaire survey among young patients aged 12-22 years at the outpatient clinics at a tertiary university hospital in 2012.

Descriptive statistical analyses were performed using SPSS 19.0 and differences between groups were evaluated by Chi2 test when appropriate.

RESULTS: Demographics

We got 169 replies (78% from pediatric dept), 55% being female, median age 15.5 years and median illness duration 11.0 years (0-20 years).

Independent visits

One third wanted independent visits when asked. Among young people with some experience of independent visits, significantly more (53%) wanted this opportunity ($p < 0.0001$). However, only 20% of young people always or often talked to doctors without their parents being present during outpatient clinic visits.

Confidentiality

More than 2/3 of the respondents found confidential consultations important or very important regardless of age. The vast majority (80%) of adolescents less than 18 years of age trusted that they were offered confidential care. Among young adults older than 18 years, 10% was uncertain if their hospital care was kept confidential.

CONCLUSIONS: Independent visits are not routinely offered at specialized outpatient clinics despite young patients' wish. One third of young patients immediately wanted this option and experience with independent visits increased the desire.

The majority of patients found confidential care important or very important and trusted that they were offered this although this is generally not the case in relation to parents due to the Danish legislation. Also among young adults, the knowledge of confidential care was insufficient.

Keywords: Patients' rights, youth friendly health services, confidentiality, independent consultations

PP104

The Relation between Self-Esteem, Depression and Anger. Does Anger Predict Depression and Self-Esteem in Students?

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OBJECTIVE: Anger has devastating effects on personal relationships and cause problems in public health and is aggressive behavior (Tyler and Nvakv, 2005). According to research, people who have low self-esteem have more aggressive behavior and depression can indicate the occurrence or non-occurrence of aggressive effects. (Levinson, 1999).

The aim of this study is to examine the relation between self-esteem, depression and aggression in students and also answer to this questions, does anger predict depression and level of self-esteem or not.

METHODS: Sample: 405 secondary school students (210 girls and 195 boys) (M: 13/31 and SD: 99/0) Measurement: (STAXI-2 C / A) (Brenner and Spielberger, 2009). Coppersmith Self-Esteem questionnaire (Coopersmith (1967). Maria Kovacs Children's Depression questionnaire (1989).

RESULTS: There is a relation between Results of self-esteem and depression ($R = -0.68/0$), between depression and anger ($R = 0.50/0$), as well as between state anger and self-esteem ($0.45/0 = R$). Girls' average scores on depression and anger is more than boys and boys' average scores on self-esteem and anger management is more than girls. Self-esteem and depression of 0/31 of variance is explained by the trait anger, 0/34 of the variance of the anger trait, by depression, 0/26 of the variance in anger trait can be explained by esteem reverse.

CONCLUSIONS: The results of this study showed significant negative correlations between self-esteem and depression. There is a significant correlation between depression and anger. This result is consistent with the results (Levinson, 1999, Peterson et al, 1992, Balasmo 2012, mailing and co, 2012, evren and co 2011, McPhie and co 2012, also depression, aggression and self-esteem among girls and boys was different and girls scored higher in depression and anger. (Bvlgyny, 1996).

Keywords: Anger, Depression, self-esteem.

PP105

Measuring Complete Mental Health from Adolescence to Young Adulthood: A 10-Year Longitudinal Study**Emmelin Teng, Anthony Venning, Helen Winefield, Shona Crabb***

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OBJECTIVE: It is well-documented that high levels of wellbeing reported in adolescence lay the foundation for future mental health. However, different approaches to the conceptualisation and measurement of mental health are currently adopted in research and practice; some focus on mental illness while others on positive wellbeing. The current descriptive study compared perspectives, taking into account both positive and negative functioning by adopting the Complete State Model (CSM) to categorise the mental health of participants during adolescence (Time 1) and young adulthood (Time 2).

METHOD: Young adults from South Australia (N=117; M=24.4 years, SD=0.75) were recruited from participants involved in a 10-year longitudinal investigation examining the transition from school to workplace or higher education. Participants were categorised into one of four mental health groups, according to the CSM, based on standardised measures of positive and negative functioning: flourishing (complete mental health), languishing or struggling (incomplete mental health), or floundering (complete mental illness). The CSM perspective was then compared to results of a separate mental illness approach (General Health Questionnaire) and a positive wellbeing approach (Life Satisfaction) within the same sample.

RESULTS: Descriptive statistics compared measurement perspectives within the sample at adolescence and young adulthood. The percentage of participants classified as Flourishing had increased (43% to 53%), while the percentage of those classified as Floundering had decreased (23% to 4%). Cross-sectional data collected at Time 10 indicated that single dimension measures identify different percentages of the sample as psychologically healthy or distressed, compared to combined measures.

CONCLUSIONS: This study builds on a research agenda for examining conceptualisation of mental health in young people. The discrepancies between differing approaches highlight questions about the most helpful representation of mental health in young people, with implications for the design and implementation of mental health programs. **Funding:** Collection of the original database was funded by Australian Research Council grant DP0879497 to AH Winefield, PH Delfabbro, MF Dollard, HR Winefield, JC Metzger & A Hammarström.

Conflict of Interest: None declared

Ethics – Approval for this research has been granted by the Human Research Ethics Committees of the University of South Australia and the University of Adelaide.

Keywords: adolescent, young adult, mental health, mental illness, wellbeing, positive psychology.

PP106

Retrospective Study; Screening for Postnatal Depression in Singaporean Adolescent Mothers**Aslinna Abdul Jabbar, Chia Yen Yen, Lee Kim Nai, Lau Gek Muay, Oh Jean Yin, Kumudhini Rajasegaran, Sadhana Nadharaja**

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OBJECTIVE: To study the prevalence of psychosocial risk and postnatal depression in single adolescent mothers.

METHODS: 43 adolescent mothers were randomly screened for symptoms suggestive of postnatal depression and their psychosocial risk factors during their postnatal visits in CARE (Clinic for Adolescence Pregnancies) Clinic. Screening was done using a self administered written questionnaire with questions based on postnatal depression screening tool. Other data collected includes patient demographics, contraception use and their future plans.

RESULTS: Data from questionnaires revealed that 81% of adolescent mothers were still single and 53% were in a relationship of which only 11% were married. The majority (53%) of adolescents seen was in mid teens (16-17 years old). 14% gave their babies up for adoption. Only 16% requested for contraception during their postnatal visits.

Support for these adolescents and their babies mainly came from maternal family with 77% of patients staying with their parents and receiving financial support (40%) from them. Baby care duties were shouldered by 53% of these young mothers.

Postnatal depression screening questions were positive in 33% of these young mothers. However only 5% feels they need help for it.

Majority (63%) of these young mothers expressed their plans to continue secondary schooling and working (53%). More than half (56%) see themselves being married with family within 5 years.

CONCLUSIONS: Young mothers have a higher psychosocial risk factors compared to older mother which can lead to postpartum depression. The majority of these young mothers that were screened did not know that they had symptoms of depression and not aware that there is support for it. There is a need for a routine postnatal depression screening for all young mothers during their postnatal visit.

Keywords: Adolescent, postnatal depression, pregnancy,

PP107

Emotion Regulation and Coping Strategies in Adolescence and Their Associations with Psychosocial Wellbeing and Health

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OBJECTIVE: Emotion regulation and coping strategies are self-regulatory strategies useful to manage emotional experiences. In adulthood, coping and emotion regulation strategies are associated with psychosocial well-being (e.g., Kashdan et al., 2006; John & Gross, 2004). The impact of regulation and coping strategies on wellbeing outcomes in adolescence is instead largely unexplored. The study tested the hypothesis that adolescents' psychosocial well-being (conceptualized in term of positive and negative affect, life satisfaction, emotional and social loneliness, and health) is related to preferred emotion regulation (reappraisal and suppression) and coping strategies (social support, avoidance, positive attitudes, problem solving, turning to religion-humor).

METHODS: A large sample of Italian adolescents (N = 641; 41% males; M age = 16.67, S.D. = 1.59) was assessed on the well-being and strategy-use variables. Descriptive, correlational and linear regression analyses were carried out to assess their associations.

RESULTS: Correlational and regression results showed that, as regards regulation strategies, Cognitive reappraisal was positively associated with psychosocial well-being indexes in adolescence, except for negative affect; Suppression was instead a significant and negative predictor of all well-being variables. As regards coping, Seeking social-support, Avoidance, and Turning to religion and humor were the most important predictors of well-being, with a negative association. Problem-solving coping was related to higher life satisfaction and health, whereas Positive-attitude coping was irrelevant for well-being.

CONCLUSIONS: The results confirmed the hypothesis that preferred emotion regulation and coping strategies are very salient for well-being in adolescence, with well-being predicted by a greater reliance on cognitive reappraisal and problem-solving coping, and a lesser inclination to rely on suppression, avoidance, turning to religion and humor, and seeking social support. The study findings suggest that to increase the effectiveness of interventions aimed at promoting adolescents' well-being it would be useful to train them to master emotion regulation and coping strategies that have a high adaptive value.

Keywords: Emotion regulation strategies, coping, well-being, health, felt affect, loneliness, life satisfaction, adolescents

PP108

Psychosocial Risk Screening and Counselling for Young People Attending Primary Care: A Cluster Randomised Trial

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OBJECTIVE: The burden of disease for young people is largely preventable. Best practice guidelines advise at least annual psycho-social risk screening for early detection and intervention. Few studies have explored the effectiveness of this approach.

We aimed to test the effectiveness of training general practitioners and nurses to screen all young people (14-24 years) presenting to general practice, for psychosocial risks, and provide a brief motivational interviewing intervention for identified risky behaviours.

METHODS: 42 general practices were recruited from Victoria Australia, baseline tested and randomised by strata into intervention or comparison groups. Intervention clinicians received nine hours of interactive training in youth friendly care, screening and motivational interviewing. Practices were visited twice to assist with developing office procedures supporting screening. Comparison clinicians received a three hour seminar on youth friendly care. Six weeks post-training, young people attending the practices had an exit interview on their: engagement with the service, discussion of psychosocial issues and self-reported risks. They were followed up three and 12-months post-consultation to determine impact on risky behaviours.

RESULTS: 40 practices recruited 902 patients post-randomisation. Intervention clinicians and their patients were more likely to discuss: cigarette smoking (OR 1.59:1.04-2.44), alcohol use (OR 2.06:1.27-3.35), cannabis (OR 2.94: 1.60-5.43), road safety (OR 9.52: (3.35-27.1), and fear or abuse in relationships (OR 5.37:2.50-11.5). Yet, proportion screened for any one risk ranged from 7-41%. At three-months there was a small intervention effect on illicit drug use (p=0.02) and contraception use (p=0.03) and trends toward reduced alcohol and tobacco use. Outcomes were unchanged from three to 12 months.

CONCLUSIONS: Our training intervention increased clinicians' screening behaviour. The impact on health outcomes shows promise given most youth visit primary care annually. Further research must first explore and address barriers to clinician screening and counselling young people to assess the full potential of this approach.

Keywords: Primary care, young people, screening, motivational interviewing, psychosocial risks, health outcomes,

PP109

Prevalence of Post Traumatic Stress Disorder (PTSD) in Coastal Locations in Adolescents 6 Months after the Earthquake and Tsunami in Chile

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OBJECTIVE: To determine the prevalence of probable PTSD in a sample of adolescents, up to 16 years of age, affected by the February 27th major earthquake and tsunami in the Bio Bio region of Chile

METHODS: A sample of 1123 students (53.3% male) of 12 schools belonging to 12 different locations; 10 corresponded to coastal locations with varying degrees of affectation by the tsunami, and 2 not in the coast line, therefore affected only by earthquake.

All students were administered the CPSS scale and a demographic sheet to quantify exposure at 6 months from the event.

RESULTS: The prevalence of PTSD was 6.9% which increases to 21.2% by including sub-threshold PTSD, with girls being more affected (10.3% increasing to 27.1% with sub-threshold). Factors associated with higher prevalence of PTSD at 6 months were female gender, life-threatening feeling, being a victim of looting, and being fearful that night.

CONCLUSIONS: The results permit to understand the variables associated to the presence of PTSD, and are of interest for the development of preventive and therapeutic programs in young population affected by disasters.

Keywords: PTSD, Adolescents, Disaster

PP110

Community Oriented Touring Riso-Therapeutic and Arts Intervention in Adolescents in Localities Affected by the Chilean Earthquake

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OBJECTIVE: De-dramatize the situation experienced in the earthquake and tsunami through the use of humor (riso-therapy), art, creativity and promoting self-esteem and self-concept as resilient coping mechanisms.

Assess the achievement of this objective through the implementation of community actions which reflect the re-meaningfulness of the event.

METHODS: An intervention plan based in therapeutic techniques of psychodrama, drama and community intervention models through the action of therapeutic clowns inviting the community to actively join in actions that seek to de-dramatize the disaster was developed.

Achieving the goal was measured by the ability of the community to participate collectively in the implementation of a "Community wave" which reflected the new approach to the event.

RESULTS: The work was successfully implemented in 20 villages. In all the villages the community actively participated in the activities. In 100% of the communities the "Community wave" (a powerful indicator of new understanding an attitude toward the event).

CONCLUSIONS: This research proves that is possible to implement an innovative approach focused in the young population using community resources and respecting its values in order de- dramatize such an adverse event as the February 27th earthquake and tsunami was.

Even the intervention was initially orientated for the young people, the participation of the whole communities was achieved.

Keywords: Adolescents, art-therapy, riso-therapy, disaster

PP111

Examination Anxiety - Assessment and Strategies for Intervention

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OBJECTIVE: India, has a highly examination oriented educational system, Around the time of examinations, students often report to the clinics of pediatricians, mental health professionals and family practitioners with severe stress related symptoms. There is a high degree of parental pressure for competitive examinations as they are entry points for professional courses and can make or break a career. AACCI conducts Life Skills modules in various educational institutions, which has a special module to address examination stress and anxiety and are targeted towards helping students cope with these anxieties and perform to their best capacity in these examinations unhindered by emotional problems. Data is collected to deliver a need based module for target groups.

METHODS: Material and methods Sample 100 students ages 13 to 16, studying in school and 117 students aged 17-18 studying in first year medical college

Tool: well validated examination anxiety scale by (Freidben, 1997) Statistical analysis by SPSS 18.0

RESULTS: All the factors at the root of examination anxiety, viz. social derogation, cognitive blocking and tenseness, are highly correlated with one another. These three factors correlate with the Freidben total score, respectively to the extent of 0.86, 0.74 and 0.79, all of which are significant correlations ($p < 0.01$). Additionally, there is correlation of 0.38 between social derogation and cognitive blocking ($p < 0.01$), of 0.55 ($p < 0.01$) between cognitive blocking and tenseness and that of 0.50 ($p < 0.01$) between social derogation and tenseness.

CONCLUSIONS: Conclusions Helping students to deal with exam stress thus need to focus on a) reducing the factor of social shame and guilt at the possibility of doing poorly, b) cognitive blocks that occur when students tense up before exams, which may be overcome with good mnemonics, c) relaxation techniques for physical tension which can give writer's cramp or palpitations and affect their academic performance.

Keywords: Examination anxiety, Freidben score, school and college students, AACCI

PP112

Mindfulness, Anxiety, Depression, Stress and Personal Well-Being(Quality of Life) in Students of University

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OBJECTIVE: Personal well-being, is deep taught of human from their general life satisfaction, and have positive feelings rather than negative feelings. (diner1999). well-being is important structure that in low level result cause to depression and Social isolation and lack of Satisfaction and Confidence and it cause of reduction of mental and physical health(king,2001).. This article study and Comparison of mindfulness, anxiety, depression, stress and well-being (Quality of Life) among Iranian Students.

Hypothesis: between mindfulness, anxiety, depression, stress personal well-being(Quality of Life) correspond. there is Differ in well-being between man and woman. there is Differ in DAS scale between man and woman.

METHODS: FFMQ inventory(baer,2006), DAS inventory(loyi band,1995), well-being(Quality of Life)PWI-A inventory(kaminz,2004) were completed by participation.250 students of university. ($M = 22.25$, $SD = 3.04$) 124 man and 123 woman(3 questionnaire were deleted)participated in this study.

RESULTS: There is a negative correlation between mindfulness and anxiety, depression, stress. There is positive correlation between mindfulness and personal well-being. there in negative correlation between personal well-being and anxiety, depression, stress. Men and women are different in mindfulness, well-being, anxiety, depression and stress. mindfulness and depression explain important quota from Variance of personal well-being.it means according r^2 , 0.28 personal well-being relate to mindfulness, anxiety, depression, stress components.

CONCLUSIONS: This study are support from other study that mindfulness conduces to well-being and relates with low anxiety, stress and depression. So according of authors well- being manifest with higher level of mindfulness and lower symptoms of disorder.(Weinstein and co, 2009, Chiesa and Serretti, 2009, Hoffman and co,2012,Penedo and co, 2012, Nyklíček,2011)

Keywords: Mindfulness, anxiety, depression, stress, personal well-being(Quality of Life).

PP113

Validation of You're Welcome Quality Criteria in English Emergency Department Settings***Dougal S Hargreaves, Clare Dieppe*, Janet E McDonagh*****

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OBJECTIVE: You're Welcome (YW) quality standards are the first national standards for adolescent health services to include emergency departments (EDs). This article characterizes ED use among young people in England and validates the YW criteria using data from a national ED survey.

METHODS: National Hospital Episode Statistic data on ED activity were obtained and divided by age-specific population estimates from the Office for National Statistics. Using data from the Emergency Department Survey 2008, logistic regression was used to calculate the odds of increased overall satisfaction when individual YW criteria were met, adjusting for sex and use of health services. Spearman's rank correlation coefficients were used to identify the ten questions in each survey which best correlated with overall satisfaction. The degree to which these ten items were included in the YW criteria was assessed.

RESULTS: ED activity increases during adolescence, peaking at age 19 in females and 20 in males. 2189 respondents aged 16-19 and 2850 aged 20-24 completed the patient surveys. All 16 questions which mapped to YW criteria were significantly associated with overall satisfaction ($p < .001$). Of the ten questions which best correlated with overall care rating, all mapped directly to YW criteria or related to provider characteristics consistent with the YW approach.

CONCLUSIONS: Young people are frequent users of ED services. Although limited by lack of data relating to involvement, publicity and confidentiality, this study provides strong support for the face validity and content validity of the remaining YW quality criteria for young people in emergency department settings.

Keywords: Adolescent friendly healthcare, Young adult, Health services research, You're Welcome quality criteria

PP114

Challenging Clinical Encounters: An Investigation into The Experiences of Gps Consulting with Young People Experiencing Emotional Distress and an Exploration of the Gp's Role***Jane Hazel Roberts, Ann Crosland***

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OBJECTIVE: Mental ill-health amongst young people is a significant problem. Young people who consult with their GP are known to have a higher psychological morbidity and accompanying emotional distress than those who do not seek help. A small body of research has identified that GPs have difficulty in identifying emotional distress in this patient population unless it is severe. Consultations with young people in this clinical arena can be problematic yet little is known about how the situation is perceived by GPs.

This study explores GPs' views and experiences in this clinical arena in order to develop a conceptual model which offers theoretical generalizability.

METHODS: Grounded theory methodology was used, augmented by the application of situational analysis. Nineteen semi-structured interviews were conducted with practising GPs in the North East of England between January 2009 and July 2010.

RESULTS: GPs vary in their degree of engagement with young people who present with emotional distress. This clinical terrain is perceived by the majority as being unfamiliar territory and creates professional anxiety and uncertainty. Three domains emerged as being pivotal in shaping a GP's response to this problematic situation. They are defined as a GP's performance in the clinical encounter; a GP's view of young people and their health needs and a GP's epistemological frame of reference.

The three areas intersect with each other to shape a GP's engagement with emotionally distressed young people. This is translated in the clinical encounter as 'the enactment of role'. Three role archetypes emerged from the empirical study data: the 'Fixer'; the 'Future Planner' and the 'Collaborator'.

CONCLUSIONS: A GP's role in responding to emotional distress in young people is ill-defined and unsupported, resulting in anxiety and uncertainty about how to proceed. Greater understanding of the factors which contribute to dis/engagement has implications for education, practice, research and policy.

Keywords: GPs; young people; emotional distress role of GP

PP115

Religious and Spiritual Beliefs of Adolescent Health Providers: Implications for Adolescent Health Care

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OBJECTIVE: The Global Study of Spirituality and Adolescent Health (GSSAH) is a multi-cultural, multi-national, and multi-phased research program on spirituality as it relates to adolescent health from the perspectives of adolescents themselves, their parents, and their healthcare providers.

This first phase was designed to 1) determine if there is a need to address spirituality and religiosity in adolescent health care, and 2) to understand the role that spirituality and religiosity play in the personal lives of adolescent health professionals. This report presents the results of our initial survey of adolescent health care professionals who are members of the Society for Adolescent Health and Medicine (SAHM).

METHODS: A cross-sectional online survey was completed by 218 members of the United States based Society for Adolescent Health and Medicine during an eight week period in 2012. Most respondents were physicians (79%), female (70%), and resided in the United States (87%).

RESULTS: A belief in God was held by a majority of respondents (62%), as was the feeling that a sense of spirituality or religiosity gives their personal lives meaning (64%). The majority of respondents believed that issues involving spirituality or religiosity were a component of adolescent health (60%) and should be discussed during adolescent health care visits (51%). While fewer than half felt adequately trained in this area (40%), the majority did feel comfortable discussing issues related to spirituality and religiosity with their adolescent patients (57%).

CONCLUSIONS: Issues surrounding spirituality and religiosity are important in the lives of the adolescent health care providers in this survey group and are seen by the survey respondents as important components of adolescent health care. Attention should be paid to this area by clinicians, researchers, training programs, and adolescent health organizations.

Keywords: Adolescents, spirituality, religiosity, health,

PP116

Youth Friendly Primary Care Health Services in New Zealand, Development Over the Last 20 Years

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OBJECTIVE: To illustrate the interaction between pragmatic service delivery and political exigencies

METHODS: There are up to 20 Youth One Stop Shops in New Zealand providing free primary health care, working in a developmentally appropriate way. The evolution of their development, their response to local need, and the evaluation of their outcomes and outputs, has been studied.

RESULTS: There are a wide variety of models in use, for the way health and development services are delivered to young people between 12 and 25 years. These range from nurse led with other agencies providing workers from the same building, to multidisciplinary, health, education, employment and welfare services delivered by one agency in the same building and multiple agencies from different buildings. Sources of funding dictate the limits of what can be done, which is illustrated by wide inconsistencies across the country.

CONCLUSIONS: Service in youth health in primary care in New Zealand have developed and grown continuously but not smoothly over the last 20 years. Much of what has been achieved has been due to the persistence of local personalities. For the growth of youth health and development services to continue, Youth Health needs to be recognized as a professional scope of practice and area of medical and nursing registration, by national government agencies.

Keywords: Youth, Primary Care, Service Delivery

PP117

What is Quality Youth Healthcare? Lessons from the Field**Carmen Jarrett, Ann Dadich*, Fiona Robards, David L Bennett**

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OBJECTIVE: To identify elements of quality youth healthcare to inform the development of a clinical resource kit**METHODS:** Ten focus groups were facilitated with 38 practitioners in New South Wales, Australia who worked with young people. Practitioners represented government and non-government services that offered primary, secondary, or tertiary care. Discussions focused on the elements of quality youth healthcare, as well as the factors that helped and hindered it. Transcriptions were inductively coded using the method of constant comparison.**RESULTS:** Participants suggested that quality youth healthcare is comprised of three interrelated elements:

- Understanding the holistic needs of young people. This includes the ability to recognise and be sensitive to youth needs, regardless of whether these are related to health (such as accommodation and legal issues)
- Relating to young people. The need to relate to young people requires engagement (that is, a sincere interest in, and commitment to their needs and preferences); understanding (including patience and consideration), and boundary-setting (such as clarifying roles and expectations)
- Negotiating professional roles and collaborative care. This involves the capacity to draw on and synthesise professional expertise, evidence-based practices, the preferences of the young person (and perhaps family members), as well as available resources (including professional networks), and traverse the context in which youth healthcare is delivered (within and beyond the service)

CONCLUSIONS: These findings have clear implications for practice, policy, and research. First, they highlight the skills that are likely to foster quality youth healthcare – this opens opportunities to develop informative resources, a task that is currently underway by NSW CAAH in the form of the Youth Health Resource Kit for clinicians. Second, they reveal opportunities to develop a robust policy framework that supports appropriate governance arrangements. Third, they provide a platform from which to examine the drivers that shape quality youth healthcare.**Keywords:** Youth, services, quality

PP118

Developing a Collaborative Adolescent Health Research Charter with Young People**Nicola Gray, Bharti Mepani*, Hayley Reed**, Robert Sassoon, Lindsay Starbuck**

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**ALPHA Young People's Group, DECIPHer, Cardiff University, Wales

OBJECTIVE: The nature and topics of adolescent health research is determined by the research interests of adults, be they research funders or do-ers. The relevance of this research to the interests of young people themselves is not widely considered. The aim of this ongoing work is to create a collaborative adolescent health research charter between young people, funders, researchers and policymakers.**METHODS:** A collaborative session at the 2012 AYPH conference in Cardiff engaged 19 young people in a series of peer-led activities relating to both the content and infrastructure of adolescent health research in the UK. This included the young people interviewing a senior researcher and a senior health policymaker who were keynote speakers at the conference. Reflection points included:

- ♣ How can we make sure research about young people's health is relevant, useful and helps improve their health?
- ♣ What five key areas of young people's health do you want to see improved and why?

RESULTS: The young people at the conference emphasised the importance of meaningful participation of young people in the design and development of research. They expressed concern about the research cycle, particularly how long it takes to get to dissemination work. As a group, we acknowledged that young research participants may well be adults by the time the research is published. Pre-session discussion with ALPHA revealed content areas of interest including Alcohol and substance abuse, Obesity, Teenage Pregnancy, Stress, and Sexual health. A short film summarising the day's outputs is available at <http://www.youtube.com/watch?v=nB6rDYLp0A>.**CONCLUSIONS:** We have made a promising start in generating infrastructure and content issues for adolescent health research that will go forward for agreement and prioritisation using online consensus methods with a snowball sample of young people in the UK for future dissemination as a charter to the adolescent health research community, including funders and users.**Keywords:** Research, Participation, Dissemination, Infrastructure

PP119

Youth Friendliness Evaluation of a Tertiary Children's Hospital: Views from Adolescents and Their Parents

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OBJECTIVE: The notion of youth friendliness has typically focused on primary care settings in low and middle-income countries. We set out to assess the youth friendliness of a tertiary children's hospital in Melbourne, Australia as part of a hospital-wide initiative to improve quality of care for adolescents.

METHODS: We defined a set of indicators measuring youth friendliness within a hospital setting based on an extensive literature review and existing measures from different countries, informed by a youth advisory committee. Indicators were grouped into two main domains: 1) guideline-informed care; and 2) experience of care. These indicators were the basis of adolescent and parent questionnaires. Adolescents (12-18 years) and their parents/guardians were invited to participate in a quantitative survey. During the recruitment period, a sample of in- and out-patients that was systematically identified across departments were mailed a questionnaire immediately after their last visit to the hospital.

RESULTS: A total of 787 adolescents and 943 parents completed questionnaires (response rates of 35.4% and 37.5% respectively). Overall, adolescents and their parents felt welcome (91.5%) and respected (96.4%) by their clinical teams. Adolescents expressed their need to be more involved in consultations (31.2%) and one in ten did not feel at ease to ask questions. A major gap was identified around guideline-informed care. Only 34.6% of adolescents reported having discussed psychosocial issues (> 5 items), 29% had discussed confidentiality and only 28.3% had been seen alone at some stage during the consultation. Only 25% reported that their treating team had discussed transferring them to adult healthcare and 18% expressed their need for more involvement in their healthcare.

CONCLUSIONS: Important gaps remain in the provision of guideline-informed care. This suggests that targeted interventions to promote clinicians' capacity to better implement guideline-informed care are needed if quality healthcare delivery to adolescents is to be achieved.

Keywords: Youth friendliness, evaluation, hospital setting, guidelines-informed care, experience of care, adolescents

PP120

Development of the 'Adolescent Friendly Hospital Survey'

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OBJECTIVE: Despite growing interest in adolescent friendly healthcare, approaches to measurement including a workable set of indicators are lacking. We set out to develop indicators of 'adolescent friendliness' within a hospital setting in order to inform the development of a survey tool that could be used to monitor and improve the quality of care provided to young people.

METHODS: The indicators were developed in a multi-step process. First, we undertook a systematic review to identify youth friendly indicators from young people's perspectives. Second, we reviewed existing tools to measure adolescent friendliness. From this work we formulated a conceptual framework around quality health care delivery to adolescents (adolescent friendly care) which integrated elements of both experience of care and guideline informed care within the broader context of patient and family centred care. Specific indicators of adolescent friendliness as defined from the conceptual framework were then determined, developed and discussed in consultation with the hospital's youth advisory committee.

RESULTS: This process resulted in a set of 13 indicators that measure adolescent friendliness; 6 measure experience of care and 7 measure guideline informed care. Separate versions were developed for adolescents and parents. Item selection occurred, followed by face and content validation, and pretesting with a sample of adolescents and parents. The Adolescent Friendly Hospital Survey was formatted in paper and web versions, with separate surveys for adolescents and parents, inpatients and outpatients. Parent questions sought both their perspective and their perception of their child's perspective. Results from a representative cohort of patients and parents have informed the refinement of the survey. The final version is relatively brief as the questions to parents about their child's perceptions of care were redundant.

CONCLUSIONS: We have now defined a conceptual framework, indicators and tools to measure the adolescent friendliness of healthcare within a hospital setting.

Keywords: Quality of Care, Adolescent Friendly Care, Indicators, Survey, Hospital

PP121

Youth-Friendly Cancer Care: Meeting the Psychosocial Supportive Care Needs of Adolescents and Young Adults

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OBJECTIVE: Despite great global interest in cancer service reform, there is scarce evidence about how best to meet the needs of adolescents and young adults with cancer (AYAs). We set out to investigate the supportive care needs of AYAs and their parents with the goal of developing a program logic model of best practice psychosocial supportive care.

METHODS: The first stage was a qualitative study. Identified from clinical databases, eligible patients were 15-25 year olds, 6-24 months from a cancer diagnosis, together with a parent/carer. Interviews were undertaken by telephone and then transcribed. Nvivo and team meeting discussions informed thematic analysis of the transcripts.

RESULTS: Interviews were undertaken with 52 AYAs with various tumour types from different treatment settings (paediatric, adult, and AYA specific) in 6 clinical services across Australia, and 43 parents/carers. AYAs and parents described transitioning into life on treatment and into life after treatment as challenging. AYAs reported delays in diagnosis (often until parents become involved), reluctance to engage with the details of diagnosis and prognosis (typically coupled with parental 'holding' of this information), lack of developmentally appropriate discussion of psychosocial concerns (eg substance use, mental health), and inadequate discussion of fertility preservation. Parents highlighted challenges around employment including financial impact of lost income, and some confronting aspects of being a carer. Both groups described limiting the expression of emotions in order to prevent distressing each other.

CONCLUSIONS: These data indicate considerable room for improvement in many areas of psychosocial supportive care for young people with cancer, with a number of themes not previously described in the literature. These themes have since informed the development of a quantitative survey now being completed by a nationally representative sample. Both data sources will be used to inform the articulation of a developmentally appropriate model of care for this age group.

Keywords: adolescents, young adults, cancer, supportive care model, mixed-method research, psychosocial

PP122

Lobar Consolidation of Lung May Be Not always Lobar Pneumonia in Children

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OBJECTIVE: Echinococcosis (hydatid cyst) is the most common and serious human cestode disease, it's engaged in agriculture and animal husbandry countries like Turkey. A 10 years old girl with chronic cough, hemoptysis, and wide consolidated areas in chest X-ray is presented in order to emphasise hydatid cyst in differential diagnosis of lobar pneumonia.

METHODS: The patient had applied with the complaints of cough and hemoptysis before our hospital admission. The patient has been diagnosed with lobar pneumonia and oral antibiotic therapy had started but symptoms did not recovered. On physical examination, the body temperature = 36.7 °C, breath rate= 24/sec, Left lung sounds (especially at baseline) was significantly decreased and rales in the middle zone of the left lung was heard. There was tenderness through all abdomen. Liver and spleen were nonpalpable.

RESULTS: In chest X-ray, 105 mm diameter, nodular, sharp limited increase in density that may belong to cystic or solid lesion was detected which was completely invaded the middle and lower zones of the left hemithorax. As a result of tomographic assessment of lungs, 70x65 mm in size, unilocule, hypodense cysts was monitored in the superior segment of the lower lobe of the left lung, and 76x55 mm in size, hypodense cysts with milimetric septas was monitored in the posterobasal segment of the inferior lobe of the left lung. In addition, there was a hypodense cyst (82x80 mm) with wall calcification in the right lobe of the liver. The patient was referred to the thoracic surgery department.

CONCLUSIONS: We aimed to report this case in order to keep in mind the diagnosis of hydatid cyst in children because Turkey is endemic area, applied with chronic cough complaint and suspected to radiological findings.

Keywords: cyst hydatid, lobar consolidation, lung

PP123

Pediatricians' Awareness of Children's Oral Health: Knowledge, Attitudes and Practices among Turkish Pediatricians

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OBJECTIVE: In Turkey, 74.1% of children between 3 and 6 years of age develop dental caries. Caries affects 75% of children by the age of 15 years. In this study, we aimed to assess the depth of oral health and dental knowledge among pediatricians in Turkey, and to determine factors that distinguished groups based on different range of knowledge scores.

METHODS: We conducted a cross-sectional survey of demographics by assessing knowledge of oral and dental health, attitudes about oral health during well-child visits, and opinions about infant oral health care visits.

The outcome variables were the proportions of pediatricians who adhered to good clinical practice guidelines, who recommended dental visits for children under the age of one, and who had a knowledge score greater than 50%.

RESULTS: The participant characteristics that were significantly associated with a greater mean number of correct answers were female gender, good clinical practice, confidence in detecting dental caries and the presence of a dentistry department in their hospital ($p=0.001$, $p<0.001$, $p<0.001$ and $p=0.02$, respectively). Only 13.9% of pediatricians referred children under one year old to a dentist. After adjusting for the level of oral health education received during residency training, gender, having children, only the knowledge score was significant in predicting referral to a dentist for patients under the age of one year ($p=0.01$).

CONCLUSIONS: Some pediatricians' knowledge was found to be associated with practices in accordance with professional society recommendations. The lack of dental knowledge limits pediatricians' role in promoting children's oral health in daily practice.

Keywords: Dental caries, education, knowledge, oral health, physicians

PP124

Training of Pediatricians' about Children's Oral Health

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OBJECTIVE: Oral health has a serious impact on children's general health and on the economic status of the community. Despite the importance of oral health, pediatric dentistry received little attention in undergraduate pediatric curricula. The purpose of the current study was to determine what oral health education pediatricians received in Turkey.

METHODS: We conducted a cross-sectional survey about the physicians' education and training. The participants were asked if they received training in oral health care during medical school or residency or if they had gained training through practical experience.

RESULTS: A total of 446 surveys were completed with an overall response rate of 40%. Only 10.8% of pediatricians reported receiving education during residency and/or medical school, 21.5% gained training through practical experience and 67.7% reported receiving no training. The percentage of pediatricians who received training ≥ 3 hours was only 1.8%.

CONCLUSIONS: Collaborations between the dental community and pediatricians are essential. Oral health education should be introduced at each level of a pediatrician's medical training, and basic knowledge about the pathogenesis, prevention and diagnosis of caries must be included in residency curricula.

Keywords: Dental caries, education, training, oral health, pediatricians

PP125

Self –Medication and Related Health Complaints among Expatriate Adolescents in United Arab Emirates

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OBJECTIVE: Self-medication (SM) is one of the potentially hazardous health practices encountered globally among adolescents. However, information on SM practices in school students of United Arab Emirates is lacking. In this context, the present study aimed to identify the prevalence of SM and to assess the health complaints related to SM among expatriate adolescent students of UAE.

METHODS: A cross sectional survey was conducted among expatriate adolescents studying in high schools of UAE. Data was collected through a validated self-administered questionnaire and analyzed using SPSS 19 version. Descriptive analysis was conducted by calculating means and proportions for continuous and discrete data respectively. Inferential analysis was done by using the Pearson chi-square test of significance to identify association amongst variables.

RESULTS: The analytical sample was made up of 324 expatriate students of different ethnicity, age range of 14-19 years and was almost equally distributed by gender. The period prevalence rate of SM with both prescribed and non prescribed (over the counter) medications among the participants was 89%. Headache and fever were common self medicated conditions and consequently, analgesics and antipyretics were most commonly used both in the past two weeks and the past year before the survey. A high prevalence of SM with antibiotics (54%) was also observed. Females were self medicating significantly more often for certain health complaints. Average number of self medicated drugs in the past two weeks and the past year was 2 ± 1.5 and 3 ± 3.5 respectively.

CONCLUSIONS: The prevalence of SM among adolescent students in UAE is high with a preponderance of medicine use for certain health complaints among females. There is a need to create awareness about the risks and benefits of SM. Health care providers, pharmacists, educators and parents should be actively involved in health education strategies for establishing safe SM practices in adolescents.

Keywords: Self-medication, adolescents, United Arab Emirates, prevalence

PP126

Continuous Glucose Monitoring, Oral Glucose Tolerance and Insulin – Glucose Parameters in Adolescents with Simple Obesity

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OBJECTIVE: To assess oral glucose tolerance, 72-h continuous blood glucose concentrations by CGMS, calculate homeostatic model assessment (HOMA), and the quantitative insulin sensitivity check index (QUICKI) in adolescents with simple obesity.

METHODS: A standard OGTT was performed (1.75 g of glucose solution per kilogram of body weight to a maximum of 75 g). Plasma samples were collected at 0 and after 2 hours for determination of glucose and insulin concentration for calculation of HOMA and QUICKI. CGMS (using Medtronic MiniMed, Minnesota, USA) was performed for 24 hours covering the time for OGTT.

RESULTS: Using OGTT, the mean fasting and 2h glucose concentrations were 5.02 ± 0.73 mmol/L and 6.8 ± 1.56 mmol/L, respectively. OGTT revealed 3 cases (23%) with IFG (>5.6 mmol/L), 4 cases (30%) with IGT (>7.8 <11.1 mmol/L). Using the CGMS supported with the multiple blood glucose monitoring (glucometer) (3-4 times/day), IFG was detected in four cases, two of them were detected with the OGTT as well, the maximum BG (2h or more after meal) were >7.8 and <11.1 mmol/L (IGT) in 9 children (69%) and >11.1 mmol/L (diabetic) in one case (7.6%). Five cases had a minimum BG recorded of <2.7 mmol/L (hypoglycemia). Measuring HbA1C % (mean levels $5.7 \pm 0.3\%$) detected no abnormality (none $>6.5\%$). There were no significant correlations between the HOMA and the QUICKI with the BMI, fasting blood glucose concentrations, or the age ($r: <0.2$, $p>0.05$). The age was positively correlated with the BMI ($r: 0.82$, $p<0.001$).

CONCLUSIONS: Using CGMS has detected significantly more glycaemic abnormalities (76.6%) (IGT and diabetes) compared to the standard OGTT (53%) in obese adolescents. These findings denoted the presence of high prevalence of glycaemic abnormalities in our obese adolescents. CGMS is superior to OGTT and HbA1C in detecting glycemic abnormalities.

Keywords: Continuous glucose monitoring (CGMS), Oral glucose tolerance test, Obesity, Adolescents

PP127

Clinical Biochemical and Radiological Manifestations of Severe Vitamin D Deficiency in Adolescents Versus Children: Response to Therapy

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OBJECTIVE: To describe the clinical, biochemical and radiological manifestations of severe vitamin D deficiency in adolescents versus children and monitor the effects of treatment with a mega dose of IM cholecalciferol.

METHODS: All patients were subjected to: Detailed history taking including nutritional intake and exposure to sun, anthropometric measurements, Physical examination and measurement of serum creatinine, Ca, PO₄, albumin, ALP, parathormone and 25 OHD concentrations. During each clinic visit, every 2-3 months, the anthropometric and radiological parameters were reassessed and recorded and the laboratory tests repeated

RESULTS: At presentation adolescents with severe VDD presented with pain in weight bearing joints, back, thighs, knees, and calves (30/36) difficulty walking and/or climbing stairs and/or running (8/36), muscle cramps and/or facial twitches and/or carpo-pedal spasms (12/36) and genu valgum (2/36). Biochemical serum abnormalities included high ALP (31/36), low phosphate (10/36) and low Ca (4/36). 19 out of 35 of adolescents with VDD had radiological changes. Two different radiological patterns have been recognized in adolescents. In pattern 1 (n=7) the lesions appear as metaphyseal multi-locular cystic lesion with sclerotic margins, exocentric subcortical location without significant cortical erosions, periosteal reaction, osteoporosis, or other metaphyseal manifestations. This pattern occurred in adolescents with normal or increased BMI and good intake of milk. Whereas pattern 2 (n=12) appeared as generalized diminished bone density with prominent primary and secondary bone trabeculations, widening of the metaphyseal zone with relatively more lucency with loss of all bone trabeculations. No cupping or fraying of the metaphyses was identified. This pattern occurred in adolescents with relatively lower BMI with poor intake of milk and lower IGF-I levels compared to those with pattern 1 (142±56 ng/ml versus 199±78 ng/ml, p=0.002), p = 0.002).

CONCLUSIONS: An IM megadose of cholecalciferol is an effective therapy for treatment of VDD in adolescents for 3 months but not for 6 months.

Keywords: Vitamin D deficiency, adolescents, children, radiology, treatment.

PP128

Thalassemia Major in Adolescent: Support, Follow up and Difficulties of Iron Chelation

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OBJECTIVE: β thalassemia major is frequent in Tunisia, severe by its complications, its management is a public health problem, it is an autosomal recessive hemoglobinopathy characterized by a defect in the synthesis of β -globulin chains. Patients receive regular blood transfusions. the body is not able to get rid of iron overload. Desferoxamine is usually administered five nights per week by an automatic pump. Actually, There is two oral Iron chelations which are recently introduced in our country

METHODS: Our population includes 10 patients, 5 girls and 5 boys. The age at diagnosis ranged from 4 months to 3 years. The current age of our patients is between 14 years and 22 years

Monitoring of these patients is both: Clinical: Growth, puberty, hepatomegaly and splenomegaly

Biological: complete blood account before and after transfusion; liver blood test, thyroid blood test, hepatitis B, C and VIH serology and serum ferritin Radiology: echocardiography, abdominal ultrasound and MRI T2*

RESULTS: Several complications can occur in β thalassemia: hypersplenism, cardiac failure, autoimmune hemolytic anaemia and delay stature and puberty Iron chelation was made at first by desferoxamine and later by Deferasirox.

Desferoxamine dose: 30 to 50 mg / kg / day

Subcutaneously; during 5 / 7 days; started as soon as the serum ferritin > 1000 μ g / l

But there are many problems:

The non-availability of Desferal

The non-availability of syringes,

The dysfunction of the pump

The psychological impact of this therapeutic, especially in adolescence

Deferasirox dose: 20 to 40 mg / kg / day; dispersible tablets

One oral single dose per day

Indicated in the treatment of post-transfusional hemosiderosis, also when desferoxamine therapy is inappropriate.

CONCLUSIONS: Conventional management of β thalassemia major is expensive in underdeveloping countries like Tunisia. The most expenditure is represented by Iron chelation.

Keywords: β thalassemia major adolescent iron chelation

PP129

The Effect of Swimming on Bone Metabolism in Elite Adolescent Swimmers

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OBJECTIVE: Weight bearing exercise has been identified as having the most positive influence on bone mineral density (BMD). It is controversial whether non-weight bearing sports such as swimming improve BMD.

METHODS: Seventy-nine elite swimmers (38 female, 41 males) between the ages of 10-21 years (mean 12.19) were studied. All subjects underwent combined measurement of BMD by dual-energy X-ray absorptiometry and specific biochemical markers of bone turnover. Height, weight, ideal body weight ratio, BMI, Tanner stage, bone age, daily calorie and calcium intake, history of chronic illness and medications were recorded. Number of hours of training per week, style of swimming, and type of training was noted.

RESULTS: Two of the patients (2.5%) were found to have osteoporosis (z score <-2.5), 10 patients (12.5%) were found to have osteopenia in one region either the proximal femur or lumbar spine (z-score: between -1 and -2.5) and 10 patients (12.5%) were found to have a total osteopenic score in both regions. To evaluate the etiology of low BMD those with and without low BMD were evaluated for sex, age, calcium intake, amount of hours training in water and on ground, style of swimming and number of years of training. The only statistically significant finding was higher calcium intake showed higher BMD (P<0.17). Another important finding was low calorie and calcium intake, mean 1900 Kcal and mean 685mg respectively.

CONCLUSIONS: Of elite swimmers 27.8% had low BMD which shows individuals engaged in high-intensity chronic training for swimming do not have augmented bone mineral accretion. Although we were not able to statistically show the affect of training on ground, we do believe it is an important part of training programs for swimmers. Low intake of calcium was the only significant cause of low BMD and the mean intake was well below the recommended daily allowance for adolescents.

Keywords: Swimming, elite athlete, adolescent, Bone Mineral density

PP130

Hemophagocytic Syndrome in Juvenile Systemic Lupus Erythematosus

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OBJECTIVE: Systemic Lupus Erythematosus (SLE) is an autoimmune disease affecting especially adult women. Juvenile forms represent 15 to 20% of all SLE cases. The diagnosis in adolescent patients is often delayed due to lack of specificity of symptoms such as fatigue, headache, weight loss or prolonged fever.

METHODS: We report the case of a 15-year-old girl with no history of familiar autoimmune disease hospitalized for etiologic assessment of an isolated prolonged fever evolving for one month.

RESULTS: There was no cutaneous or articular symptoms and no particularity in clinical examination, except a plateau fever of 39 to 40°C. Biological assessment showed pancytopenia with hemolytic immunological anemia, biological inflammatory syndrome, biological signs of hemophagocytic syndrome confirmed by cytological examination of bone marrow. After eliminating infectious causes of prolonged fever, immunological laboratory tests were performed and showed strongly positive antinuclear antibodies (ANA) as well as anti DNA native antibodies. The diagnosis of SLE complicated with hemophagocytic syndrome was retained. There was no extra hematological impairment especially no renal impairment. The treatment was based on High doses of glucocorticoids combined with synthetic anti malaria drug. Both clinical and biological evolution were favorable.

CONCLUSIONS: Juvenile systemic Lupus Erythematosus is rare, polymorphic in its clinical presentation but also more severe because of greater frequency of renal impairment and difficulty of patients treatment compliance.

Keywords: Hemophagocytic Syndrome, Juvenile Systemic Lupus Erythematosus

PP131

The Evaluation of Oxidative Stress Parameters and Body Composition in Obese Children and Adolescents and in Their Parents

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OBJECTIVE: The purpose of this study is to analyse the relationship between the obese children and adolescents and their parents for the body composition and destructive and protective features of the oxidative metabolism.

METHODS: A total of 48 obese children and adolescents (aged 6-16 years) and their parents and 36 age-matched healthy controls were included in the study. Anthropometric measurements and total and segmental body compositions were evaluated in all subjects. Fasting plasma glucose, insulin and lipids were measured. The followings were analysed as oxidative stress parameters: Malondialdehyde (MDA), oxidized LDL (oxLDL), small dense LDL (sdLDL), endothelin (ET-1), and paraoxonase (PON-1). The correlations of these parameters in obese subjects with those in their parents were analysed.

RESULTS: There were significant difference for the body fat percentage, insulin, lipids, HOMA-IR and oxLDL levels between the obese subjects and the healthy controls. In obese children and adolescents oxLDL was positively correlated with LDL, total cholesterol, and triglycerides. The significant correlations between the metabolic parameters of the obese patients and those of their parents were found: Child's sdLDL and mother's insulin ($r=0.687$, $p<0.05$); Child's sdLDL and mother's HOMA ($r=0.67$, $p<0.05$); Child's PON-1 and mother's ET-1 ($r=0.70$, $p<0.05$); Child's sdLDL and mother's HOMA ($r=0.67$, $p<0.05$); Child's HOMA and father's fat mass ($r=0.50$, $p<0.05$); Child's MDA and father's LDL ($r=-0.56$, $p<0.05$); Child's oxLDL and father's oxLDL ($r=0.58$, $p<0.05$).

CONCLUSIONS: This is the first study in literature investigating the metabolic relationship regarding oxidative markers in obese patients and their parents. In this study, significant relationships were found between obese children and adolescents and their parents for the oxidative stress parameters and body compositions.

Keywords: Obesity, parents, Malondialdehyde (MDA), oxidized LDL (oxLDL), small dense LDL (sdLDL), endothelin (ET-1), and paraoxonase (PON-1)

PP132

Overweight in Adolescents: Impact of a Cognitive Behavioural Intervention Program on Weight Management in Depressive Overweight Adolescents

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OBJECTIVE: The aim of this study was to determine the effect of cognitive behavioural group therapy (CBT) in depressive overweight adolescents.

METHODS: Study group composed of 19 male (age 14, 05 ± 2 , 10) and 32 female (age 14, 47 ± 1 , 99) overweight adolescents who attended adolescent clinic.

Patients classified as overweight and obese according to Cole criteria. The age, gender, and height-specific 95th percentile was used to indicate high blood pressure. Insulin resistance was defined as a HOMA-IR >95th percentile according to D'Annunzio criteria. Children's Depression Inventory (CDI) (Kovacs, 1981), Capa Social Phobia Scale for Children and Adolescents, Social anxiety scale, Coopersmith Self-esteem Inventory and Strength and difficulties questionnaire (SDQ) was used to screen psychopathology. Quality of Life was measured by the KINDL® questionnaire.

Patients were divided into two groups:

1) Overweight adolescents without depression receiving lifestyle interventions 2) Overweight adolescents with depression receiving CBT +lifestyle interventions. Depressive patients will attend to 9 sessions CBT and there will be a supplemented CBT parent group.

The impact of treatment modalities on weight management and on self-esteem, social anxiety, life quality and social phobia will be assessed after 10 weeks therapy

RESULTS: Thirty five percent of the patients were classified as overweight and 65% of them were classified as obese. Twenty two percent of them have high blood pressure, 47% of them have insulin resistance.

Seventeen percent of adolescents had depression and 16% had social phobia, only one patient had social anxiety, only one patient had a low self-esteem. Twenty six percent of them were classified as having high risk for mental problem on SDQ.

CONCLUSIONS: Preliminary results showed that depression among overweight adolescents are common. We would be able to give our definite results after completing the 9 sessions of CBT for depressive adolescents.

Keywords: Adolescents, depressive, overweight, cognitive, behavioural, intervention

PP133

Low Levels of Metabolic Syndrome(Mets) in a Community Based Obesity Trial

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OBJECTIVE: The HELP trial is an RCT of a motivational-interviewing intervention for adolescents with obesity(BMI \geq 95 centile aged 12-19)recruited from the community.Here we present baseline cardio-metabolic and anthropometric data for 111 participants recruited thus far.

METHODS: Patients with chronic illness are excluded. In addition to clinical measures and fasting blood-testing,non-invasive measures of arterial stiffening(pulse wave velocity:PWV and pulse wave analysis:PWA)were recorded.

RESULTS: Participants: mean age 15.3 years;60% female;14% pre/early pubertal,24% mid,37% late. 39% south-Asian ethnicity,33% white/other,28% black.

Median BMI 32.4;mean BMI-SDS 2.85.100% had waist circumference \geq 95th centile (or \geq adult thresholds aged >16).1 person had hypertension defined as BP \geq 95th centile.

16% had Homeostatic model assessment(insulin resistance)(HOMA-IR) \geq 4.5.18.9% had raised insulin for pubertal stage.36% had HbA1c $>5.7\%$.59% had acanthosis nigricans.Sensitivity and specificity of acanthosis for HOMA-IR >4.5 was 77.8% and 45.1%.Cholesterol/HDL ratio was >3.6 (95th centile children) for 56%; >4 (adult cut-off) for 34%.18% had cholesterol \geq 5.2mmol/L;19% had HDL <0.9 mmol/L;21% had triglycerides \geq 1.47mmol/L.

5% met IDF-criteria for the MetS in adolescents and 10% met other published MetS pediatric criteria.PWA data was available for 85%,PWV for 58%.PWA was raised(>95 th centile)in 20%. Raised PWA was associated with greater BMI-SDS(OR3.31,95% CI:1.13-9.67) controlled for age,sex,ethnicity and HOMA-R. There was an association between PWV and BMI-SDS when controlled for age, sex, ethnicity and HOMA-IR($p=0.02$, $r=0.37$).

CONCLUSIONS: Prevalence of the MetS in our community sample of obese adolescents is less than reported elsewhere, although proportions with abnormal cardiovascular risk factors were high. A greater proportion of our group would have the MetS using a definition that incorporates insulin resistance and HbA1c—suggesting more work is needed on definitions in adolescents.

Association of BMI-SDS with measures of arterial stiffening in our study contributes to confirming a link between BMI and longer-term cardiovascular risk.

Keywords: Metabolic syndrome, obesity, adolescence, insulin resistance, hypertension

PP134

Primary Care Professionals' Experience of Treating Adolescent Obesity: An Interpretative Phenomenological Study

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OBJECTIVE: To explore the experiences and perceptions of primary care professionals with regards to weight management with adolescent patients

METHODS: In-depth face-to-face interviews were conducted with eight health care professionals (HCPs) based at general practices in two English counties. All interviews were recorded and transcribed verbatim, and analysed using Interpretative Phenomenological Analysis (IPA). The number of interviewees was kept deliberately low (four general practitioners (GPs) and four practice nurses) in line with guidelines for undertaking IPA research.

RESULTS: Three main themes were identified: (1) HCPs' roles & personal identity; (2) Managing patients; and (3) Managing adolescents. Under the first theme, HCPs discussed the relevance of obesity management to their professional role, with most considering general practice to be a difficult setting for optimum care in this area. They showed ambivalence towards the incorporation of obesity management within their professional role, and talked about their own endeavours in this domain more in terms of personal rather than professional identity. Under the second theme, general aspects of obesity management with patients was highlighted, particularly the difficulty of how to discuss the topic of weight with a patient who had attended for other (unrelated) reasons, and the importance of creating partnerships with patients in order to maximise treatment effects. Finally, under the 3rd theme, HCPs discussed issues of particular relevance when dealing with adolescent patients; participants showed a tendency to perceive adolescents as particularly vulnerable with regards to discussions about weight, a perception that sometimes further inhibited weight management with this age group.

CONCLUSIONS: If policy initiatives suggesting a role for primary care in managing obesity in young people are to be effective, it is essential that the concerns of HCPs regarding the relevance of obesity management to their professional role, and their worry about causing harm to adolescent patients, are understood.

Keywords: Adolescent, obesity, general practice, patient-centred care

PP135

Why Parents Need To Be Involved in The Treatment of Their Obese Teenagers ? Results of a Qualitative Study

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OBJECTIVE: To explore parents' and adolescents' perceptions of youth obesity, their expectations of a family based behavioral therapy for obesity, as well as their evolution throughout the program.

METHODS: Qualitative study involving focus groups with parents and adolescents before and after a five months family based behavioral therapy for obesity. Focus groups were tape recorded and transcribed verbatim. A content analysis was performed in order to produce representing themes identified in the text.

RESULTS: Before the program, parents felt helpless, with no personal resources. They were scared by the progressive autonomy of their child and considered them as not being able to take control over food. Obesity was a major source of conflict in the family for both parents and adolescents. The adolescents felt discouraged, with no family support. After the program, parents have understood their co responsibility in the treatment and made changes at home in order to support it. Relationships were less conflictual and some mutual trust was restored. The adolescents felt more responsible and self confident in the changes they can do. For most of them, well-being was enhanced. Parents and adolescents have highly appreciated the group support.

CONCLUSIONS: Weight loss is not the only issue of obesity therapy at this age. Involvement of the whole family in the treatment of obesity is crucial to restore co responsibility, trust and communication in these families which are essential components of successful weight loss.

Keywords: Adolescent, obesity, family therapy

PP136

Right Ventricle Function in Obese Adolescents with or without Hypertension: Insights from Tissue Doppler Imaging

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OBJECTIVE: The aim of this study was to present right ventricle echocardiographic parameters in asymptomatic adolescents with obesity and/or hypertension.

METHODS: 93 obese (n=36 obese-nonthypertensive and n=57 obese-hypertensive; body mass index >30 kg/m²) and 14 non-obese hypertensive (body mass index=17-25 kg/m²) adolescent along with 23 age-matched non-obese, non-hypertensive (body mass index=17-25 kg/m²) adolescent for the control group, were included in the study. Pulsed Doppler and tissue Doppler parameters were studied using transthoracic echocardiography for right ventricular function.

RESULTS: There was significant difference in tricuspid valve(TV) myocardial performance index (MPI), TV isovolumic relaxation time (IVRT), and TV isovolumic contraction time (IVCT) when the hypertensive and normotensive cases in the non-obese group were compared. While there was significant difference in all tissue Doppler parameters between the obese and non-obese cases in the hypertensive group, there was also significant difference in TV E/A ratios and TV MPI parameters between the hypertensive and non-hypertensive cases in the non-obese group.

CONCLUSIONS: According to our findings, conventional and tissue Doppler echocardiography is useful when demonstrating the effects of obesity on the right ventricle, both in the presence and absence of accompanying hypertension, and echocardiographic indicators of right ventricle dysfunction vary depending on whether obesity is unaccompanied or not.

Keywords: Adolescent; hypertension; obesity; echocardiography

PP137

Design and Implementation of Educational Material to Help Overweight Teens and Their Parents to Enroll in A Group Program

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OBJECTIVE: Most teen/parent “teams” wishing to enroll in a family based behavioral treatment program for obesity withdraw when the program starts. The aims of our study were to identify barriers to their involvement in group therapy and to understand their experiences, expectations, conceptions about their overweight and the proposed treatments

METHODS: Qualitative research involving 10 “teen-parent” pairs. We explored their difficulties related to weight issues, their expectations and what motivated them to participate in the program and reasons for their disengagement of this program. From the transcripts collected and analysed, we developed a teaching material that we tested on 20 other “teen-parent” pairs who wanted to participate to a group program, in order to identify their resources, their expectations and their barriers to inclusion and engagement in the program.

RESULTS: The first part of the study highlighted 3 educational needs: to find a meaning in the program in relation to their personal history; to define shared goals (teen-parent) to become partners in care and to identify their own resources in order to be less overwhelmed by weight issues. The teaching material we developed has helped the teenagers and their parents to decide whether the program met their needs and whether they wished to participate and to become partners in this project. The education materiel will be presented in the poster.

CONCLUSIONS: This material has improved teenagers and their parents adherence to the treatment of obesity, allowing them to find their sense in the therapeutic project. The discussion around this material also helped healthcare providers to expand their understanding of families' experiences and difficulties.

Keywords: Teenager, obesity, group program, adherence, teaching materiel

PP138

Australian Adolescents' Perceived School-Based Barriers and Facilitators to Engagement in Physical Activity

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OBJECTIVE: School-aged youth spend a significant amount of time either in transit to and from school, or within school settings performing a range of varying learning-based activities. Adolescent physical activity has also been shown to increase the likelihood of maintaining physical activity throughout adulthood. The purpose of this study is to investigate adolescents' perceived school-based barriers and facilitators to engagement in physical activity.

METHODS: One-hundred and twenty four participants (38 males and 86 females) were recruited from two non-denominational same-sex private schools, in Brisbane, Australia. The mean age and standard deviation (SD) was 13.83 (0.56) and 14.40 (2.33) for males and females respectively. Participants responded to a series questions regarding perceived barriers and facilitators to engagement in physical activity. Quantitative data was analysed using descriptive statistics and frequency distributions, and qualitative data with thematic analysis.

RESULTS: A total of 121 (97.6%) participants had complete data sets and were included in the analysis. School timetable (44.6%), homework (81.8%), and assessment (81.0%) were identified as the most prominent perceived factors, increasing the difficulty of physical activity engagement. Physical Education classes (71.9%) and school sport programs (80.2%) were identified as the most prominent perceived factors that facilitate engagement in physical activity. There was no significant gender effect.

CONCLUSIONS: Each of the identified factors perceived by adolescent's as either barriers or facilitators to engagement in physical activity may be addressed by administrators at a school and government policy level. These may include strategies such as; increasing the assigned hours to physical education classes, providing additional extra-curricular sporting opportunities, and reviewing the time allocated to homework and assessment items. This may provide a simpler, low-cost solution to increasing youth physical activity, as opposed to contemporary higher-cost strategies utilising increased staff commitment, mass media, provision of equipment and counsellors and other health professionals.

Keywords: Physical activity, youth, adolescent, school, barrier, facilitator, policy

PP139

The Use of Sms Messaging for Physical Activity Promotion: Preferences of Australian Adolescents and Their Parents

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OBJECTIVE: Recent increases in youth mobile phone ownership and usage may provide a unique and innovative opportunity for engagement by health promoters, via a familiar and immediately accessible medium. This study investigated adolescents' and their parents' preferences for promoting physical activity via means of SMS messaging.

METHODS: Adolescents (36 males and 76 females) and their parents (37 males 75 females) were recruited from two non-denominational same-sex private schools, in Brisbane, Australia. The mean age and standard deviation (SD) for adolescents and parents was 14.03 (0.58) and 47.18 (4.65) respectively. Participants responded to a series of questions regarding mobile phone ownership, and preferences for physical activity, school-based physical activity programs, and programs involving SMS messaging. Data analysis included descriptive statistics and frequency distributions. T-tests were employed to measure gender effect.

RESULTS: Overall, 47 (42%) parents desired their child to be more physically active, and were interested for their child to participate in a school-based physical activity program. Of those parents, 16 (34%) parents were interested in their child participating in an SMS-based physical activity program, with 21 (45%) not interested, and 10 (21%) neutral. One hundred and four (95%) adolescents owned a mobile phone, with 84 (82%) of those adolescents wanting to be more physically active. Of those adolescents, 14 (17%) were interested in participating in an SMS-based physical activity program, with 40 (48%) not interested, and 30 (36%) neutral. There was no significant gender effect.

CONCLUSIONS: Although SMS messaging may provide an innovative method for youth physical activity promotion, low levels of interest are concerning. These results differ from other studies utilising SMS messaging for the purpose of health promotion, where more positive feedback from participants were reported. A screening process to gauge interest prior to the implementation of any SMS-based health promotion program may prove invaluable toward the success of the program.

Keywords: Youth, adolescent, parents, physical activity, intervention, mobile phone, sms

PP140

Relationship of Bmd to Demographic-Anthropometric Parameters, Calcium Intake and Physical Activity in Greek Male Adolescents

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OBJECTIVE: Bone density is increasing during adolescence and is influenced by a number of factors. The aim of this study was to investigate the relationship between Bone Mineral Density (BMD) and demographic and anthropometric characteristics, calcium intake and physical activity in Greek healthy adolescent boys.

METHODS: A total of 63 healthy male adolescents aged 9-18 years (mean 13.5±2.1 years) that attended the Center for Adolescent Medicine over a 3-year period (2008- 2011), were enrolled in the study. For each participant a thorough personal and dietary history was obtained, Body Mass Index (BMI) was calculated from body weight and height and total body lean mass was estimated from the sum of 5 skin-fold thicknesses (triceps, biceps, subscapular, suprailiac, calf). All adolescents underwent physical fitness status assessment by the European physical fitness test battery (EUROFIT) and BMD measurement of the lumbar spine (L1-L4) by dual-energy X-ray absorptiometry. Pearson's correlation coefficient was used to assess the strength of association between normally distributed continuous variables. The SAS statistical package (Version 9.1, SAS Institute Inc, Cary, NC) was used in all analyses.

RESULTS: Bone mineral density was positively and strongly correlated with age ($p<0.0001$) and BMI ($p=0.004$) whereas its correlation with total body lean mass was of borderline statistical significance ($p=0.045$). No correlation was found between BMD and birth weight or calcium intake. From the five categories of EUROFIT, only the multistage 20 metre shuttle run test was found to be adversely associated with BMD ($p=0.001$).

CONCLUSIONS: Certain parameters of physical fitness in the adolescent boys studied, were found to be associated with more favorable skeletal health outcome. Further studies are needed in order to investigate whether these parameters have predictive value for BMD so as to be used for the detection of male adolescents with potential risk for osteoporosis later in their life.

Keywords: Bone mineral density, bone health, adolescence, Greek adolescent males

PP141

Body Image Perceptions of Adolescents in A Province in North-East Thailand***Rosawan Sripanidkulchai Areemit, Soontaree Boonsing***

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OBJECTIVE: Body image is part of self identity development during adolescence. Because there is scarce data in Thailand, the authors aim to explore the perceptions of body image among healthy adolescents.**METHODS:** Adolescents from schools and a university were randomly selected and divided by age into early (10-13), middle (14-16) and late (17-21) adolescents. They were asked to complete a self administered questionnaire. Data was collected from March to October, 2011, demographic information, self reported weight and height were collected and body mass index (BMI) was calculated. Perception of one's figure, preferred figure as an adult, preferred boy/girlfriend's figure and a healthy person's figure were assessed by using the modified Stunkard figures.**RESULTS:** Five hundred forty adolescents (180 per age group) participated in the study, 45.4% were male. The BMI of the participants were less than the 5th, between the 5th - 95th, and above the 95th percentile for age in 23%, 67% and 10% of females and 11%, 69% and 20% of males. The perception of one's figure was too thin, just right and too fat in 21.4%, 34.9% and 43.7% of females and 21.2%, 48.2%, and 30.6% of males. Twenty five percent of women and 4.5% men chose their "figure as an adult" to be thinner than the healthy range. 17.1% of males and 10.2% of females preferred to have a girlfriend or boyfriend whose figure was thinner than the healthy range. Four percent of the subjects chose "a healthy person's figure" that was thinner than the healthy range.**CONCLUSIONS:** The majority of adolescents had a BMI within the normal range, but the majority of females perceived themselves as "too fat". Body image disproportion could be a symptom of eating disorders and further studies are warranted.**Keywords:** Body image, Adolescent, Thailand

PP142

Monitoring The Health of New Zealand's Young People: A Decade of Surveillance Research***Terryann C Clark, Theresa Fleming*, Simon Denny*, Pat Bullen**, Sue Crengle***, Ben Dyson**, Sarah Fortune****, Tasileta Teevale*****, Jennifer Utter*****, Roshini Peiris John*****, Elizabeth Robinson*****, Janie Sheridan********

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OBJECTIVE: The Youth2000 survey series aims to improve the health and wellbeing of New Zealand's young people by providing accurate and timely information that communities, schools, parents and policy makers to improve the health status of young people. The aim of this abstract is to describe major health trends for New Zealand's young people utilising the Youth2000 surveys undertaken in 2001, 2007 and 2012.**METHODS:** Nationally representative surveys of New Zealand's young people attending secondary schools were undertaken in 2001 (n=9699), 2007 (n=9107) and 2012 (n=8500). The questionnaires covered important health and wellbeing topics for young people in New Zealand. The surveys were administered via Multi-media Computer Assisted Self-Interview (M-CASI) on internet tablets/laptops. The survey was funded by a range of stakeholders including the Ministries of Youth Development, Social Development, Health, Education, Justice, the Department of Labour, Families Commission and the Alcohol Advisory Council of New Zealand. The Youth'12 survey was given ethical approval by the University of Auckland Human Subject Ethics Committee (ref 2011/206).**RESULTS:** Main indicators and trends for physical health, mental health, substance use, sexual health and injury will be presented for New Zealand youth utilising three waves of data by gender to identify priorities in healthcare.**CONCLUSIONS:** This study highlights the importance of monitoring a comprehensive range of health indicators at a national level as a means to advocate for appropriate healthcare delivery, identify priorities and develop relevant policy in collaboration with Government stakeholders.**Keywords:** Youth, Survey research, mental health, sexual health, injury, health, trends, policy

PP143

Health Literacy and Preventing Behaviors among High School Students in Thailand

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OBJECTIVE: The aims of this study were to develop health literacy measurement and to investigate the associations between health literacy and their preventive behaviors with overweight status among high school students in Thailand.

METHODS: A pilot survey was conducted in initial stage in order to assess the internal consistency and construct validity of health literacy using exploratory factor analysis. A multi-stage random sampling was applied in nationwide survey. A total of 1,328 students in four provinces and Bangkok were participated in this study. The structured questionnaires were used to collect data from December 2011 to January 2012. Weight and height of participants were measured by field researchers. There questionnaire consisted of 7 parts; a) socio-demographic factors; b) health literacy; c) access to information; d) self management skill; e) media literacy, f) decision skill and g) preventing behaviors. General characteristic was described and Chi-square tests were used to identify their relationships between independent variables and their status.

RESULTS: Almost half of overweight and obese students self-reported fair to bad health. Only 56.8% were correctly self-reported body size using weight by height standard. Students from North-Eastern region had inadequate health literacy compared with other regions. Health literacy such as media health literacy and self-management skills were significantly associated with their weight status respectively ($p=0.02$ and $p=0.03$). On the contrary, decision skill was not significantly associated with obesity ($p=0.37$). Drinking clean water > 6 glasses and having both soft drink and sweet within a meal among overweight and obese groups were more frequent than normal weight group significantly.

CONCLUSIONS: Health literacy has increasing importance in public health particularly in teenage obesity. It is concerned with media health literacy, self-management skills, that associated with their obesity status. The measurement tools also captured the different dimensions of health literacy within Thai context.

Keywords: Health literacy, teenage obesity, preventing behaviours

PP144

Psychosocial Correlates of General Self-Efficacy in 11-15 Year Old Adolescents in England

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OBJECTIVE: To explore the relative impact of different aspects of adolescents' psychosocial environment on general self-efficacy

METHODS: The study drew on data from 4400 students aged 11-15 years who participated in the Health Behaviour in School-aged Children (HBSC) study in England in 2009/2010. Aspects of the adolescents' psychosocial environment (family affluence, family life, school life, peer relationships, community life, extracurricular activities, and health-related quality of life (HRQoL)), as well as age and gender, were investigated for their relative impact on adolescent general self-efficacy (GSE). The data was analysed using multi-level modelling.

RESULTS: In line with previous research, age was found to be significantly associated with GSE, with older students reporting higher levels of GSE than younger ones. Adolescents from higher affluence families also had higher GSE scores than lower affluence adolescents, as did those who reported greater involvement in extracurricular activities such as sports and drama. Having a strong sense of belonging in school was associated with greater GSE, and may be of particular relevance for those adolescents who feel strongly pressured by school work. HRQoL showed interactions with many of the effects, suggesting that it may have a moderating role in GSE. The relationship with parental involvement and engagement with school life was more complex and suggests that greater understanding is needed of how those factors operate in relation to GSE.

CONCLUSIONS: Taking into account multiple aspects of adolescents' psychosocial environment, participation in extracurricular activities and several aspects of connection with school life were shown to be important factors for young people's GSE. While reinforcing previous research in terms of the impact of age on GSE, our data did not find an association with gender which contradicts other studies that tend to show boys as having higher GSE. The findings are of particular relevance to educational policy.

Keywords: Adolescent, self-efficacy, psychosocial environment,

PP145

Impact of Body Image and Self -Esteem on Jamaican Adolescent Behaviour

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OBJECTIVE: Positive self-esteem has been shown to be associated with adolescent body habitus and lower risk taking behaviours. Few of these associations have been investigated in developing countries, where unique socio-cultural environments exist. This study examined the relationship between self-esteem, body habitus, body image and risky behaviours in Jamaican adolescents.

METHODS: A cross sectional survey of 1559 Jamaican 15-16 year olds was conducted. Study participants were a geographical subset of a national birth cohort study, who were enrolled at birth in 1986. Data collection included use of self-administered questionnaires and anthropometric measures. Self- perception was measured using the Harters Self-Perception Profile for Adolescents, body habitus was assessed by body mass index (BMI) and use of the modified Collins line drawings. Descriptive analyses were performed.

RESULTS: Eighty-six percent (86%) of adolescents reported being happy with their appearance, with males more likely to have good body image ($p<0.0001$). The majority of adolescents displayed high self-esteem, as measured by social acceptability (80.5%) and popularity (65.1%). Obese adolescents were more likely to have poor body image ($p<0.0001$) and low self-esteem ($p<0.0001$). Neither body image nor self-esteem were associated with current substance use, however adolescents with high self-esteem were more likely to have 'ever-used' cigarettes ($p<0.0001$), marijuana ($p=0.01$) and alcohol ($p<0.0001$). Self-esteem was not associated with initiation of sexual activity, but good body image was associated with consensual rather than forced first sex ($p=0.001$).

CONCLUSIONS: Jamaican adolescents' body image is associated with BMI. High self-esteem is associated with experimental substance use and good body image with consensual rather than forced sexual activity. These findings have not been reported previously in developed countries, suggesting that these associations may be related to socio-cultural influences. Interventions emanating from developing countries may be useful in guiding other resource poor countries to develop cost-effective interventions that enhance self-esteem

Keywords: Self-esteem, body image, adolescents, developing country

PP146

Adolescent External Cause Mortality in Greece (2000-2009) and Youth-Friendly Health Services: Priorities for The Future

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OBJECTIVE: Information about adolescents' external cause mortality in Greece is scarce, although they represent approximately 12% of the Greek population. The aim of the present study was to explore patterns, rates and trends of mortality due to external causes in adolescents aged 10-19 years in Greece, over the recent decade 2000-2009.

METHODS: Data were electronically derived from the database of the Hellenic Statistical Authority. General external mortality rates and specific mortality rates by major causes of death were studied throughout the 10-year period and time trends were calculated by models of trend analysis.

RESULTS: Road traffic accidents, illicit drug use and suicides were the top three external causes of death for adolescents in Greece and mortality rates were significantly higher in adolescent boys than in girls in all regions of the country. External cause mortality declined significantly by 43.5% over the decade (from 21.6 to 12.2 per 100,000; $p<0.0001$) due to significant declines in mortality from road traffic accidents (from 14.5 to 9.1 per 100,000; $p=0.0001$), substance abuse (from 2.4 to 0.6 per 100,000; $p=0.0003$) and suicides (from 1.6 to 0.5 per 100,000; $p=0.016$), mainly in the ages 15-19 years.

CONCLUSIONS: From 2000 to 2009 the major external killers of adolescents in all regions of Greece were psychosocial and behavioral in origin, all of which are largely preventable. The needs for youth-friendly health services and counseling about adolescents' psychosocial issues and life skills are enormous in Greece. The sharp decrease in mortality could be attributed to the amelioration of health care services and to several interventions that were implemented throughout the country over the decade and highlights the vast potential for further improvement by increasing focus on this vulnerable group. Adolescents in Greece would benefit by the expansion of preventive youth-friendly services in every region of the country.

Keywords: Adolescent mortality, youth friendly services, road traffic accidents, illicit drug use, suicides, Greece

PP147

Intrapersonal Factors Associated to Adolescent Sexual Behaviour in Latin-America: A Cross-Sectional Survey in Three Cities

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OBJECTIVE: Studies show that Latin-American adolescents initiate sexual activity at increasingly earlier ages and that only a minority use modern contraception consistently. This study aims to explore associated factors of adolescents' sexual behaviour.

METHODS: We assessed possible determinants of sexual onset and contraceptive use among 13–18 aged adolescents using data from cross-sectional surveys undertaken from July to November 2011 in three Latin-American cities: Cochabamba(Bolivia), Cuenca(Ecuador) and Managua (Nicaragua). We used logistic regression to calculate adjusted odds ratios (AOR) and to control for confounding factors.

RESULTS: Overall, 9605 adolescents participated in the study from which 3502 in Cochabamba, 3300 in Cuenca and 2803 in Managua. From the respondents of Cochabamba 24,8% reported having started sexual activity, from which 33,1% reported a consistent contraceptive use. In Cuenca the reported sexual activity and consistent contraceptive use were respectively 16,6% and 29,4%. In Managua it was respectively 27,6% and 47,5%.

A preliminary logistic analysis of the data show that respondents were more likely to report being sexually activity if they were regular alcohol users (Cochabamba: AOR= 5.56 p<0.001; Cuenca: AOR= 3.72,p<0.001; Managua:AOR=4.51,p<0.001); if they were living separated from their parents (Cochabamba:AOR=1.52,p<0.001; Cuenca: AOR=1.63,p<0.001;Managua AOR 1.48,p=0.002) and if unreligious (Cochabamba: AOR=1.32, p=0.008; Cuenca: AOR=1.48, p=0.002). Apart from socio-economic and demographic factors, we preliminary found that contraceptive use was related to adolescents' ease to communicate about sexuality activity if they were regular alcohol users (Cochabamba: AOR= 5.56 p<0.001; Cuenca: AOR= 3.72, p<0.001; Managua: AOR= 4.51,p<0.001); if they were living separated from their parents (Cochabamba: AOR= 1.52, p<0.001; Cuenca: AOR= 1.63, p<0.001; Managua AOR 1.48, p=0.002) and if unreligious (Cochabamba: AOR=1.32, p=0.008; Cuenca: AOR= 1.48, p=0.002). Apart from socio-economic and demographic factors, we preliminary found that contraceptive use was related to adolescents' ease to communicate about sexuality (Cochabamba: AOR= 2.51, p<0.001; Cuenca: AOR= 2.24, p= 0.01; Managua: AOR= 1.4, p=0.029) and their level of self-esteem (Cochabamba: AOR= 2.6, p<0.001; Cuenca: AOR= 2.9, p<0.001). The association of those and other possibly related factors (e.g. gender aspects) will be further analysed.

CONCLUSIONS: The preliminary results show some intrapersonal factors (religiosity, alcohol use, communication skills, self-esteem) related to adolescents' sexual behaviour and to be taken into account for the development of sexual health promoting strategies.

Keywords: Intrapersonal determinants, sexual behaviour, adolescents, Latin America, cross-sectional survey

PP148

Food Style in Adolescents: Contributions of the Health Education

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OBJECTIVE: The food style of adolescents have significant impact in developing oral diseases. The study aimed to evaluate the contributions of the implementation of a program of health education on adolescent eating style

METHODS: Analytical trial - before and after the intervention program on eating styles, with no control group, a sample of 200 adolescents, attending public schools in the central region of Portugal, aged between 11 and 16 years and 13.21 mean (SD= 1.014).

The data collection was done through a food Styles Questionnaire, administered before and after participation in the program of health education. The program, called "ProSorriso", consists of theoretical and practical training about healthy eating and evils of sugar.

RESULTS: Eating styles before Training Program in Oral Health reveal teens who make 5-6 meals per day (55.0%), 27.5% is between 3-4 meals. After the program - ProSorriso there is an increase of adolescents to make 5-6 meals per day (63.0%) and 33.0% is between 3-4 meals per day, with significant differences between the two evaluation periods (t = -3.739, p = 0.000).

Most teenagers before the program - ProSorriso ate sweets "sometimes" (47.0%) and 26.0% "almost every day." After the program ProSorriso, consumption of sweets decreased with consumption of sweets "sometimes" in 43.5% and only 8% "almost every day." The differences between the two moments are highly significant (t = -6,929, p = 0.000). The intake of soft drinks "once a day" before the program - ProSorriso was 35.5% and 13.0% "more than once a day." After training only 1.0% eat soft drinks "every day". The differences between both periods are significant (t = -6,270, p = 0.000).

CONCLUSIONS: Adolescents improve eating style after participation in the "ProSorriso", namely the number of meals per day and daily intake of sweets and soft drinks.

Keywords: Adolescents, dietary, health education

PP149

The Medicine Use and Corresponding Health Complaints among Turkish Adolescents, A Cross Sectional Survey

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OBJECTIVE: This study aims to investigate whether there is a gender specific pattern of medicine use, and to document relationship between medicine use and subjective health complaints.

METHODS: The prevalence of health complaints and medicine use of adolescents for headache, stomach-ache, sleeping difficulties and nervousness by gender were investigated in 1760 15th years of age adolescents. Statistical analyses included frequencies, cross-tabulations, chi square tests and odds ratios separately for girls and boys.

RESULTS: Medicine use for headache and stomach-ache was significantly more common among girls than among boys ($p < 0,001$). The odds of medicine use for headache was about nine times higher among boys and thirteen times higher among girls those who reported headache weekly compared to those who reported headache rarely or never during the preceding six months.

The odds of medicine use for stomach-ache was about five times higher among boys and six times higher among girls those who reported stomach-ache weekly compared to those who reported stomach-ache rarely or never during the preceding six months.

The odds of medicine use for difficulties in getting to sleep was about three times higher among boys and seven times higher among girls those who reported difficulties in getting to sleep weekly compared to those who reported difficulties in getting to sleep rarely or never during the preceding six months. The odds of medicine use for nervousness was about two times higher both among boys and girls those who reported nervousness weekly compared to those who reported nervousness rarely or never during the preceding six months.

CONCLUSIONS: These results indicate that adolescents who report more frequent recurrent health complaints are also more likely to report more frequent medicine use for their health complaints. Adolescents' medicine use should not be regarded as an acceptable behaviour should be regarded as an indicator of subjective health problems and personal burden.

Keywords: Adolescents, Turkish, medicine, health, complaints

PP150

Psychosocial Pathways to Sexually Transmitted Infection (Sti) Risk Among Youth Transitioning out of Foster Care: Evidence from a Longitudinal Cohort Study

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OBJECTIVE: To test the fit of a theoretically driven conceptual model of pathways to STI risk among foster youth transitioning to adulthood. The model included: 1) historical abuse and foster care experiences, 2) mental health and attachment style in late adolescence, and 3) STI risk in young adulthood.

METHODS: We used path analysis to analyze data from a longitudinal study of 732 youth transitioning out of foster care. Covariates included gender, race and an inverse probability weight. We also performed moderation analyses comparing models constrained and unconstrained by gender.

RESULTS: Thirty percent reported they or a partner had been diagnosed with an STI. Probability of other measured STI risk behaviors ranged from 9% (having sex for money) to 79% (inconsistent condom use). Overall model fit was good (Standardized Root Mean Squared Residual of 0.026). Increased risk of oppositional/delinquent behaviors mediated an association between abuse history and STI risk, via increased inconsistent condom use. There was also a borderline association with having greater than 5 partners. Having a very close relationship with a caregiver and remaining in foster care beyond age 18 decreased STI risk. Moderation analysis revealed better model fit when coefficients were allowed to vary by gender versus a constrained model, but few significant differences in individual path coefficients were found between male and female-only models.

CONCLUSIONS: Interventions/policies that: 1) address externalizing trauma sequelae, 2) promote close, stable substitute caregiver relationships, and 3) extend care to age 21 years have the potential to decrease STI risk in this population.

Keywords: Sexually transmitted infection, sexually transmitted disease, foster youth, foster care, delinquency

PP151

Recruitment Challenges: A Randomised Trial of a Community Based Obesity Intervention for Adolescents

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OBJECTIVE: To recruit 500 overweight adolescents aged 12 to 17 years from the community to the Staying Fit weight management randomized control trial.

METHODS: Staying Fit is an online intervention for overweight and obese adolescents. The program has 12 sessions and provides personalised nutrition, physical activity and body image modules to assist young people aged 12-17 years to manage their weight. Various recruitment strategies were employed utilising schools, social and mainstream media, clinical and community services to recruit a community based sample of young Australians to participate in an RCT of the Staying Fit program.

RESULTS: The most successful strategies for recruiting overweight and obese adolescents to the Staying Fit RCT were school newsletter advertisements. Parents were more likely to make the initial enquiry and strategies aimed at parents were more successful. Over two thirds of all enquiries resulted in an enrolment to the study, and the most common reasons for non-participation were that the adolescents were too young or had a co-morbidity that made them ineligible.

CONCLUSIONS: The success of research projects is founded on being able to recruit appropriate participants. There is a need to recruit a given number of eligible subjects to provide sufficient power to address the research question and often a limited time frame in which to recruit the sample. In Australia approximately one in three adolescents is currently overweight or obese, yet we found recruiting adolescents from the community for a research trial to address this issue was challenging and time intensive. The enrolment rate achieved in this study was higher than has been reported in previous community based obesity interventions in Australia and the USA.

Keywords: Recruitment, adolescents, overweight, obesity, community RCT

PP152

Recognition of Health and 5 Characteristics in Life-Span Development of the Adolescent and Elderly Groups

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OBJECTIVE: The purpose of this research is to investigate the confidence about their health and other 5 characteristics in life-span development using the multi-axis concentric circle scale in the adolescent and the elderly groups

METHODS: Subjects were Japanese young people (18-22 years old) and elderly people (65-79 years old). All the subjects were given to explanation about the purpose of this research and agreed with the cooperation in research. The subjects were asked to put an x mark on the suitable position on each axis and perform some evaluation of the degree of the confidence about their health at age 0 to 100. The subjects were also asked to estimate the degree of satisfaction, happiness, optimistic tendency, volition and similarity of themselves at present and themselves at age 0 to 100.

RESULTS: Results showed that the difference in change patterns of the mean score by 12 ages of these evaluation items between 2 groups were statistically significant ($p < 0.05$). Both 2 groups showed the peak score of the health item at the age of 20. However, the mean score of the health items at age 40 to 60 of the adolescent group were significantly lower than those of the elderly group ($p < 0.05$). The result also showed that the difference in the change pattern between the adolescent group and the elderly group of other 5 estimation items was larger than that of the health item. These results showed that the expected confidence about their health of the adolescent group in the middle years was lower than that of the elderly group and predictions about various kinds of future characteristics were difficult.

CONCLUSIONS: In order to enable suitable predictions about the future characteristics in the adolescent group and to maintain their health, it is desirable to offer more information about the possible future characteristics.

Keywords: Life-span development, the multi-axis concentric circle scale, recognition

PP153

Panacea, And “Disease of the Century” Through the Eyes of Post-Soviet Youth**Ekaterina Bagreeva**

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OBJECTIVE: The collapse of the Soviet Union was followed by a socio-economic crisis, and many state and public institutions were restructured affecting the approach to traditional values such as family, education and health. Medical care in Russia was modified extensively, and its accessibility and status was partially weakened.

In the following era, a new generation of children grew up with a special view on, and understanding of health, disease, trust as well as their own responsibility for factors affecting their personal well-being.

The purpose of our research was to find what these youths consider to be the panacea of today, what are the most important factors affecting their health condition, whom do they trust in health-related situations and where do they seek help; What are their ideas on “the disease of the century”, and how do they see the role of the government in protecting the health of young people in Russia?

METHODS: A pilot study was conducted in November 2012 on 100 young people aged 19-21 years using a questionnaire, and a series of in-depth interviews in Moscow in order to identify their attitudes towards health and related issues.

RESULTS: The result shows that there are three main groups of factors, that may be called the panacea from the deceases. First of all, a healthy lifestyle, sleep, and love. A significant gender difference was discovered in the answers to these questions. For advice in matters of health, many of the respondents turn primarily to their parents, and then to doctors. Young men show a tendency to rely on their own resources.

CONCLUSIONS: When answering the question of “the disease of the century”, two particular direction were identified; one pinpointing diseases such as HIV, AIDS and cancer, while the other pointed to different forms of addiction, such as alcohol, drugs and internet.

Keywords: Disease of the century, health factors, disease and addiction

PP154

Do Government Cash Transfers Work To Support Households in Caring for Orphaned Youth? Evidence from Western Kenya

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OBJECTIVE: Our objective was to describe indicators of socioeconomic (SES) and nutritional status and future outlook among orphaned adolescents (OA) aged 10-18 living in CT vs. non-CT households in western Kenya.

METHODS: This project follows a cohort of OA from 300 randomly selected households (CT:102, non-CT:198). Markers of SES included UNICEF-defined essential material possessions, household food security, adequacy of diet, and school attendance. School attendance was self-report and WHO-standardized Z-scores (body mass index (BMI)-for-age, height-for-age) were calculated using SAS macros (malnutrition defined as $Z < -2$). Future outlook was measured asking youth whether they felt they had limitless/many vs. limited/no opportunities in life. Baseline data were analyzed using multivariable logistic regression comparing children in CT-HH vs. non-CT HH. Odds ratios are adjusted (AOR) (with 95% confidence intervals, CI) for guardian age and sex.

RESULTS: Included in this analysis were data from 753 adolescents in 300 HH. The population was 48% female with a median age at enrolment of 13.7 years. Overall there were few differences in SES indicators, including HH food security, adequacy of diet, or possession of a pair of shoes and a blanket. Adolescents in CT-HH were less likely to have ≥ 2 pairs of clothes compared to non-CT HH (AOR: 0.57, 95%CI: 0.15-0.60). Adolescents in CT-HH were neither more nor less likely to be currently attending school (AOR: 1.09, 95%CI: 0.50-2.40), nor to have missed any days of school in the preceding month (AOR: 0.66, 95%CI: 0.43-0.1.01). There were no differences in BMI-for-age or height-for-age between the two groups. Adolescents living in CT-HH were more likely to have a positive future outlook (AOR: 1.86, 95% CI: 1.33-2.59).

CONCLUSIONS: OA in CT-HH appear to be at least on par with non-CT HH in SES and nutritional status, adding to growing evidence suggesting the CT program is having a positive effect.

Keywords: Orphans, adolescents, Africa, cash transfers, nutrition, food security, optimism, socioeconomic status

PP155

Nutritional Status and Adequacy of Diet among Orphaned Adolescents Living in Community-Based and Institutional Environments in Western Kenya

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OBJECTIVE: This analysis aimed to compare household food security, adequacy of diet, and nutritional status among orphaned adolescents aged 10-18 years living in households in the community, living on the street, and living in institutional environments in western Kenya.

METHODS: The Orphaned and Separated Children's Assessments Related (OSCAR) to their Health and Well-Being Project is a 5-year cohort of orphaned children and adolescents aged ≤ 18 year living in 300 randomly selected households, 20 Charitable Children's Institutions (CCIs) (i.e. orphanages) recruited through systematic invitation, and a convenience sample of 100 street-involved youth in Uasin Gishu (UG) County. Data are collected with standardized and validated instruments. Z-scores were calculated using Epi-Info and SAS 9.1 (malnutrition defined as $Z < -2$). Odds ratios are adjusted (AOR) (with 95% confidence intervals, CI) for guardian age and sex, and intra-household clustering.

RESULTS: There were 1583 adolescents eligible for analysis: 767 in CCIs, 740 in households in the community (HHs), and 76 street youth. The population was 45% female and median age of 13.6 years. Most youth (94%) reported an adequate diet: 95% in CCIs, 94% in HH's, and 99% of street youth ($p=0.08$). There were no differences among the categories of youth in BMI-for-age. Youth living in households were more likely to be stunted compared to those in CCI's (low height-for-age) (AOR 3.7, 95% CI: 2.6-5.2). Street youth were even more likely to be stunted compared to those in CCIs: (AOR: 10.3, 95% CI: 5.7-18.7).

CONCLUSIONS: Orphaned and separated adolescents living in the community and in institutional environments appear to have an equally adequate diet although there is some trend to suggest that street youth have a better diet. However, adolescents in the community and, particularly, those on the street are both far more likely to be stunted for their age, suggesting more chronic and long-term malnutrition than adolescents in institutions.

Keywords: Orphans, Africa, nutrition, street youth, adolescents, food security

PP156

Cross-Immunity to The 2009 Pandemic H1n1 Influenza Virus among Adolescents Born 1990-1996 in Indonesia

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OBJECTIVE: To analyze the level of cross-immunity to the pandemic 2009 virus resulting from previous influenza vaccination in adolescents age groups.

METHODS: The cross sectional study was conducted to 12-18 years old adolescents were born 1990-1996 in Indonesia. Using a haemagglutination inhibition assay, we measured cross-immunity antibodies to pandemic H1N1 virus (2009 H1N1) in stored serum samples from donor 12-18 years old adolescents were vaccinated with seasonal influenza vaccines contain A/H1N1/Solomon/2006 in June 2008.

RESULTS: A total of 78 of 131 adolescents (60%) who were born 1990-1995 had seropositive antibody titers of 40 or more against 2009 H1N1, whereas none of adolescents born after 1995. Vaccination with seasonal trivalent inactivated influenza vaccines resulted in seroconversion antibody to 2009 H1N1 of 15 (12%). No significance difference of seropositive percentage between pre and post vaccination. No age-related increase in cross-immunity against the 2009 A(H1N1) virus.

CONCLUSIONS: Vaccination with TIV seasonal influenza 2007-2008 vaccines induced little cross-immunity to 2009 H1N1 in adolescents born 1990-1996 in Indonesia

Keywords: Adolescent, cross-immunity, influenza pandemic 2009

PP157

Views of Community Pharmacy Personnel on Providing Services to Young People in New Zealand***Emma Horsfield, Janie Sheridan, Fiona Kelly***

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OBJECTIVE: Previous research has suggested that the convenience of community pharmacies could provide an opportunity to increase youth healthcare access, but few studies have investigated this area. This study aimed to explore the views of community pharmacy personnel with respect to providing services to young people aged 12-25, in order to identify any barriers and potential ways to overcome these.

METHODS: A youth participatory approach was used in the research design and will inform the interpretation of results. An interview guide was developed with a Youth Advisory Group (YAG). Fifteen semi-structured, qualitative interviews were conducted by the lead researcher (EH), with 6 pharmacists, 3 technicians, 3 assistants and 3 pharmacy owners. Interviews were recorded and transcribed verbatim and data were analysed to identify themes relating to barriers and facilitators. The next step will be to discuss results with the YAG. Their feedback will guide the interpretation and conclusions made.

RESULTS: Analysis conducted to date indicates that participants reported mostly positive experiences and attitudes towards youth. Common barriers discussed tended to be those perceived from the young person's perspective, such as lack of awareness regarding service availability, or reluctance to seek healthcare due to concerns about confidentiality or embarrassment. Several had experiences where young people could not afford products or services but described potential solutions to this issue. Some older participants discussed difficulties with communication and rapport. Nearly all participants said they would like more training on youth health, and thought this should be available for pharmacy staff as well as pharmacists.

CONCLUSIONS: Preliminary findings of this study suggest that pharmacy staff and pharmacists would benefit from more training in youth health to support development of community pharmacy's role in youth health as an accessible primary healthcare provider, although the YAG perspective is still required for complete interpretation. Following consultation with the YAG, recommendations will be made regarding potential ways to improve service delivery to youth. This study was funded by The University of Auckland and New Zealand Pharmacy Education and Research Funding, and ethics approval was obtained from the University of Auckland Human Participants Ethics Committee. The authors have no conflicts of interest to declare.

Keywords: Community Pharmacy, Pharmacies, Pharmacists, Young people, Youth Health, Primary Healthcare, Adolescent Health

PP158

"Public Policies in Latin America"***Susana Guizarro, Maria Del Carmen Calle*, Alberto Tomas Simioni*****

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**Ministry of Health of the province of Santa Fe, Argentina

OBJECTIVE: 1) Diffusion of public policies for Adolescents and Youth in Latin America

2) Different realities and the development of public policy in Latin America

METHODS: 1) Priorities and Challenges in Adolescent Health in the region

2) Role of Scientific Societies and Public Departments in search of Public Policy

3) Programs and targeted interventions based on Public Policy

RESULTS: Since more than 20 years, Latin America has reached progress in the development of public policy regarding Adolescents and Youth. From a diagnosis of the situation we have become aware of this need, which required to go far beyond a specific program or intervention. In this regard, scientific societies have met an important role forming regional groups and associations (ALAPE Adolescents Committee, ALOGIA and CODAJIC). This process led different countries to develop their ministries in specific areas to approach National Health Programs for the Adolescent and Youth. These events spurred on the development of specific programs for that purpose.

CONCLUSIONS: Development of Public Policies in Latin America is such important that it becomes a fact without precedents in other regions of the world. An analysis of this development, with their successes, but also with their difficulties and failures, can mean an important contribution in a World Congress.

Keywords: Public Health

PP159

Teaching Adolescent Health Research Course in a High School Curriculum

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OBJECTIVE: This course was designed to offer students the opportunity to study adolescent health and development in the context of current societal and public health issues. We consider the myriad factors that influence adolescent development, the current health status and health risk behaviors of adolescents focusing on epidemiological trends and behavioral and social etiological factors. Students will conduct original research on topics of interest to them, and will gain practice in presenting their results both orally in presentation to the class and in writing research reports. Students will use epiquery (a data set on adolescent issues) to access data on such topics as nutrition, weight management, eating disorders, alcohol and tobacco, teenage pregnancy, peer pressure, sexually transmitted diseases, bullying, sexual orientation etc. Students will use current data on these topics to support their individual research.

METHODS: 1. Delineate the health status of adolescents with regard to the following indicators:

- major mortalities and morbidities of youth (e.g., obesity, homicide, suicide, sexually transmitted infections, pregnancy etc.)
- the high-risk behaviors associated with these mortalities and morbidities (e.g., unsafe sexual activity; alcohol, tobacco, and drug use; food choices)
- the social and environmental factors and contexts which influence the health and well-being of adolescents

2. Analyze the relationship between and among environmental, social, and personal factors that influence adolescent health.

3. Describe and analyze strategies for preventing public health problems and for improving adolescent health.

4. Synthesize research to develop recommendations to prevent health-related problems.

5. Comprehend concepts related to health promotion and disease prevention to enhance health.

RESULTS: Each student conducted independent health research projects and presented various findings on different topics.

CONCLUSIONS: NA

Keywords: Adolescent health, research

PP160

“ Careful Poor Control” or Recurrent Diabetic Ketoacidosis: Exploratory Factor Analysis of Phenotypes of Diabetes Control in Young People from a Large Multi-Centre Study: Funded by the Uk National Institute of Health Research (Nih-Hta) (06/44/05)

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OBJECTIVE: Control of diabetes is a multi-dimensional concept encompassing quality of life as well as medical indicators such as glycaemic control (HbA1c), hypoglycaemia and diabetic ketoacidosis (DKA) requiring admission to hospital.

Traditional concepts of the poorly controlled adolescent is of a young person non-adherent to insulin, blood glucose (BG) monitoring and dietary regimens, resulting in high HbA1c and recurrent episodes of DKA. High HbA1c, is regularly conflated with recurrent DKA. Yet many young people with high HbA1c report high quality of life and are never admitted to hospital with DKA.

We hypothesised that high HbA1c reflects “careful poor control” in adolescents, who avoid hypoglycaemia (hypos), hospitalisation and dietary regimens by carefully running high BG levels avoiding hypos and DKA. Careful Poor Control constitutes a discrete “phenotype” of poor diabetes control in adolescence, separate from recurrent DKA.

METHODS: Data were obtained from a large UK multi-centre diabetes self-management study (CASCADE).

284 young people (8-16 year) from 28 UK hospitals provided HbA1c and completed confidential questionnaires. A priori hypothesised variables included in the factor analysis were HbA1c, hospital admissions in the past 6 months (parental report), frequency of hypoglycaemic episodes (parental report), frequency of BG testing (young person report) and insulin withholding (young person report).

RESULTS: The factor analysis included 185 observations on each variable and retained 3 factors. The following variables loaded onto each factor:

Factor1: frequency of BG testing (factor loading 0.73)

Factor2: HbA1c (0.35), Hypoglycaemic episodes (0.53)

Factor3: Hospital admissions (0.39)

CONCLUSIONS: The factor analysis supports the hypothesis that HbA1c, BG testing, and admissions represent differing patterns of poor diabetes control, that manifest as either Careful Poor Control or recurrent DKA. Greater understanding of these phenotypes may allow targeting of psychological or self-management interventions. We are undertaking further work to elucidate the possible phenotype of Careful Poor Control.

Keywords: Phenotypes, diabetes, glycaemic control, HbA1c, young people

PP161

Development of Self Completion Questionnaire That Can Be Used as a Simple Measure of Competency for Use in Diabetes Education Programmes: Cascade-Cq: Funded by UK National Institute of Health Research (Nih-Hta) (06/44/05)

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OBJECTIVE: Structured education programs may improve HbA1c in adolescence. The team at the Children's Hospital in Los Angeles developed an eight-stage competency system to be able to assess skills and knowledge within diabetes management (Kaufmann et al). However determining competency currently requires a clinical interview. We designed a self completion questionnaire that can be used as a simple measure of competency for use in diabetes education programmes.

METHODS: 16 specific diabetes competencies, based on Kaufman's competency levels, were identified. A self completion questionnaire for young people and parents was developed after consultation with representative patient groups. Consecutive consenting participants were recruited from child and adolescent diabetes clinics in one London teaching hospital (clinic size 400). Participants (0-18 years) and their parents were asked to participate during routine clinic appointments during a 6 month period. Competency levels were assessed by the young person and their parent. Clinic staff were also asked to rate each young person's diabetes competency.

RESULTS: Data were available on 120 young people.

Clinician assessment of competency was significantly correlated with both the young person's self-rating ($r=0.36$, $p<0.001$) and parent rating ($r=0.48$, $p<0.001$) of competency. The parent assessment had higher correlation with clinician assessment.

Participant's HbA1c at the last clinic visit was significantly negatively correlated with competency assessments by all categories, but with a slightly higher correlation for the clinician assessment ($r=-0.48$, $p<0.001$) than for parent ($r=-0.30$, $p=0.002$) or young person ($r=-0.24$, $p=0.01$) assessment.

CONCLUSIONS: Self-assessment of diabetes management competency by young people and parents correlated moderately well with clinician assessment. This suggests that competency assessment by young people and/or parents using our Cascade Competency Questionnaire (CCQ) may prove to be a useful tool for promoting diabetes self-management and improving diabetes control.

The CCQ has been revised based upon detailed examination of responses and the new version is currently being piloted.

Keywords: Questionnaire, competency, diabetes, education programmes, adolescent

PP162

Developing and Evaluating Outcomes for the 'Tree Of Life Project': An Innovative Day Event for Young People Living with Diabetes

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OBJECTIVE: Chronic health conditions, such as diabetes, can interfere in the lives of young people interrupting their progress with life and relationships. As the illness begins to dominate the life of the young person, it can take over their view of themselves, interfering with their 'identity story' thereby leaving them feeling disconnected from family and friends.

METHODS: The UCLH diabetes service offers an integrated medical and psychological approach to supporting children, young people and families living with these challenges. The 'Tree of Life' is a day event for young people with diabetes aged 13-19. The project uses a Narrative approach providing a 'safe place to stand' where young people can tell their illness stories and at the same time give accounts of their abilities, hopes and dreams. The project is designed to enable young people to build their preferred 'identity story', with a view to enhancing self-esteem.

RESULTS: The project has been running since July 2010. Several young people have gone on to qualify as peer trainers by completing a peer training session and then co-facilitating groups. Qualitative outcome data from young people will be presented demonstrating that the group has helped young people to develop positive views of themselves and feel less isolated by connecting, learning from and sharing knowledge with others with similar experiences.

CONCLUSIONS: The presentation will describe how evaluation and outcomes have been developed for the project alongside how to incorporate this into the delivery of the groups.

Keywords: Diabetes, identity story, self esteem

PP163

'I Don't Feel Like an Outcast Anymore': Establishing a Peer Support Network for Young People and Parents in a Supra-Regional Liver Disease and Transplant Service

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OBJECTIVE: Young people with chronic illness and post-transplant have poorer health outcomes than other age groups, with transition into adult services a particularly high risk period. Peer support can be an effective component of engaging young adults in services, improving health outcomes and wellbeing. Ways of implementing peer support in geographically diverse services and the role of parents/carers remain unclear. This presentation will describe 'The 16+ Day', a peer support day within a large supra-regional liver service.

METHODS: Eleven young people (aged 16-17 years) and 16 parents attended the first 16+ Day. It was facilitated by a multidisciplinary staff team alongside four 'young mentors' (aged 19-28 years old) who had transitioned into the adult liver service. Separate parallel sessions were run for young people and parents. Evaluation was through questionnaires and qualitative comments.

RESULTS: All participants rated the 16+ Day as very enjoyable and useful, with significant improvements in adjustment to liver condition, adherence, transition, and optimism about the future. Key benefits included 'Giving hope', 'Not feeling alone', 'Knowing what to expect' and 'Increasing confidence'. Parents rated the day as enjoyable and useful, with 100% of parents feeling more able to help their child with transition after the day. Young mentors also reported significant benefits, both in their own adjustment and a different perspective gained from helping others. Further service developments were suggested.

CONCLUSIONS: Peer support is an effective means of improving the acceptability and effectiveness of health services for young people. Novel approaches are necessary for different services and their unique populations. The 16+ Day demonstrates how geographical barriers can be managed, and the importance of developing networks amongst parents/carers to facilitate their changing roles as their child grows into adulthood. The 16+ Day also highlights the usefulness of including expert patients, for the benefit of young people and the mentors themselves.

Keywords: Chronic illness, transplant, peer support, transition

PP164

Inter-Professional Learning to Educate Disadvantaged Youth about Asthma and Smoking

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OBJECTIVE: Although patient education is an essential component of asthma management, health professionals often lack the knowledge and skills to educate their patients. Our aim was to enable university students to engage with and educate young people from schools in low-socioeconomic areas about asthma self-management and smoking prevention.

METHODS: The Triple A (Adolescent Asthma Action) program was offered as an Inter-professional Learning Activity to first year medical and fourth year pharmacy students from the University of Sydney. 11 students participated in two half day Triple A Educators workshops. They then taught senior high school students (n=54) how to educate their younger peers about asthma and how to resist smoking in a one day workshop. University students completed questionnaires on asthma knowledge, confidence in teaching asthma devices and feedback on the program.

RESULTS: There was an improvement in asthma knowledge and confidence in teaching asthma devices but this was not significant (likely due to the small sample size). Feedback from the university students noted that they learnt the importance of asthma education and the need for each profession to communicate effectively with their patients. They developed presentation, leadership and class room management skills, and increased their confidence in working with adolescents. Helping empower young people from disadvantaged backgrounds to resist taking up smoking was a highlight for many of the students.

CONCLUSIONS: Through the Triple A program, university students engaged in an effective Inter-professional Learning Activity and gained valuable experience of working in schools to improve asthma management and prevent smoking in adolescents.

Keywords: Inter-professional, disadvantaged youth, asthma, smoking prevention

PP165

What Do Adolescents Want from Their Medical Devices?

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OBJECTIVE: Current medical device design does not consider adolescent user needs, a fact demonstrated in the literature and interviews with clinical staff. It has been suggested that the failure of medical device developers to meet the needs of adolescent users could have a negative impact on adherent use.

This research communicates the findings from an interview study with 20 adolescents with cystic fibrosis. It presents new insight into medical technology design which adolescents consider help or hinder adherent use, whilst also reflecting on the personal and social implications of medical device use by this cohort.

METHODS: Ethical approval was sought from the National Health Service (NHS) Local Review Committee prior to conducting the adolescent interviews. The participants involved were aged 11-19 years old and had experience of a variety of medical devices. Interview data was thematically analysed so emergent themes could lead the data outputs.

RESULTS: The findings include adolescent desire to be informed during use of their medical devices, with immediate and long term feedback. This was considered an important element in control of their condition. Interaction of device use emerged as a significant issue. Current device design does not engage the user and poor quality device use can result. Adolescents also valued design features which would contribute to their independence and autonomy. The desire for adolescent acceptance and identity formation were often at odds with the management regimes of the medical condition and device design was one specific element within this wider issue.

CONCLUSIONS: The research findings highlight that adolescent user needs of medical devices are currently not well met or understood. The themes which have emerged provide a foundation for adolescent inclusive 'design rules' for medical device design. The aim being that if their adolescent needs are better satisfied then adherence to recommended use and health outcomes might be positively impacted.

Keywords: Adolescent user needs, medical devices, adherence, technology,

PP166

Perceived Barriers to Medical Adherence among Chronically Ill Adolescents. A Systematic Review

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OBJECTIVE: Adolescents seem to have more difficulties in taking long-term medication as prescribed compared to children and adults. We wanted to explore: 1) Which barriers to medical treatment adherence do chronically ill adolescent perceive? 2) Are the barriers unique to specific diseases or could they be characterized as disease independent?

METHODS: Web of Science, PubMed, Embase, PsycINFO, and CINAHL were searched from January 2000 to May 2012 to identify relevant articles. Articles were included if they examined barriers to medical adherence among chronically ill adolescents aged 13-19 years. Articles were excluded if adolescent's views on barriers to adherence were not separated from children's or caregiver's views, or if the articles were not about chronic illness. Two reviewers read the included articles and assessed the study quality. Data was analysed using a narrative synthesis approach.

RESULTS: 29 articles with both quantitative, qualitative and q-methodology study designs were included in the review. The synthesis led to following key themes: Relations to peers and parents, adolescent development incl. the pursuit of normality, health and illness incl. bodily experiences and illness perception, organisation, treatment complexity, forgetfulness, and costs.

CONCLUSIONS: The reported barriers to adherence were not unique to specific diseases. The most common reported barriers, which also have a significant impact on the adolescents' psychosocial development, were worries about feeling different from peers, struggle with conflicts to parents and sense of normality. The quantitative studies indicated that practical barriers were less important except for forgetfulness and scheduling problems. Knowledge and assessment of barriers to medical adherence is important for both policy-makers and clinicians in the planning of interventions and in communicating with adolescents about their treatment. Non-adherence may have serious consequences for health with increased morbidity and mortality as a result. Thus, the personal and economic burden of patient non-adherence can be immense.

Keywords: Adolescents, chronic illness, medical adherence, perceived barriers

PP167

Problems During Treatment and Prognostic Factors in Teenagers with Acute Lymphocytic Leukemia- An Analyse Study

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OBJECTIVE: Acute lymphoblastic leukemia (ALL) is the most common and the most curable malignancies in children; however, it presents some challenges in adolescents. The purpose of this study is to compare 5-year overall survival (OS), event free survival (EFS), demographic and treatment problem differences between adolescent and young children (age <10) with acute lymphoblastic leukemia (ALL) treated with BFM protocols at a single center.

METHODS: The documentation of ALL patients from January 1995- June 2012 were gathered and the charts which had enough data were included (241 patients). The mean age was 6,2y(8mo-17y), of these, 43 patients were >10y old, 198 patients were younger than 10y.

RESULTS: Teenagers were more prone to relaps and death than their counterparts (p:0,047, p:0,009 respectively). T-ALL was more common in teenagers(p:0,004) and, although not meaningful, still, it carried a poorer prognosis. CNS involvement, though not affected by age, led to a high death rate(p:0,001). Adolescents had more thrombocytopenia (p:0,015) and lymphopenia (p:0,0001). The major problems encountered during treatment were febrile neutropenia, neurologic disorders, electrolyte-metabolic imbalances, which were more pronounced in older children(p:0,038, p:0,014). During therapy, there were some interruptions, paucities and by-passed parts of the regimen. Children who could not get the exact treatment had a higher death rate(0,004); teenagers had a even higher rate(0,0001). The 5 year EFS was %81,2 for the younger and %65,1 for teenagers (p:0,025).

CONCLUSIONS: Despite all modern treatment regimens and supportive care, teenagers which are commonly assigned as high risk, still carry poor prognosis.

Keywords: Acute lymphocytic leukemia, teenagers, prognostic factors

PP168

Towards a Youth Friendly Hospital. A Manageable Model for Ambitious Goals

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OBJECTIVE: Akershus University Hospital identifies young people as a group of patients with it's own challenges and needs. In wanting to better meet the challenges and needs of this group, the hospital started the Adolescent Medicine Project.

METHODS: To approach this ambitious and important task, the project created the "Youth Friendly Hospital Model" (YFHM), which consists of six young-people-oriented- themes:

1. Availability (- of service for the adolescent and young adult)
2. Environment (physical and psychological, suited for the young person)
3. Transition (from health care for children to health care for adults)
4. Competence development (Improving hospital staff skills to meet the needs of young persons)
5. Collaboration across services (between health care for children and adults).
6. Rights (awareness and compliance)

At the core of the model is the youth council. One of the project's goals is to ensure genuine user participation. A council of around 10 young people (15-20 yrs) representative for important patient groups is recruited. The youth council's mandate is to comment on and to elaborate the six YFHM-themes.

RESULTS: In August 2012 two subprojects, each corresponding to one of the YFHM-themes, were created. A workgroup of clinical staff were assigned to each of the subprojects.

For 2013 these two subprojects will continue and new subprojects corresponding to other YFHM-themes will be initiated. A project coordinator, serves as a liaison between the youth council, subproject work group and project head management group.

CONCLUSIONS: We believe that ambitious goals is not enough and suggest mapping out concrete areas of intervention within a comprehensive framework. We believe that our model makes it possible to fulfill our aims for this patient group.

Keywords: User participation, youth friendly hospital, organizational development, development of public health services, adolescent medicine, transition

PP169

Youth Ambassadors - A Training Program for Nurses

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OBJECTIVE: At Rigshospitalet, there are no wards dedicated to adolescents. Nurses at both paediatric and adult departments have reported challenges when tending young people. A key factor for Youth Friendly Health Services is staff training.

The aim of the Youth Ambassador (YA) training program is to develop and promote nursing skills in the care, treatment and rehabilitation of young patients, to promote knowledge sharing and cooperation between CAM and local departments as well as between YAs across the hospital through network building.

METHODS: The Youth Ambassador training program was developed in cooperation between CAM and the nursing managers, and lasts ten months. The theoretical teaching modules consist of nine full-day-modules over a five month period. The themes are focused on themes related to young people e.g. adolescent bio-psycho-social development, developmentally appropriate communication, patients' rights, sexuality, adherence, coping strategies, ethnic minority youth and transition. Furthermore, an important part is YAs' dissemination of key messages from the modules to local colleagues. During and after the theoretical modules YA work on an individual adolescent focused project, presented for the local managers at the end of the program, with focus on implementation. During and after the training program YA form a professional network meeting six times annually.

RESULTS: The training program has now been completed twice and 41 nurses from 29 wards are now Youth Ambassadors. The individual projects have been focused on adolescent friendly environment, age-appropriate communication and HEADS assessment, and youth groups. Implementation of the projects is accomplished or in the pipeline at most local departments.

CONCLUSIONS: The challenge is to continue developing and maintaining nursing competencies and implementing the individual projects as well as defining and qualifying the function of the Youth Ambassadors. Implementing YA's special status requires organizational reflection and support from the hospital management.

Keywords: Staff training, youth friendly health services

PP170

The Magic of a Youth Advisory Board

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OBJECTIVE: Involving and engaging young people is a key factor in adolescent friendly health services. The youth advisory board (youth panel) was established at an early stage at the Center of Adolescent Medicine (CAM). The aim was to give young people a say in CAM's work.

METHODS: By contacting patient associations, youth NGOs and individual young patients known by the team, the panel was established consisting of 15 young people with various long-term health conditions as well as healthy young people. During the last three years, the youth panel have met four to six times annually with additional electronic communication and meetings in smaller working groups if necessary. The members of the panel suggested a renewal of the panel and the new panel consists of 13 young people aged 13-22 years. Two of the members are 'old friends' from the first panel.

RESULTS: The healthy young members quite quickly stopped while young people with long-term health conditions have been steadily coming to the meetings.

The members of the youth panel have contributed to the work of CAM by e.g.:

- Discussing communication with young people incl. good and bad ways of breaking bad news
- Suggesting and revising information material for young patients
- Revising questionnaires for young patients
- Advising CAM on training health professionals
- Describing young patients' special challenges in patient associations' newsletters
- Giving interviews to the press
- Contributing to a professional handbook on cancer rehabilitation and long-term consequences
- Giving lectures at national local meetings for health professionals and forming an expert panel at the IAAH meeting in Copenhagen
- Being an equal partner in the hiring committee for a new social educator at CAM

CONCLUSIONS: CAM actively uses the advice and suggestions from the youth panel to improve conditions for young people at the hospital.

Keywords: Youth friendly health services, youth involvement

PP171

Strengthening Youth-Friendly Approaches among Health and Non-Health Workers in Bosnia and Herzegovina

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OBJECTIVE: Describe the implementation of practical tasks and youth-friendly approach recommendations in the existing services in D oboj and Sarajevo Center municipalities

METHODS: Youth service providers and facilitators collected descriptive data on the number and type of services provided between November 2011 and January 2012) during usual encounters with young people.

RESULTS: Every young person received one or more services: 577 were reached. Among those 574(99%) received explanation about confidential care, in 419 (72%) psychosocial history (HEADSSS) was taken. Brief advice was given on: sexual and reproductive health 306(53%), alcohol, tobacco and other substances 376(65%), healthy eating 278(48%), physical activity 229 (39%), safety147(25%),190 young people got an information or leaflet about existing services.

CONCLUSIONS: Youth service providers in Doboj and Sarajevo Center municipality completed required tasks in their own professional settings giving information to young people about confidential care and healthy lifestyles. These tasks allow service providers to enhance their knowledge and skills in discussing lifestyle issues with young people and increase awareness of young people on existing services.

Keywords: Youth-friendly services, healthy lifestyle, health workers, non-health workers

PP172

Consent and Confidentiality: Confusion among Staff Caring for Young Patients

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OBJECTIVE: This study aimed to examine to which extent staff (doctors and nurses) in a paediatric department caring for children aged 0-18 were familiar with the legal rights for young patients and if a 1-hour teaching session could increase the staff's knowledge.

METHODS: Prior to a 1-hour teaching session on legal rights for children and young patients (Danish Health Act from 2005/2007(DHA)) staff-members fulfilled a 4-item multiple-choice test (pre-test, N=55). Four months later participants were asked the same questions (post-test, N=27). Results (pre- versus post-test) were compared using chi2-test, level of significance 0.05%.

RESULTS: 88% correctly answered that DHA discriminates between minors<15 yrs, minors 15-17 yrs and adults (+18 yrs). According to DHA, parents should actively be informed about all aspects of their children's healthcare. However, in pre-test 76% of staff-members mistakenly answered that some information could be kept confidential between the young person and staff, without informing the parents. In post-test this proportion decreased to 30% (p<0.01). The right to give treatment consent for a mentally healthy 15 year old patient was correctly stated in 9% in pre-test and increased to 36% in post-test (p<0.05). Correct answers regarding evaluation of an adolescent's competences for autonomous decision making increased from 40% to 63% (ns). At follow-up 85% stated that they needed to know the rules in daily clinical practice, and 70% replied that they would need more training.

CONCLUSIONS: We found much confusion among staff-members regarding young patient's legal rights. Results suggest that a 1-hour teaching session can increase the proportion of correct answers. However, post-test results still revealed a high proportion of incorrect answers, and could reflect suboptimal current practices. Further education and training in legal issues for adolescents is needed, particularly in departments caring for patients aged 15-17 years due to changing competences of minors.

Keywords: Legal rights, staff training, youth friendly health service

PP173

Youth Friendly Services? Using Simulated Clients to Evaluate Sexual Health Services in Urban South Africa**Rebecca S. Geary, Emily L. Webb*, Lynda Clarke, Shane A. Norris****

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OBJECTIVE: Few studies have evaluated whether youth-friendly services improve young people's experiences of sexual and reproductive health services, and none in South Africa have done so since the Youth Friendly Services program became government, rather than non-governmental organisation, led. This study investigated whether clinics providing Youth Friendly Services in Soweto, South Africa deliver a more youth-friendly experience than those not providing Youth Friendly Services, using simulated client methodology.

METHODS: 15 randomly selected public primary health clinics each received 3-4 visits from simulated clients requesting advice on condom reliability or contraceptive methods. Seven of these clinics provided Youth Friendly Services. After each visit semi-structured debrief interviews were conducted with simulated clients. Mixed effects regression was used to investigate associations between Youth Friendly Services provision and visit outcomes.

RESULTS: There was no evidence that clinics providing Youth Friendly Services deliver a more youth-friendly experience (adjusted difference in mean youth-friendly score 0.25 95% CI -1.05, 0.55 $p=0.537$) or that they would be more likely to be recommended to peers (adjusted odds ratio 0.19 95% CI 0.02-2.07 $p=0.174$) than those that do not provide Youth Friendly Services.

CONCLUSIONS: This study found no evidence that clinics providing Youth Friendly Services deliver a more youth-friendly experience for obtaining advice on condoms or contraceptive methods than those that do not provide Youth Friendly Services. Further information on themes relating to youth-friendly experiences could enhance program development; relevant qualitative data analysis is on going and these results will also be presented. As one of the few countrywide, government-run youth-friendly clinic programs in a low or middle-income country, these results may be of interest to program managers and policy makers in other sub-Saharan African settings, as well as to the South African Department of Health and other stakeholders.

Keywords: Youth, adolescent, sexual and reproductive health services, youth friendly, adolescent friendly, South Africa, simulated client

PP174

Self-Reported Attitudes of Hospital Doctors in Working with Teenagers**Jessica Platt, Lee D Hudson***

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OBJECTIVE: Adolescents make up approximately 10% of the UK population and have specific health needs. Most adolescent inpatients over 16 years are cared for on adult-wards. The attitudes and confidence of medical personnel treating them there is important. To ascertain self-reported confidence levels of doctors of working with teenagers, a survey was conducted of consultants in 2 NHS hospitals.

METHODS: An internet-based questionnaire was administered to consultants working in 2 NHS hospitals. Likert scaling was used to measure agreement on questions concerning attitudes towards interacting with teenagers in hospital.

RESULTS: 62 hospital consultants responded (32% anaesthetist, 32% surgical/dental/emergency, 23% adult medical physician or medical specialty, 8% paediatrics/paediatric surgeon, radiologist 5%). 50% of consultants agreed that they frequently had to deal with teenagers; 76% agreed that they found interacting with teenagers easy. 86% agreed that they were confident in talking to teenagers. 82% agreed that they understood the needs of teenagers in hospital. 73% agreed that having teenagers on wards was challenging. Only 8% felt there was adequate information on working with teenagers in their hospital. There was no statistically significant difference between paediatric and adult physicians in their own reported ability to relate to teenagers, nor in confidence to understand teenagers' needs. Adult physicians were more likely to agree that having teenagers on adult wards was challenging than adult surgeons (100% vs. 55%, $p=0.01$); there was no difference between surgeons and anaesthetists.

CONCLUSIONS: The majority of doctors surveyed said they routinely worked with teenagers, most were not paediatricians. Most consultants surveyed felt confident about their skills in working with teenagers, but most thought it was challenging. Little differences were found between adult and paediatric doctors in their self-reported confidence, though numbers of paediatricians in the survey were small. More information for working with teenagers for doctors might be useful.

Keywords: Teenagers, hospital doctors, attitudes

PP175

A Social-Pedagogical Intervention for Adolescents During Long-Term Hospital Admission

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OBJECTIVE: Critical illness as well as long-term hospitalization can affect young persons' (YP) normal psycho-social development. Our aim is to strengthen resilience in YP during long-term hospital admissions as well as maintaining and developing normal adolescent identity, self-esteem, autonomy and individuation.

METHODS: The social educators work with YP on the wards and in the youth club HR BERG. Short term hospitalized YP are offered recreational facilities and are invited to meet peers at HR BERG. Long-term hospitalized YP with complex needs are offered an individual course with the social educators using a four-step approach:

1. Creating a trustful relation based on a non-judgmental, resource-focused and respectful approach with less focus on illness
2. Supporting and motivating the young patient to see opportunities and set realistic goals
3. Changing 'waiting time' to 'leisure time' to empower YP to continue working on own goals and experiencing a sense of control
4. Gaining control and responsibility

RESULTS: The social educators' main focus is the individual adolescent and her/his psycho-social well-being and concerns during hospital admission. These concerns are often school, friends, family, missing leisure time activities, and body image and not so much the illness itself. Using activities e.g. playing table tennis, darts, card games or computer games may ease conversations about more sensitive issues e.g. fear, loneliness and body image.

CONCLUSIONS: The social-pedagogical approach used by the social educator is a combination of interpersonal relationship and individually tailored physical and recreational activities. Even small recreational activities change the focus from patient identity and contribute with the feeling of being 'normal' through positive experiences.

Keywords: Social education, social-pedagogical, hospital admission

PP176

Brief Interventions for Cannabis Use: Increasing Engagement and Motivation for Change in Young People

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OBJECTIVE: Cannabis is the most widely used illicit drug, and it is now well recognised that for some young people its use is not without associated social and health costs. These can include dependence, involvement in crime, decreased participation in education, employment and training, and mental health concerns. Brief, motivating interventions need to be available.

METHODS: The experience of providing training on working with young cannabis users in metropolitan and rural and remote settings in all Australian states and territories, primarily for non-clinicians, led to the need for a brief DVD that illustrated engagement and motivational enhancement (ME) processes for young cannabis use.

RESULTS: This presentation will briefly cover what we know about what works and does not work for young people who use drugs, the evidence for the use of a motivational enhancement (ME) approach, and the structure of a brief intervention that might take less than 15 minutes.

CONCLUSIONS: The DVD will be used to illustrate how an engaging and meaningful conversation with a young cannabis user may lead to a beneficial outcome whether the young person decides to address their cannabis use at that stage or not. In addition, an evidence-informed and evaluated print and web-based brief intervention – 'Clear Your Vision' – will be illustrated that may follow on from the motivational enhancement conversation.

No conflict of interest. Ethics approval not required. Funding from Commonwealth Department of Health and Ageing, Australia

Keywords: Cannabis, young people, motivational enhancement

PP177

“Opening Doors” – Engaging with Young People to Deliver Youth Friendly Harm Reduction

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OBJECTIVE: Issue and Approach: Young people who use drugs experience difficulties accessing harm reduction services. “Opening Doors” employs participatory, rights-based approaches, and a broad conceptualisation of ‘harm reduction’, to shape, increase access to and participation in youth friendly harm reduction in Asia.

METHODS: Nepal: ‘rejuvenation’ of programs requested. Activities: facility/program rejuvenation; worker training; key ‘stakeholders’ identified, mutually beneficial engagement and referral pathways initiated; strengthening links to residential programs; facilitating post-discharge continuing care.

China: under 25s on Methadone Maintenance Treatment involved in risk behaviours, including wanting to cease MMT too soon. Activities: training for MMT staff on becoming ‘youth friendly’; DVD, flip chart, brochure on ‘methadone myths and realities’ (eg dependence, retention, dental, bone, fertility, impotence issues); developing links to employment; group activities to fill time, educate, develop skills.

Thailand: increasing engagement of young high-risk ATS users. Activities: development of young ‘peer leaders’; youth led IEC materials; key youth service ‘stakeholders’ identified; policy and rights advocacy DVD developed by young people.

RESULTS: Key Findings:

- Youth access and participation increased – in use of, shaping and delivering services
- Data from Nepal - improvements in mental health and social integration, and reductions of risk behaviours; from China - greater retention on MMT
- Youth led resource development
- Links strengthened to education, training, employment
- Developing youth leaders
- Capacity building – in South and SE Asia, with extension to Middle Eastern region.
- Tool Kit in flexible format to aid capacity building translated into Mandarin, Thai, Malay, Indonesian and Arabic.

CONCLUSIONS: It is possible to promote and build capacity for youth friendly harm reduction in diverse settings.

No conflict of interest. Ethical approval obtained from UNSW Ethics Committee and participating agencies. Funding from AIDSFonds (Netherlands)

Keywords: Youth, harm reduction, drug use, youth friendly services

PP178

Breaking New Ground: Adolescent Addiction Medicine in an Australian Tertiary Paediatric Hospital

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OBJECTIVE: The impact of adolescent substance use on neural development and the importance of early intervention are increasingly recognised. ‘SAMY’ is a service for substance-using adolescents uniquely based within the Department of Adolescent Medicine of a tertiary paediatric hospital, which adopts a “strengths-based” approach to early intervention. This study reviews the socio-demographic characteristics of referred adolescents, the associated ED presentations, their substance use and mental and physical co-morbidities, the challenges of providing specific follow-up and the results thereof.

METHODS: A comprehensive review of paper and electronic patient records of over 200 adolescents aged to 16 years from 2008-2012 was conducted. Referral, clinical and socio-demographic information, and details of SAMY involvement, were analysed using SPSS19.

RESULTS: Over 200 adolescents were referred in 2008 – 2012, over 80% involving ED presentations. Genders were equally represented; mean age 14.9 years. Most were Australian-born, living with 1–2 parents; < 20% were in “out-of-home care”. Alcohol, cannabis and nicotine were most commonly used, with little use of other substances. Rates of dependence were low, mainly involving nicotine and cannabis. There were significant rates of acute trauma, existing mental health and behavioural problems and “risky” behaviours prior to presentation. Chronic medical conditions were identified in 15%. Appointments were made for those not accessing other services: around 2/3 subsequently attended, most “completing” treatment.

CONCLUSIONS: This novel service targets a group of challenging and high-risk young people, successfully engaging many in ongoing care. SAMY provides opportunistic, early intervention to adolescents and their families/carers, with the goals of ceasing or reducing substance use and minimising the risk of these individuals subsequently developing substance dependence. This study describes over 200 such adolescents, their presentations and co-morbidity, the efforts involved in achieving engagement and the determinants of treatment completion, and aims to inform Addiction Medicine service development in hospitals at which adolescents present.

Keywords: Adolescent, addiction medicine, paediatric hospital, early intervention, drug use, alcohol, substance use, dependence

PP179

Differential Influence of Parental, Siblings and Friends Smoking on Chilean Adolescent Smoking

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OBJECTIVE: Numerous studies have demonstrated that adolescents whose friends, and/or parents use substances are more likely to use substances themselves and to use them more frequently than youth whose friends and/or parents are nonusers. Smoking by significant others (especially friends) is one of the most consistent predictors of adolescent smoking. The role of siblings is less clear. Although the total effects of parental and friends' smoking on adolescent smoking have been well documented, considerable disagreement remains regarding how these effects operate. For example, it is unclear whether the effects are direct or indirect.

METHODS: The data from 2697 students (12-19 years old) in 69 classrooms representing 12 public and private schools in Metropolitan Santiago de Chile was obtained in 2012 through a pen and paper survey about smoking. The schools were sent anonymous, self-administered questionnaires and teachers supervise students while they answered. The eligible sample for the study included 60.6% females and 39.4% males. The students who reported "never smoking" were 1805 (66.93%) and those who smoked at the time of the test were 892 (33.07%). All descriptive data and analysis were performed using Stata version 11 software. A multiple correspondence analysis was used to determine the consistency of responses to each question. Multiple logistic regressions were used to examine the relationship between questions.

RESULTS: Our study shows that 38.4% of the adolescent smokers were from smoking parents against 30.3% from non-smoking parents ($p < 0.05$). The influence of the mother was greater (41.1% vs 28.7%). In the case of siblings smokers the result was 49.5% vs 29.1% ($p < 0.05$). When the best friend was a smoker the relationship was 74.8% vs 25.8% ($p < 0.05$). The influence of other friends not as close was less relevant.

CONCLUSIONS: The results show that parents' (specially the mother), siblings, and the best friend smoking affect adolescents smoking directly and indirectly. In general, best friend smoking has a stronger effect on adolescent smoking behavior, particularly on initiation.

Keywords: Adolescents' smoking, parental, sibling and friends smoking, adolescent behavior, adolescent initiation and escalation of smoking

PP180

Parental Smoking-Specific Control and Intention to Smoke among Hong Kong Adolescents

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OBJECTIVE: To investigate the association between parental smoking-specific control and intention to smoke among never-smoking adolescents.

METHODS: In a secondary school survey in Hong Kong, 27178 never smokers provided information on parental smoking-specific control, including family communication about the harms of smoking (yes vs no), and the anticipated level of control by each parent if the student were to smoke, with options of "mild", "strict", "uncertain level" and "unknown" vs "none" (reference). All options but "none" denoted some level of control. These 2 measures were also combined as anticipated parental control with categories of "neither parent", "mother only", "father only" and "both parents". Intention to smoke was affirmed if "definitely not" was not chosen for any of these 3 items: "Would you smoke (1) in the next 12 months, (2) in the next 5 years, and (3) if your good friends offer you cigarettes?"

RESULTS: Among never smokers (46.0% boys, mean age 14.6, SD 1.8 years), the prevalence of parental communication and some level of paternal control and maternal control was 47.8%, 97.5% and 98.8%, respectively. About one-fifth (21.2%) had an intention to smoke. Parental communication was beneficial with an adjusted odds ratio (AOR) (95% CI) of 0.60 (0.56-0.65) for intention to smoke. Compared with paternal control of "none", the AORs (95% CI) of intention to smoke were 0.83 (0.63-1.09) for "mild", 0.67 (0.52-0.87) for "strict", 1.19 (0.91-1.56) for "uncertain level" and 0.61 (0.46-0.81) for "unknown". The corresponding figures for maternal control were 0.71 (0.50-1.00), 0.54 (0.38-0.75), 0.69 (0.49-0.98) and 0.77 (0.53-1.10). For parental control, the AORs (95% CI) were 0.71 (0.46-1.10) for "mother only", 1.03 (0.57-1.87) for "father only", 0.46 (0.32-0.65) for "both parents" compared with "neither parent".

CONCLUSIONS: Parental smoking-specific control may reduce the intention to smoke among never-smoking adolescents.

Keywords: Smoking-specific control, intention to smoke, parenting, adolescent, smoking

PP181

At The Crossover of Adolescent and Alcohol**Valérie Uldry, Marianne Caflisch**

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OBJECTIVE: These last ten years, Swiss hospitals have been confronted with an increased number for alcohol abuse among young adolescents. The Children and Adolescent Department of Geneva has established a brief intervention program for all adolescents hospitalized for alcohol intoxication.

METHODS: This program consists of one night at the emergency unit followed by an ambulatory consultation within ten days. At that time, we propose an evaluation of their psychosocial situation and risk behaviors. If necessary these youngsters are referred for special cares. We also inform them about the taken risks (secondary prevention) and help the parents in their educational function.

RESULTS: After 6 years of this program, 315 adolescents on 356 came to the ambulatory consultation. This result is probably due to the quick intervention made after the emergency care.

CONCLUSIONS: This program seems to answer to a demand as 88% of all adolescents, to whom an appointment was offered, came to the evaluation. The parents also feel reassured after this intervention.

Keywords: Adolescent, alcohol, brief intervention program

PP182

Separation-Individuation Process, Defense Mechanisms, Alexithymia and Family Dynamics among Substance Dependent Individuals**Yesim Keskin, Yavuz Erten*, Ayhan Kalyoncu****

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OBJECTIVE: The present study is aimed to investigate the separation-individuation process, defense styles, the levels of alexithymia and family dynamics among substance dependent individuals.

METHODS: The sociodemographic form, Related Autonomy Scale (RAS), Defense Styles Questionnaire (DSQ) and Toronto Alexithymia Scale (TAS) were used as instruments.

RESULTS: The results revealed that the substance abuse group reported lower levels of related autonomy, as well as lower levels of behavioral autonomy, autonomy in attitudes and values and unconflicted autonomy; higher levels of use of immature defenses and higher levels of alexithymia features. Moreover, there was a statistically significant difference between the control and the substance abuse groups regarding whom they are living with, the occupation of the mother, the perceived felt closest person in childhood and perceived motherhood. Yet, the results of the study yielded that there was no statistically significant difference between heroin and alcohol dependence groups.

CONCLUSIONS: The results are discussed in the light of psychodynamic conceptualizations and family systems perspectives.

Keywords: Substance Abuse, Separation-Individuation, Defense Mechanisms, Alexithymia, Family Dynamics

PP183

**What Does Tattoo Say About Heroin Dependence?
Separation-Individuation Process and Family Dynamics
Among Tattooed and Non-Tattooed Heroin Dependent
Adolescents**

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OBJECTIVE: The present study is aimed to investigate the family dynamics and the separation-individuation process among tattooed and non-tattooed heroin dependent adolescents.

METHODS: A detailed sociodemographic form, tattoo history form, Related Autonomy Scale (RAS) were used as instruments.

RESULTS: The results revealed that, compared to the non-tattooed heroin dependent group, the tattooed heroin dependent group reported their fathers as neglecting and reported lower levels of emotional autonomy and unconflicted autonomy.

CONCLUSIONS: The results are discussed in the light of psychodynamic conceptualizations and family systems perspectives.

Keywords: Addiction, tattoo, separation-individuation, family dynamics

PP184

**Adiponectin, Leptin And Ghrelin Levels in Obese Adolescent
Girls with Polycystic Ovary Syndrome (PCOS)**

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OBJECTIVE: To evaluate the differences in adipokines, namely adiponectin, leptin and ghrelin, in obese adolescent girls with or without PCOS.

METHODS: This is a case-control study of 38 adolescent girls (age 15-20 years) admitted to the gynecology clinic of Istanbul University School of Medicine. Patients were categorized into two groups as follows: Group I: 17 obese adolescent girls with PCOS (BMI \geq 30 kg/m²); Group II: control group of 21 obese adolescent girls (BMI \geq 30 kg/m²).

Diagnosis of PCOS was based on the revised Rotterdam criteria. Patients had to fulfill two out of the following three criteria: (i) oligomenorrhea and/or amenorrhea; (ii) clinical and/or biochemical manifestations of hyperandrogenism such as a hirsutism score of > 8 according to Ferriman and Gallwey (19), (iii) polycystic ovaries seen in ultrasound and exclusion of other etiologies.

RESULTS: LH, LH/FSH and cortisol levels were significantly higher in the obese PCOS girls compared to the obese controls (6.94 ± 3.28 versus 4.44 ± 1.79 ; 1.50 ± 0.72 versus 0.90 ± 0.36 ; 16.02 ± 4.28 versus 12.46 ± 5.29 ; $p < 0.05$, respectively). Adiponectin, leptin and ghrelin levels were similar between the obese PCOS girls and the obese controls (11.13 ± 6.00 versus 15.26 ± 12.66 ; 23.66 ± 11.54 versus 23.11 ± 11.17 ; 665.69 ± 402.12 versus 650.22 ± 467.73 , respectively). Adiponectin negatively correlated with BMI ($r = -0.32$; $p = 0.04$) and positively correlated with fasting glucose ($r = 0.40$; $p = 0.01$). Leptin positively correlated with BMI ($r = 0.534$; $p = 0.001$), estradiol ($r = 0.354$; $p = 0.02$) and TSH ($r = 0.374$; $p = 0.02$). No significant correlation was found between ghrelin and the test parameters.

CONCLUSIONS: Among obese adolescents with PCOS, adiponectin and leptin levels do not seem to be determined by the existence of PCOS, while ghrelin presents no significant correlation.

Keywords: Adiponectin, ghrelin, leptin, obesity, polycystic ovary syndrome.

PP185

Implications of Premature Ovarian Failure on Bone Turnover Markers and Bone Mineral Density

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OBJECTIVE: The objective of this study was to compare the implications of premature ovarian failure on bone turnover markers and bone mineral density in patients under the age of 40.

METHODS: Sixty-one patients, who were admitted to the Infertility Clinic of Istanbul University School of Medicine, with a diagnosis of POF were selected for this cross-sectional study. Patients were divided into two groups according to age, patients <30 years old (n=30) and patients ≥30 years old (n=31).

Serum bone-specific alkaline phosphatase (BALP) and procollagen type I C-peptide (PICP) were measured as markers of bone formation. Cross-linked N-telopeptides of type I collagen (NTX) was measured as a marker of bone resorption.

RESULTS: Between the two age sub-groups (<30 and ≥30 years old), there was a significant difference in MRS, lumbar spine t-score, NTX and BALP (10.93±7.79 versus 17.38±8.62; -1.84±1.47 versus -1.06±0.93; 58.80±21.32 versus 41.1±11.37; 48.99±42.16 versus 23.76±10.08, respectively). There was a significant negative correlation between lumbar spine t-score and NTX (p = -0.665), between lumbar spine t-score BALP (p = -0.595) and between lumbar spine t-score and PICP (p = -0.340). A significant negative correlation was also observed between total hip score and BALP (p = -0.327). BMI had a significant negative correlation to NTX and BALP (p = -0.373; p = -0.304, respectively).

CONCLUSIONS: It is apparent that BMD is commonly less in women with POF than normal healthy women. Therefore, measurement of BMD is warranted. At this time, it is not clear how often the tests should be carried out to evaluate BMD. Further prospective studies are required to establish guidelines. However, it seems reasonable to monitor women with POF yearly for the presence of any endocrine dysfunction and to assess BMD at periodic intervals.

Keywords: Premature ovarian failure, bone mineral density, osteoporosis, bone turnover markers.

PP186

Impact of Premature Ovarian Failure on Factors Associated With Bone Loss in Karyotypically Normal Patients

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OBJECTIVE: In this study our aim was to evaluate the impact of premature ovarian failure and hormone replacement therapy on androgen levels and bone mineral density in karyotypically normal (46,XX) patients.

METHODS: Forty-six patients, who were admitted to the Infertility Clinic of Istanbul University School of Medicine, with a diagnosis of POF were selected for this cross-sectional study. All patients were karyotyped as 46,XX. Fifteen young women in reproductive age served as the first control group and were matched by age. Fifteen healthy women in natural menopause served as the second control group. Both lumbar spine (L2-L4) and the total femur were chosen as measurement sites for BMD. Cross-linked N-telopeptides of type I collagen (NTX) was measured as a marker of bone resorption.

RESULTS: There was a significant difference in E2 and FSH levels between groups. There was also a significant difference in lumbar spine and total femur scores. Patients with POF were stratified by age and HRT. DHEA-S level was significantly higher in patients who were younger than 30 years old and using HRT (0.576±0.86 versus 1.78±1.22; p=0.04). When patients with POF were stratified by HRT (receiving or not receiving), FSH and E2 levels were similar between the two sub-groups. When patients were compared according to age, there were significant differences in E2 level, FSH level, lumbar spine and total femur scores. Total testosterone correlated negatively with NTX and Beck score. BMI correlated positively with lumbar spine and total femur scores.

CONCLUSIONS: Being diagnosed with POF can be an unexpected and upsetting diagnosis and women may express depression and sadness. The early detection and identification can provide a better opportunity for timely therapeutic intervention. HRT is strongly advised for women with POF, since early loss of sufficient estrogen production is associated with skeletal, cardiovascular and neuropsychological complications.

Keywords: Bone mineral density, premature ovarian failure, hormone replacement therapy, androgens.

PP187

Menstrual Irregularity in Adolescence Early Markers of Metabolic and Cardiovascular Risk in Women?

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OBJECTIVE: Menstrual irregularity in the first years after menarche may be a marker for underlying Insulin Resistance (IR). IR is associated with type 2 diabetes mellitus, hypertension, and dyslipidemia. Through these and other mechanisms, this condition may predispose to cardiovascular disease (CVD). IR is compensated by increased insulin production by pancreatic beta cells, and the resulting hyperinsulinemia may manifest itself by increasing the insulin mitogenic effects, which can affect the menstrual cycle. These changes may be present very early, before the metabolic changes of IR. The objective is evaluate menstrual irregularity in adolescence and its relationship with metabolic and cardiovascular risk

METHODS: Observational, comparative and transversal-cut study with 82 female adolescents aged between 10 and 19. All adolescents underwent a clinical evaluation with anthropometric and laboratorial data, composed of Fasting Glucose, Total Cholesterol, HDL-cholesterol, Triglycerides, Oral Glucose Tolerance Test (OGTT) post 120 minutes (glucose 120), Fasting Insulin and Insulin post OGTT post 120 minutes (insulin 120). Two groups were created. G-1, adolescents with irregular cycles, and G-2, adolescents with regular cycles

RESULTS: 82 adolescents evaluated, 48 formed G-1, and 34 formed G-2. In statistical analysis it was observed: G-1 presented: waist ($p=0,012$), fasting insulin ($p=0,0003$), glucose 120 ($p=0,002$), Insulin 120 ($p=0,0001$), Homa-IR ($p=0,0003$), triglycerides ($p=0,002$), Metabolic Syndrome ($p=0,001$) greater than G2 and HDL ($p=0,001$) G/I ($p=0,0003$), QUICK ($p=0,0001$) lower than G-2.

Logistic regression analysis observed insulin 120 >75 ($p=0,002$) were significant to predict irregular cycle

CONCLUSIONS: Clinical evaluation of adolescents and women should include an evaluation of menstrual cycle, since alterations in pattern might represent first sign of a condition to predispose to CDV.

Keywords: Adolescence, menstrual irregularity, cardiovascular risk, insulin

PP188

Polycystic Ovarian Syndrome (PCOS) in Adolescence: Clinical and Laboratory Parameters

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OBJECTIVE: The clinical criteria for the diagnosis of the POS in adolescence have not yet been defined, and are put as similar to those of the adult phase. However, not always in adolescence may we use the same criteria of the adult phase adequately, mainly when correlating lower gynecological ages and take into account the characteristics of this age range as well as the evolutionary character of the disease. The objective is evaluate clinical and laboratory variables in adolescents related to PCOS

METHODS: Observational, comparative, transversal cut study with 82 female adolescents aged between 10 and 19, underwent a clinical and laboratory evaluation of insulin resistance (IR), hormonal and lipid profile. Two groups were created: G-141 with PCOS, and G-2: 41 without PCOS

RESULTS: Observed: G-1 presented acne ($p < 0,0001$), menstrual irregularity ($p < 0,0001$) hirsutism ($p = 0,004$), FH PCOS ($p = 0,05$), MS ($p < 0,0001$), fasting insulin ($p = 0,0003$), insulin post Oral Glucose Tolerance Test (Insulin-120) ($p = 0,0001$), HOMA-IR ($p = 0,0002$), TG ($p = 0,05$), Total Testosterone (TT) ($p = 0,007$), LH ($p = 0,042$) greater than G-2. And G/I ($p = 0,0003$) and QUICK ($p = 0,0001$) lower than G-2.

CONCLUSIONS: PCOS is a progressive disease whose morbidity increases overtime, meaning that its appearance during adolescence is more harmful to health than when it appears during the adult stage. Diagnosis during this phase will allow preventive interventions that may alter the course of this disease. The criteria used to diagnose PCOS during adolescence must take into account the pathophysiological progress of the factors constituting the syndrome, particularly with regard to insulin resistance (IR) and the specific characteristics of the pediatric and adolescent populations.

Keywords: Adolescence, polycystic ovarian syndrome, insulin resistance

PP189

Susceptibility and Severity in Relation to Cervix Cancer and Their Association with Human Papillomavirus Vaccination Status in Korean Female University Students**Hae Won Kim**

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OBJECTIVE: Human papillomavirus (HPV) is highly prevalent sexually transmitted disease (STD) among young age group especially female university students. However, HPV vaccination led by government has not yet established and due to a high cost for HPV vaccination in Korea, more concern about preventing cervix cancer especially for unmarried women is urgent. This study examined the level of susceptibility and severity related to cervix cancer, and their association with HPV vaccination status in Korean female university students

METHOD: A survey design was utilized to collect cross sectional and retrospective data. A convenient sample of 303 unmarried female students attending university in Korea was recruited in this study. Level of susceptibility to cervix cancer was assessed using 5 items, severity of cervix cancer was assessed using 5 items. In Socio-demographic characteristics, age, economic status, religion, HPV awareness, HPV vaccination status, STD history, heard of Pap test and HPV vaccine were assessed. Data analysis procedures included ANOVA and Pearson correlation coefficient analysis using SPSS computer program (version18.0).

RESULTS: A survey design was utilized to collect cross sectional and retrospective data. A convenient sample of 303 unmarried female students attending university in Korea was recruited in this study. Level of susceptibility to cervix cancer was assessed using 5 items, severity of cervix cancer was assessed using 5 items, and Socio-demographic characteristics were assessed. Data analysis procedures included ANOVA and Pearson correlation coefficient analysis using SPSS program (version18.0).

CONCLUSIONS: HPV awareness and information of Pap test should be increased among Korean female university students. It is needed to more focus on beliefs related to cervix cancer prevention and on real Pap test behavior among unmarried women.

Acknowledgement

This research was supported by Basic Science Research Program through the National Research Foundation of Korea (NRF) funded by the Ministry of Education, Science and Technology (2012-R1-A1-A3015525)

Keywords: Cervix cancer, Health belief, HPV vaccine, unmarried women

PP190

Use of a Computerized Log to Facilitate the Administration of the HPV Series of Immunizations**Aric Schichor, Deborah Mcgrath, Elaine Yordan**

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OBJECTIVE: The Human Pappiloma Virus vaccine has been shown to be helpful in decreasing the prevalence of HPV infections and in preventing the development of cervical cancer. Immunization has been difficult at times because some parents fear that this vaccine will encourage early sexual activity. This fear has led to difficulty in initiating the vaccine process and in getting adolescents back for completion of the series of vaccines. We have developed a computerized log for this vaccine so as to be able to track those adolescents through the vaccination process.

METHODS: The administration of the HPV vaccine was documented both in a paper record and an online immunization record. Adolescents were tracked via these records and asked back for immunizations as needed to complete the full series. This process was started initially with our female patients. Male patients were added to this log once the recommendation was made to give this vaccine to this population. Patients identified by the log to have missed a vaccine visit were given additional appointments until they completed the series or were lost to follow up.

RESULTS: A total of 838 females have been registered into the log since 2007, with 537 (64%) having completed the full course of immunizations. A total of 469 males have been registered into the log since 2010, with 108 (23%) having completed the full course of immunizations.

CONCLUSIONS: The computerized log has been helpful in allowing us to provide the complete series of the HPV vaccine to two thirds of our female population. We feel that we will be able to reach additional male patients as well. Using pictures of HPV infections in males has been very helpful in convincing this population to return for additional immunizations.

Keywords: HPV, Computerised Log, Tracking Vaccinations

PP191

Parent's / Carer's Views and Decisions about the Human Papillomavirus Vaccine

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OBJECTIVE: To determine parental / carer attitudes of the HPV vaccine and establish whether these attitudes affect their decision to vaccinate their daughters.

METHODS: This was a school-based survey of parents/carers. The inclusion criteria was a daughter aged between 11-14. Four Schools were randomly chosen, three in Ireland and one in England.

A questionnaire was developed and then sent home in a sealed envelope with students marked to the attention of their parent / carer. The questionnaire included several different styles of questions. Participants were asked to use a Likert scale of 0-5 (0 being can't say, 1 strongly disagree – 5 strongly agree) to rank how they feel about statements made. In addition, demographic questions were included asking the participants, their age and gender.

RESULTS: From the 415 questionnaires sent out 197 responses were received giving a response rate of 47%. Of the English respondents who were offered the vaccine (n=58) for their daughter(s) 71% (n=41) accepted. Of Irish respondents offered the vaccine (n=90) for their daughter(s) 100% accepted the vaccine. Ninety percent (n=37) of English respondents felt their daughter(s) understood what the vaccine was for. Irish respondents were divided about their daughter(s) knowledge as to what the HPV vaccine was for with 57% (n=51) believing they understood and 43% (n=39) remaining unsure. Sixty-one percent (n=25) of English respondents included their daughter(s) in the decision to receive the vaccine. Similarly 66% (n=59) of Irish respondents also included their daughter(s). Worry about side effects of the vaccine was the main concern for 88% (n=15) of respondents.

CONCLUSIONS: Uptake and acceptance of the vaccine was high despite some concerns such as side effects and lack of knowledge. Acceptance of the HPV vaccine could be further improved through education and provision of more information.

Keywords: Human papillomavirus; HPV vaccine; parent's / carer's; attitudes

PP192

Vitamin D Deficiency in Autoimmune Thyroiditis

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OBJECTIVE: As well as vitamin D acts on extracellular calcium homeostasis, it also suppresses infectious, autoimmune and oncologic diseases. It effects CD4 T cell differentiation and increases suppressor T cell activity. We aim to investigate vitamin D status in our patients with autoimmune thyroiditis.

METHODS: Fifty four patients with autoimmune thyroiditis were evaluated by their physical examination, thyroid function tests, thyroid auto antibodies, serum vitamin D levels and thyroid ultrasonographies. Increased serum anti-thyroid peroxidase and/or anti-thyroglobulin levels with heterogenous thyroid gland image in ultrasonography and high serum thyroid receptor stimulating antibodies indicated the diagnosis of chronic autoimmune thyroiditis and Graves disease respectively. Vitamin D levels < 30 ug/L was defined as insufficiency and <20 ug/L as deficiency.

RESULTS: Among the patients, chronic autoimmune thyroiditis and Graves disease were diagnosed in 47 and 7 patients. Mean age was 11.44±3.40 years. Thirty nine (72.3%) patients were female. Twenty three (42.6%) were pubertal. Mean height sds and weight sds were found as 0.059 ±1.29 and -0.21±1.49, respectively. Short stature and obesity were observed in 4 and 1 patients, whereas 6 were overweight. In all of the patients mean 25-OH vitamin D level was 15.10±6.99 ug/L. Mean vitamin D values were 15.22±7.45 ug/L and 14.85±5.54 ug/L for chronic autoimmune thyroiditis and Graves disease (p>0.05). Vitamin D deficiency and insufficiency were identified in 75.9% (n=41), and 96.2% (n=52) of the patients. Vitamin D levels were <10 ug/L in 24 % (n=13), between 10-20 ug/L in 52% (n=28), and between 20-30 ug/L in 20.3% (n=11). Only 2 patients (3.7%) had vitamin D levels >30 ug/L.

CONCLUSIONS: Vitamin D deficiency and insufficiency were determined in the majority of the patients with autoimmune thyroiditis. Since how and how much does vitamin D act on autoimmune diseases is unknown, it's clear that new studies on this topic are essential.

Keywords: Vitamin D, autoimmune thyroiditis

PP193

The Influence of Puberty on Subcortical Development

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OBJECTIVE: Subcortical structures continue to develop in humans through adolescence into adulthood, and this structural and functional development has been linked to the normal and pathological behavioural patterns associated with adolescence. Puberty, one of the defining events of adolescence, is likely to play a role in this neural development, through hormones including androgens and oestrogens. Using a large, longitudinal structural MRI dataset, this study explores the interplay between pubertal stage and chronological age on the development of subcortical structures including the amygdala, hippocampus, nucleus accumbens, caudate, putamen and pallidum.

METHODS: 711 scans from 275 (158 male) healthy individuals aged 7-20 years were analysed using surface-based reconstruction software, and volumes were extracted for the structures of interest. An assessment of chronological age and Tanner stage (as a measure of pubertal development) was performed at each time-point for each participant.

The data were analysed using mixed-effects modelling to account for the longitudinal, within-subject correlation. Best fit models were obtained of the developmental trajectory of each structure separately using Tanner stage as a measure of development. Age was then added into the Tanner models to see if the model improved with the combined effects of both variables. Finally, an age-only model was fit to establish whether this provided a better fit for the data than the models incorporating Tanner stage.

RESULTS: For all the regions that were examined, there were statistically significant models relating structural development with advancing puberty. For most regions, there was improvement in the model when chronological age was added as a second explanatory variable, with interactive age by puberty effects.

CONCLUSIONS: These results suggest that the structural developmental trajectories of subcortical brain structures studied are influenced by both age and Tanner stage. This work highlights a need to consider other developmental trajectories in addition to age when investigating brain development in adolescence.

Keywords: Puberty, brain development, MRI, adolescence

PP194

Longitudinal Study on Thyroid Function in Patients with Thalassaemia Major; Relation to Iron Overload

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OBJECTIVE: We investigated and reviewed the thyroid function in all thalassemic patients attending the Pediatric Endocrine Clinic of Hamad Medical Center, Doha, Qatar during the last 12 years of follow up.

METHODS: Patients and Measurements: 48 patients with β -thalassaemia major (TM) (18 females and -30 males), between 5 and 18 years of age.

RESULTS: 48 patients completed a 12 year-period of follow-up. During this period hypothyroidism was diagnosed in 17/48 (35%) of patients, 16 of them after the age of 10 years (94%). The prevalence of overt hypothyroidism had risen from 0 % at the age of 7 years to 35% at the age of 18 years. None of the patients had high anti-thyroperoxidase (TPO) antibody titers. Thirteen out of the 17 patients with hypothyroidism, had normal or low TSH level (not appropriately elevated) indicative of defective hypothalamic pituitary response to the low circulating concentrations of FT4 (central hypothyroidism). Three patients (6.3%) had subclinical hypothyroidism (TSH between 5 and 10 uIU/ml and normal FT4). The general trend of FT4 level showed progressive decrease over the 12 years, whereas TSH levels did not show a corresponding increase. These data suggested defective hypothalamic pituitary thyroid axis involving both TSH and FT4 secretion in patients with TM over time. There was a significant negative correlation between serum ferritin and FT4 ($r = -0.39$, $p = 0.007$) but no correlation was found between ferritin and TSH.

CONCLUSIONS: Worsening of thyroid function was observed in 35% of the studied thalassemic patients by the age of 18 years. The lack of proper increase of TSH in response to low circulating levels of FT4 in 13/17 (76%) of these patients indicated a relatively high incidence of defective pituitary thyrotrophic function in these patients.

Keywords: Thyroid function, Thalassaemia, Ferritin,

PP195

General Features of Adrenarche in Healthy Children and Effects of Adrenal Steroids on Insulin Resistance

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OBJECTIVE: There are many factors which effect the pubertal development in children:one of these factors is dehydroepiandrosterone sulfate (DHEAS) level. Measurement of DHEAS levels which decreases after first months of life and increases before puberty, is important for evaluating the pubertal development.

We aimed to establish the levels of DHEAS according to age, gender and pubertal stages and investigate factors affecting pubertal development in this study.

METHODS: The study included 531children aged between 1 month-18 years (240 boys and 291 girls). Pubertal stages, DHEAS, height, weight, body mass index (BMI), insulin, lipid profile, sistolic and diastoli TA, gestational age and age of menarche were analysed.

RESULTS: The average ages at pubic hair stage 2 for girls, pubic hair stage 2 for boys, breast stage 2 and genital stage 2 were 9.57 ± 1.31 , 10.20 ± 1.77 , 8.61 ± 2.10 and 11.11 ± 1.36 years, respectively. The average age at menarche is 12.52 ± 0.94 years. There was no significant difference in serum DHEAS levels between girls and boys. DHEAS levels were associated with LDL cholesterol, HDL cholesterol, insulin, sistolic and diastolic blood tension; but there was no statistically significant correlation between DHEAS and gestational age, HOMA index in all cases. There was a significant positive correlation between DHEAS and BMI SDS in girls and a significant positive correlation between DHEAS and height SDS in boys at age 4-8 years old.

CONCLUSIONS: Further studies are needed to determine the reference values for DHEAS and the other hormones related puberty, evaluate the other factors affecting puberty and reevaluate the pathological age limits for the timing of the onset of puberty for Turkish children.

Keywords: Puberty, menarche, Dehydroepiandrosterone sulfate, body mass index, lipid profile.

PP196

The Use of Tamoxifen in the Treatment of Pubertal Gynecomastia

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OBJECTIVE: The aim of this study was to evaluate the effectiveness of tamoxifen treatment in patients with pubertal gynecomastia.

METHODS: This retrospective evaluation took place at Hacettepe University,Division of Adolescent Medicine Ankara, Turkey covering a two years period between 2010-2012. A total of 175 patients were evaluated for gynecomastia, 35 patients were started on tamoxifen at 10 mg twice daily.

RESULTS: All patients had distinct, easily palpable breast swellings with a diameter of over 3cm's (m= 4cm). Fourteen of the patients had obesity. Obesity was defined as body mass index (BMI) greater than 95 percentil for age. The mean BMI was 23.8kg/m2, (min-max.16.5-30kg/m2). The duration of treatment ranges from 4-6 months depending on the result of the treatment. In 13 patients the treatment course was completed. Eleven patients are currently being treated. Nine patients dropped out by follow up. In two patients treatment was terminated due to side effects, which included a drug eruption due to tamoxifen in one patient that resolved after cessation of the drug. In another patient hematuria occurred once after starting the treatment although the cause wasn't attributed to Tamoxifen the parents did not consent to the continuation of the drug, the patients hematuria did not repeat. No long term side effects were observed. The duration of treatment was 4.7 months (Max: 6 Min: 1) for patients that completed treatment. Complete resolution was seen in 11 out of the 13 patients. In the other two patients while one showed minimal response the other showed no response at all. Both patients were referred for surgery. In both of these patients the duration of gynecomastia before tamoxifen treatment was started was over a year.

CONCLUSIONS: Tamoxifen treatment is therefore a relatively safe, beneficial choice of treatment and we recommend it be considered for patients with pubertal gynecomastia

Keywords: Tamoxifen, Pubertal gynecomastia

PP197

Parental and Familial Determinants of Adolescents' Subjective Health Complaints: Evidence from a Greek Cross-Sectional Study

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OBJECTIVE: Medically unexplained psychosomatic symptoms, labeled as subjective health complaints, are widely reported among adolescent population. Distinct aspects of family life have been documented to influence the development of subjective health complaints in adolescence. The aim of the present study was to investigate the associations among a number of parental and family characteristics and adolescents' self-reported subjective health complaints according to parent's and adolescent's gender, in an attempt to explore whether there are sex-dependent differences.

METHODS: Questionnaires were administered to a Greek nationwide random school-based sample of adolescents aged 11 to 18 years and their parents in 2003. Data from 922 adolescent-parent pairs were analyzed. Adolescents' reported subjective health complaints were assessed for their association with parental physical and mental health, parental solicitous behavior, quality of parent-child relationship, family cohesion and family structure, as reported by one, voluntarily selected, parent. Both univariate (Student's t-test, Pearson's 2, Pearson's correlation coefficient) and multivariate (multiple linear regression models) analysis were used depending on parent's and adolescent's sex, after adjusting for adolescent's age and family socio-economic status.

RESULTS: Multivariate analysis according to parent's and adolescent's sex indicated that females' subjective health complaints were significantly associated with low levels of maternal subjective mental health, poor mother-/ father-adolescent relationship and with maternal worry regarding offspring's health complaints. None of the parental and family factors reported by both mothers and fathers was found to be significantly associated with boys' subjective health complaints.

CONCLUSIONS: Our study underscores that male and female adolescents' psychosomatic health is differentially affected by certain dimensions of family life. Inclusion of paternal reports lends to our study extra merit. The sex-dependent discrepancies could guide clinicians and policy makers to design and implement sex-specific strategies in the effort to enhance adolescents' psychosomatic development.

Keywords: Psychosomatic health, sex differences, maternal/paternal factors, family life

PP198

Complaints of Psychosomatic Health Symptoms in Adolescence: A Greek Socio-Demographic Profile

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OBJECTIVE: Experience of common health symptoms without a clear physical or psychological cause, such as headache or dizziness, is highly reported among adolescents across Europe. Defining the sociodemographic factors that are related to self-reported complaints about somatic and psychological health in adolescence and understanding the underlying relationships is critical for planning both early preventive actions in community settings and effective multidisciplinary clinical interventions. The present study aimed to investigate associations of self-reported subjective health complaints with a number of sociodemographic factors of Greek adolescents.

METHODS: Questionnaires were administered to a Greek nationwide random school-based sample of adolescents aged 11 to 18 years and their parents in 2003. Data from 922 adolescent-parent pairs were analyzed (response rate = 63%). Adolescents' reported subjective health complaints were assessed for their association with a number of sociodemographic factors: age, sex, type of area of residence according to level of urbanization, immigration background, parental education and employment status, family socioeconomic status and perceived quality of financial resources (PQFR). Multiple linear regression analysis was used to assess the association of the aforementioned factors with subjective health complaints as the dependent variable.

RESULTS: Most sociodemographic variables, apart from area of residence and immigration background, were independently associated with subjective health complaints in the univariate analyses. The multiple linear regression analysis, however, limited the factors that could predict adolescents' subjective health complaints to four (age, sex, Family Affluence Scale score and perceived quality of financial resources). Some considerations regarding parental employment status and immigration background are highlighted.

CONCLUSIONS: Our study highlights the sociodemographic components of subjective health complaints in the Greek adolescent population. The need to include adolescent-specific measures when collecting information on adolescents' social background is underlined. Identifying vulnerable adolescent populations could lead to effective health promoting and preventive interventions.

Keywords: Adolescence, financial resources, sociodemographic factors, socioeconomic status, subjective assessment, subjective health complaints.

PP199

“I Didn’t Look Like the Other Girls”: Sexual Well-Being as a Function of Patterns of Body-Esteem

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OBJECTIVE: Little is known about how patterns of body-esteem over time might be related to sexual experiences and sexual well-being. Thus, we examined if females with a consistently positive or negative body image reported different sexual experiences (e.g., sexual confidence and desire) during emerging adulthood when compared to women whose body image improved or declined between adolescence and emerging adulthood. Of particular note was the degree to which body image during adolescence served as a unique risk or protective factor.

METHODS: 148 women between the ages of 18 and 25 ($M = 21$) participated in this mixed-methods study. Participants were asked to rate their bodies on a scale of 1 (hate body) to 9 (love body) at age 16 and currently and to discuss why they felt this way at each point in time. Based on responses, women were categorized into one of four groups: consistently positive (41%), consistently negative (16%), change-to-negative (14%), and change-to-positive (28%). Dependent variables included Multidimensional Sexuality Questionnaire (Snell, Fisher, & Walters, 1993); and the Sexual Desire Inventory-2 (Spector, Carey, & Steinberg, 1996).

RESULTS: Based on a series of ANOVAs and follow-up post hoc tests, a general pattern was identified. Women who reported a consistently positive perception reported more positive sexual experiences (e.g., sexual confidence, $p < .001$) than all other groups, including those women who developed positive body-esteem after adolescence. A preliminary content analysis of open-ended responses also revealed that negative body-esteem during adolescence was most often related to negative social comparisons.

CONCLUSIONS: This exploratory study suggests that body-esteem during adolescence may play a particularly important role in the sexual experiences of women throughout early adulthood. Qualitative findings will be used to illustrate future directions and applications of this work. This study was approved by the Institutional Review Board of the State University of New York at New Paltz.

Keywords: Body-esteem, sexual experiences, body image

PP200

Emotional Regulation Difficulties in Adolescence and Its Relation to Attachment Security

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OBJECTIVE: The objective of this research was to analyse the relationship between emotion regulation, internal models of attachment and current attachment security with mother, father and peers in adolescence.

METHODS: The sample consisted of 1911 adolescents (1047 boys and 864 girls) aged 14 to 20 years. To assess emotional regulation an adaptation of the scale for adolescents Difficulties in emotion regulation (Gratz and Roemer, 2004) was used; to assess anxiety and avoidance in attachment Feeney, Noller and Hanraban (1994) scale was used and attachment security to mothers, fathers and peers was assessed using the IPPA of Armsden and Greenberg (2009).

RESULTS: As predicted, attachment anxiety in adolescents was associated with emotion regulation difficulties, especially with limited access to strategies, non-acceptance of emotional states and lack of emotional clarity. Secure adolescents showed the lowest levels of emotion regulation difficulties, differing significantly from the anxious and avoidant-fearful ones, but no significant differences were found between secure and avoidant adolescents in this variable. Our results confirm the importance of current attachment security with mother, with father and with peers in adolescence on emotion regulation.

CONCLUSIONS: Results confirmed the special relevance of two variables, attachment anxiety and alienation in attachment relationships with peers on the difficulty in regulating emotions. Regarding gender differences, girls showed higher levels of difficulties in emotional regulation, specifically in the lack of emotional clarity and in non-acceptance of negative emotions.

Keywords: Adolescence, emotional regulation, attachment

PP201

Risk Factors for Emotional Stress Leading To Major Psychological Disorder among AdolescentsHimabindu Singh

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OBJECTIVE: To explore risk factors leading to emotional stress and to identify the significant risk factors leading to neurotic disorders among adolescents.

The research shall fulfill the knowledge gap to identify the stressors essential for rehabilitation and promotion of mental health among adolescents.

METHODS: A prospective study was conducted over a period of 6 months in a Centre of Excellence of Adolescent Health, Govt. of A.P, India. A total of 378 adolescents of average intelligence with emotional stress, selected by purposeful sampling method were included in the study. Tools used were HEEADSSS Screening, Binet-Kamat Test Of Intelligence, The Standardised Medico – Psychological Questionnaire. Seventeen risk factors leading to emotional stress were identified which were interrelating with each other, out of which Poverty (25.9%), Chronic medical problems (15.07%), Academic Stress (14.02%), Body Image Issues (11%), Sibling Rivalry (10.31%), Family history of mental illness (10%), Parents with Substance abuse (9%) were common. Out of 378 adolescents, 203 were identified to have Reactive Depression, Anxiety Neurosis, Conversion Disorder and OCD. Low Self Esteem, Academic stress, Sibling Rivalry, Substance abuse, Love affairs were significant factors leading to Reactive Depression.**RESULTS:** Body Image Issue (71%), Gender discrimination, academic Stress (73.5%) and Responsibilities to earn livelihood (73%) were significantly higher in girls. Reactive Depression (46%) was most common neurotic disorder in the study. Reactive Depression was statistically significant among boys and Conversion Disorder was statistically significant among girls.**CONCLUSIONS:** Though Poverty was the commonest risk factor associated with emotional stress but Factors relating to Family and Academic Stress were statistically Significant in leading to neurotic disorders among adolescents. A comprehensive Health Program for adolescents should include promotion of positive environment at Home and Educational institutions which is concept of Yuva - An Adolescent Friendly Health Initiative.**Keywords:** Adolescents, Emotional Stress, Risk Factors, Neurotic Disorders

PP202

A Short Cognitive Screening Can Provide Good Evidence of More Serious ProblemsTove K. Marberger, Øyvind Ö. Sundseth*

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OBJECTIVE: We examined a group of long-term social assistance recipients in Oslo, Norway (N = 380). The participants had diverse problems related to alcohol/drug abuse, psychiatric and/or somatic disease, and they had various ethnical and educational background. The study goal was to identify individuals who struggled with a marked premorbid cognitive dysfunction.**METHODS:** First the initial cognitive status was assessed through a Necker cube drawing/copy. The drawing was scored as 1 (near perfect), 2 (sufficient), 3 (loss of 3D impression) or 4 (Unrecognizable). 154 clients completed WAIS-III and were assigned to four groups depending on their initial Necker score. The scaled scores of the WAIS subtests Information, Similarities, Block design and Matrices were transformed to an estimated IQ.**RESULTS:** A one-way ANOVA indicated significant group differences, $F(3, 9) = 32.5$, $p < .002$. Subsequent pairwise comparisons revealed that group 1 scored significantly better than group 2, 3 and 4. The mean difference between group 1 and 4 was $estIQ = 28.6$; 95% CI = 20.4, 36.3; $p < .000$. The differences between group 1 and group 2 and 3 were significant and large (Mean difference $estIQ = 16.9$; 95% CI = 7.2, 26.5; $p < .000$, and 16.1 95% CI = 4.2, 27.7; $p = .002$ respectively). There were no significant differences between group 2 and 3. 59 clients with screening problems went through full neuropsychological test battery and were combined with anamnestic information about premorbid function. Clients with a known acquired head injury/disease were excluded. 34 clients were identified with early general or specific learning disabilities.**CONCLUSIONS:** It is concluded that problems with Neckers cube drawing was associated with a marked cognitive dysfunction. An early identification and greater attention on spatial and three-dimensional challenges in childhood, later adjustments problems perhaps could have been avoided.**Keywords:** Necker Cube, Cognitive Screening, Identification of cognitive Problems

PP203

The Adolescent Depression Scale: Development of a New Online Screening Instrument

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OBJECTIVE: The purpose of the study was to develop and validate a multidimensional measure of depression, the Adolescent Depression Scale (ADS); an online questionnaire designed to screen for depression in adolescents.

METHODS: Results from four focus groups were incorporated into developing the ADS, in an attempt to contribute to better understanding, treatment, and potential prevention of incidences of teenage depression. Although including a number of well-recognized depression symptoms, a number of major themes not previously reported in the literature emerged from the focus groups, including the observation that clothing choice, music choice, and time spent online were impacted by the experience of depression in an adolescent cohort. Details of the preliminary stages of development of the ADS will be provided, including results of pilot sample review (N=40) of the initial 256 items drafted for the ADS, as well as results of an expert panel review (N=10) of these items. Finally, preliminary results of the evaluation of the 97 item ADS using a sample of 3,316 secondary school students (1003 males, 2313 females) aged between 12 and 20 years (M=15.67, SD=1.55), will be provided.

RESULTS: Four reliable factors comparable to those identified in previous research were obtained from an obliquely rotated factor extraction, resulting in a final 27 item instrument, illustrating construct validity. The ADS demonstrated significant positive correlations with convergent measures of depression, and weaker correlations with a divergent measure of resilience, suggesting criterion-related validity.

CONCLUSIONS: Participants highlighted a number of difficulties in identifying adolescent depression, including the paradoxical and masking behaviors that teenagers engage in to conceal symptoms, and general lack of knowledge regarding depression and ways to obtain assistance. The findings of this research illustrate that outcomes of adolescent depression may be improved by providing better education about depression, and more generally to work on reducing the negative stigma attached to depression.

Keywords: Depression, adolescent, questionnaire, screening

PP204

Suicide Ideation and Attempt Prevalences among High School Students in Rize with the Associated Factors

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OBJECTIVE: Not many data published related to suicidal ideation and attempts among high school students in Turkey, none in Rize. The aim of the study is to define the prevalences of suicidal ideation and attempts among high school students in Rize with the associated factors.

METHODS: A cross-sectional study with a sample of 833 adolescents selected among 60 classes in 21 schools with probability proportion to size sampling was conducted in Rize province in 2012. Data on the subject were collected by a self-reported questionnaire at classrooms. Logistic regression was used to estimate the contribution of various factors on suicide behavior.

RESULTS: Mean age of the students was 16.4±0.04 years, 44.5% were boys and 55.5% were girls. Suicide ideation, plan, attempt and suicidal self-injuries prevalences were 10.2%, 10.0%, 9.1% and 6.6%, respectively. Gang membership (OR=2.9), witnessing emotional violence at home (OR=2.2), receiving disciplinary punishment at school (OR=2.0), threatening someone with a knife at school (OR=3.4), alcohol-related aggressive behavior at school (OR=9.4), bad relationship with father (OR=3.8), hostile attitudes (OR=1.2), psychiatry visit in last year (OR=3.8), and exposure to sexual violence at school (OR=3.4) were the predictors of suicide ideation. Predictors for suicidal self-injuries were exposure to sexual violence at school (OR=5.4), psychiatry visit in last year (OR=3.0), hostility (OR=1.1), witnessed robbery at home (OR=3.3), and having friends involved in drugs (OR=2.5).

CONCLUSIONS: Suicide ideation and attempt were common at high schools in Rize. Substance use and other violence-related issues were the predictors which indicated the need of immediate control programs.

Keywords: Suicide

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