



IAAH

15th European Annual Meeting

June 14-15, 2010, Reykjavik, Iceland

Abstracts and Program

Sponsors

Gold sponsor:



JANSSEN-CILAG

Silver sponsor:



Other sponsors:



The conference organisers are:



**The Icelandic Pediatric Association
and
The Icelandic Child- and Adolescent Psychiatrists Association**

Table of Contents

Committees	2
Welcome.....	3
General Information	4
Program.....	5
Oral Abstracts	11
Posters Abstracts.....	29
Author Index.....	43

Local organizing committee:

Katrín Davíðsdóttir, MD

Center for child development and behaviour, Reykjavík

Ragnar Bjarnason, MD, PhD

Landspítali University Hospital, Reykjavík

Guðrún Bryndís Guðmundsdóttir, MD

Landspítali University Hospital, Reykjavík

Ingólfur Einarsson, MD

The State Diagnostic and Counselling Center

Kristín Leifsdóttir, MD

Landspítali University Hospital, Reykjavík

Tryggvi Helgason, MD

Domus Medica, Reykjavík

Scientific committee:

Ragnar Bjarnason (IS)

Katrín Davíðsdóttir (IS)

Russell Viner (UK)

Helena Fonseca (Portugal)

Tommy Melin (Sweden)

Onno Sijperda (Netherland)

Sophie Lemerle (France)

Anne Meynard (Switzerland)

Artemis K. Tsitsika (Greece)

Moja Juicic (Slovenia)

V. De Sanctis (Italy)

It's a great pleasure to welcome you to the International Association for Adolescent Health 15th European Annual Meeting in Reykjavik, Iceland June 14–15, 2010.

The theme of the meeting is "Transition of healthcare – From child to adolescent to adult". The program includes plenary lectures, work shops, free communications and posters. The conference takes place at Askja on the campus of University of Iceland, located in a walking distance from the city centre. The conference dinner will be on Monday evening together with whale watching.

Reykjavik is an excellent venue for this congress. It is a vibrant city offering most of the conveniences and attractions usually associated with major capitals of the world. Reykjavik has a large selection of restaurants, cafes, hotels and bars.

Along with an ambitious social program, participants will have the opportunity to visit Iceland's most spectacular sites of interest, including geysers, waterfalls, volcanoes and glaciers. Take the opportunity of taking time off and enjoy the pristine nature of Iceland when daylight surrounds us twenty four seven! Hope you enjoy your visit in Iceland!

On behalf of the organizing committee

Ragnar Bjarnason and Katrín Davíðsdóttir

General Information

The Meeting is held in the Natural Sciences Building of University of Iceland (Náttúrufræðahús Háskóla Íslands), now named ASKJA.
Address: Askja – Natural Science Building, Sturlugata 7, 101 Reykjavík, Iceland

Breaks

Coffee, tea and refreshments are served in the foyer of the lecture halls.

Chairs

Please be present in your session hall at least 10 minutes prior to your session. It is important that the session stay on schedule so that individuals who want to hear a specific talk may do so without concerns of time.

It is vital that all speakers observe their time allotment.

Poster Display, set-up and removal

All posters are to be put up at the beginning of meeting.

Posters are numbered in the program and the boards accordingly. Please take notice of that before hanging up your poster. Posters left on poster boards after the closing of the meeting will be removed by the organiser who can not be held liable for any loss or damage to poster.

Professional Congress Organizer – PCO

Congress Reykjavík, Conference Management Services Ltd. is the official organising agency for the meeting.

The address is: Congress Reykjavik, Engjateigur 5, IS-105 Reykjavik
tel: +354 585 3900, fax: +354 585 3901, e-mail: lara@congress.is, www.congress.is
Mobile phone: Lára – 896 6075

Speakers

All speakers are asked to bring their presentation on a CD-ROM or USB key and add their presentation to the computer in their lecture hall in a coffee or lunch break.

Program

Monday, June 14

08:00	Registration	
09:00–09:30	Opening of the Meeting	Hall 132
09:30–10:15	Plenary Lecture 1	Hall 132
	Chair: Russell Viner	
	Time for a shift of paradigm for the transition process	
	Kristina Berg-Kelly, Sweden	
10:15–10:45	Coffee Break	
10:45–12:15	Workshop Session 1	
	<i>Participants can choose between 2 parallel workshops</i>	
	A. Improving adherence in chronic illness	Hall 132
	Chair: Workshop session 1 A: Onno Sijperda	
	Russell Viner / Deborah Christie, UK	
	B. How to write a scientific paper and get it published	Hall 130
	Chair: Workshop session 1 B: Tommy Melin	
	Joan-Carles Suris, Switzerland	
12:15–13:00	Lunch	
13:00–13:45	Plenary Lecture 2	Hall 132
	Chair: Helena Fonseca	
	The core nature of adolescent health in transition	
	Dr. Janet E. McDonagh, UK	

13:45–14:45 **Oral Session 1** Hall 132

Chair: Tryggvi Helgason

13:45–14:00 **01-1 What makes transition easier for parents of chronically ill adolescents?**

Christina Akre¹, Christoph Rutishauser², JC Suris¹

¹University Hospital Lausanne, EPALINGES, Switzerland

²Children's University Hospital, ZURICH, Switzerland

14:00–14:15 **01-2 Transition of care for norwegian adolescent patients with rare and chronic conditions**

Nina Benan¹, Mads Bjerke²

¹Oslo University Hospital, SANDVIKA, Norge

²Oslo University Hospital, Centre for Rare Disorders, OSLO, Norway

14:15–14:30 **01-3 Transition from paediatric to adult services in type 1 diabetes adolescents: a longitudinal study**

Paul Jacquin¹, Laurence Du Pasquier², Christiane Guitard², Julie Houdan², Claire Levy-Marchal², Jean-Claude Carel², Nadia Tubiana²

¹Hopital Robert Debré, PARIS, France

²Inserm U690 and Department of Endocrinology and Diabétology, Hôpital R.Debré, PARIS, France

14:30–14:45 **01-4 It is like entering a kindergarden' Young hospitalized patients' experience of Rigshospitalet**

Grete Teilmann, Pernille Grarup Hertz, Charlotte Blix, Kirsten Boisen
Copenhagen University Hospital Rigshospitalet, COPENHAGEN Ø, Danmark

13:45–14:45 **Oral Session 2** Hall 130

Chair: Kristín Leifsdóttir

13:45–14:00 **02-1 Sensitive health topics are rarely discussed with young patients. Young patients' experiences at Rigshospitalet**

Kirsten A Boisen, Pernille Grarup Hertz, Charlotte Blix, Grete Teilmann

Copenhagen University Hospital Rigshospitalet, COPENHAGEN, Danmark

14:00–14:15 **02-2 Healthy bodies, healthy minds, vibrant futures: Developing a youth health policy in Australia**

David Bennett, Fiona Robards, Susan Towns

The Children's Hospital at Westmead, SYDNEY, Australia

- 14:15–14:30 **02-3 Clustering of Health Risk Behaviors in Youth with Chronic Conditions Remains after Adjustment for ADHD**
 Ylva Tindberg¹, Charlotte Nylander², Carina Seidel³
¹Mälarsjukhuset, STRÄNGNÄS, Sverige
²Department of Pediatrics, ESKILSTUNA, Sweden
³Primary Care, MARIEFRED, Sverige
- 14:30–14:45 **02-4 Trends in body mass index among Icelandic adolescents and young adults from 1992 to 2007**
 Sigríður Þóra Eiðsdóttir¹, Álfgeir Logi Kristjánsson², Inga Dóra Sigfúsdóttir², Carol Ewing Garber³, John P Allegrante⁴
¹Teachers College Columbia University, NEW YORK, USA
²Icelandic Centre for Social Research and Analysis, School of Health and Educatio, REYKJAVÍK, Iceland
³Department of Biobehavioral Sciences, Teachers College, Columbia University, NEW YORK, USA
⁴Department of Health and Behavior Studies, Teachers College, Columbia University, NEW YORK, USA
- 14:45–15:15 **Coffee Break**
- 15:15–16:45 **Workshop Session 2**
Participants can choose between 2 parallell workshops
- A. Models for transition of care in chronic conditions** Hall 132
 Chair: Workshop session 2 A: Kirsten A. Boisen
 Kristina Berg-kelly & Laslo Erdes, Sweden
- B. Advocacy in adolescent health** Hall 130
 Chair: Workshop session 2: Raisa Lounamaa
 Linda Bearinger & Michael Resnick, USA
- 19:00 **Conference Dinner**
 We are going whale watching and during the sailing we will have a nice dinner on board.
Departure is at 19:00 with Hafsúlan from Ægisgarður.
Hafsúlan is the name of the boat, Ægisgarður is the name of the pier at Reykjavík Old Harbour where the boat is.
Duration of tour with dinner is three and a half hours.

Tuesday, June 15

09:00–09:45	Plenary Lecture 3	Hall 132
	Chair: Katrín Davíðsdóttir	
	Tell me what you smoke and I'll tell you where you'll end: Tobacco, cannabis and adolescents	
	Joan-Carles Suris, Switzerland	
09:45–10:15	Coffee Break	
10:45–12:15	Workshop Session 3	
	<i>Participants can choose between 2 parallel workshops</i>	
	A. Challenges of research in transitional care	Hall 132
	Chair: Workshop session 3 A: Margareta Krabbe	
	Dr. Janet E McDonagh, UK	
	B. Managing ADHD	Hall 130
	Chair: Workshop session 3 B: Guðrún Bryndís Guðmundsdóttir	
	Helena Fonseca, Portugal	
12:15–13:00	Lunch	
13:00–13:45	Plenary Lecture 4	Hall 132
	Chair: Ragnar Bjarnason	
	Understanding risk and protective factors for adolescent harmful behavior	
	Inga Dóra Sigfúsdóttir, Iceland	
13:45–15:00	Oral Session 3	Hall 132
	Chair: Ingibjörg Georgsdóttir	
13:45–14:00	O3-1 Body composition indicators, fitness and lifestyle of 18 to 19 year old Icelandic students	
	Kári Jónsson	
	<i>University of Iceland, LAUGARVATN, Iceland</i>	

- 14:00–14:15 **03-2 Independent Associations of Physical Activity and Adiposity with Fasting Insulin and Triglycerides in Icelandic Adolescents**
Gunnhildur Hinriksdóttir, Kári Jónsson, Anna Ólafsdóttir, Sigurbjörn Arngrímsson
University of Iceland, LAUGARVATN, Iceland
- 14:15–14:30 **03-3 C-Reactive Protein and the fitness-fatness debate in Icelandic Adolescents**
Sigurbjörn Árni Arngrímsson, Ágústa Tryggvadóttir, Kári Jónsson, Anna Sigríður Ólafsdóttir
University of Iceland, LAUGARVATN, Iceland
- 14:30–14:45 **03-4 Appendicular lean soft tissue can be well predicted from simple anthropometrics measurements**
Gunnar axel Davidsson
University of Iceland, REYKJAVIK, Iceland
- 14:45–15:00 **03-5 Normal weight obesity among 18 year old girls: associations with nutrition and physical activity**
Anna S. Olafsdóttir, Lara G Magnúsdóttir, Sigurbjörn A Arngrímsson
University of Iceland, REYKJAVIK, Iceland

13:45–14:45 **Oral Session 4** Hall 130

Chair: Björn Hjálmarsson

- 13:45–14:00 **04-1 Adolescent Substance Use, Sleep, and Academic Achievement: Evidence of Harm Due to Caffeine**
Alfgeir Kristjánsson¹, Jack James², Inga Dora Sigfusdóttir¹
¹Reykjavik University, REYKJAVIK, Iceland
²National University of Ireland, Galway, REYKJAVIK, Iceland
- 14:00–14:15 **04-2 Random Student Drug Tests – a preventive method?**
Nils Lundin
Student Health, HELSINGBORG, Sverige
- 14:15–14:30 **04-3 In which social context do sportive adolescents misuse alcohol?**
Richard E Bélanger¹, Fabien Ohl², Christina Akre¹, Joan-Carles Suris¹
¹GRSAINIUMSPIUNIL, LAUSANNE, Switzerland
²ISSUL/UNIL, LAUSANNE, Switzerland

- 14:30–14:45 **04-4 Internet use and psychosocial profile of adolescents in Cyprus**
 Artemis Tsitsika¹, Noni Paleomilitou², Despina Economou², George Kormas³,
 Chrysi-Aikaterini Georgokosta³, Elpida Pantikidi³, Georgia Kourlaba³, Marios
 Kassinosopoulos⁴, Elena Critselis³, Dimitrios Kafetzis⁵
¹*Adolescent Health Unit (AHU), Second Dept. of Pediatrics, Univ. of Athens, ATHENS, Greece*
²*Cypriot Pediatric Association, NICOSIA, Cyprus*
³*Adolescent Health Unit (AHU), Second Dept. of Pediatrics, "P. & A. Kyriakou", ATHENS, Greece*
⁴*Cyprus University of Technology, LIMASSOL, Cyprus*
⁵*Second Dept. of Pediatrics, "P. & A. Kyriakou" Children's Hospital, Uni. of Athens, ATHENS, Greece*
- 15:00–15:20 **Coffee Break**
- 15:20–16:50 **Workshop Session 4**
- A. Lifestyle intervention in schools** Hall 132
 Chair: Artemis Tsitsika
 Erlingur Jóhannsson, Iceland
- 16:50–17:00 **Closing of the meeting**

Oral Abstracts

Oral Session 1

01-1

What makes transition easier for parents of chronically ill adolescents?

Christina Akre¹, Christoph Rutishauser², JC Suris¹

¹University Hospital Lausanne, EPALINGES, Switzerland

²Children's University Hospital, ZURICH, Switzerland

Objective: To assess what factors are associated to an easy transition to adult health care for parents of chronically ill adolescents.

Methods: Parents of adolescents who had transitioned to adult health care in the previous two years from two university hospitals in Switzerland were divided into two groups depending on whether they thought that the transition had been easy (ETG; N=64) or not (NETG; N=22). Groups were compared on whether parents: (a) had discussed transition with the pediatric specialist, (b) felt that their child was ready for transition, (c) thought that their child felt accompanied during transition, (d) felt themselves accompanied during transition, (e) thought that their child felt at ease with the adult specialist and (f) felt themselves at ease with the adult specialist. Variables significant at the bivariate level were entered in a logistic regression controlling for potential confounders.

Results: ETG parents were more likely to have discussed transition with the pediatric specialist (84% vs. 55%; $p < .05$), to feel that their child was ready for transition (81% vs. 32%; $p < .001$), that he/she felt accompanied (77% vs. 0%; $p < .0001$) and that they felt accompanied (59% vs. 9%; $p < .001$). Although ETG adolescents were more likely to feel at ease with the adult specialist (77% vs. 36%; $p < .01$), no difference was observed for parents (41% vs. 36%).

Only the parents feeling accompanied (Adjusted odds ratio [AOR]: 20.9 [3.6/119.8]) and their child feeling at ease with the adult specialist (AOR: 4.7 [1.4/15.5]) remained significant in the logistic regression.

Conclusions: Transition is important for parents, specially because their role will change. Feeling accompanied during the process and thinking that their child feels at ease with the adult provider appears to ease the process. Our results seem to emphasize the importance of finding adult providers who are comfortable in dealing with adolescent/young adult patients.

Transition of care for norwegian adolescent patients with rare and chronic conditions

Nina Benan¹, Mads Bjerke²

¹*Oslo University Hospital, SANDVIKA, Norge*

²*Oslo University Hospital, Centre for Rare Disorders, OSLO, Norway*

Within Oslo University Hospital in Norway there are several national competence centres for rare disorders. These are interdisciplinary units which offer information, counselling and seminars on a selected range of rare disorders. This abstract is being submitted by two of these units, (Centre for Rare Disorders and Centre for Rare Epilepsy Related Disorders), which have national responsibility for approximately 75 rare diagnoses.

The centres collaborate with patients and their families, relevant patient organizations, regional and local health services, schools, kindergartens, health stations etc. Anyone may contact the centre, and a referral or an advance appointment is not required.

The centres activities are based on knowledge and experience, which is supplied by the users and their patient organizations. This information is coordinated with the centres own expertise and is then distributed in a user friendly manner via counselling by phone/email, seminar activities, information booklets, videos and the internet, and through information meetings in the patients home environment.

The presentation will provide a brief orientation on the organization and mandate of the competence centres as parts of Oslo University Hospital.

But the main focus will be on how we work to improve transitions in the adolescent patients life by arranging information meetings in their local environment. These meetings include other professionals who are involved with the patients on different levels in life, for example teachers, social workers, physiotherapists, doctors, nurses, nutritionists.

The importance of these meetings is underlined in recent studies which points at big difficulties for the patients in getting qualified assistance from the special health services throughout Norway. Competence and quality assured information about the diagnosis in question given in the adolescent patients local environment is key to working out a good model for transition of care in the individuals life.

Transition from paediatric to adult services in type 1 diabetes adolescents: a longitudinal study

Paul Jacquin¹, Laurence Du Pasquier², Christiane Guitard², Julie Houdan², Claire Levy-Marchal², Jean-Claude Carel², Nadia Tubiana²

¹Hopital Robert Debré, PARIS, France

²Inserm U690 and Department of Endocrinology and Diabétology, Hôpital R.Debré, PARIS, France

Transition of care in type 1 diabetes (T1D) adolescents occurs during an unstable period, with medical and psychosocial risks.

A longitudinal study was conducted in T1D patients from 6 pediatric and 9 diabetologic departments. Patients were included at their last visit in pediatric clinics (T1) and re-evaluated in adult diabetes clinics 0.5-2 years after (T2). At each study time, self-questionnaires were filled out by patients and a medical questionnaire by their physician.

61 patients aged 18.6 yrs (16.9 -21.7) with T1D for 8.8 yrs, were included in the study at T1. Data were available at T2 in 57 among 61 patients (93%), mean delay T2/T1 =1yr. Median HbA1c was not different at T1 (8.9+-1.8%) and T2 (9+-2.2%), despite an increase in the number of injections (3.7 vs 3.3 inj/day). Number of DKA episodes/year tended to be higher at T2 than T1 (5 vs 2 patients, p=0.06). Six patients had developed diabetic retinopathy (DR) at T2 (HbA1c= 9.7+- 1.2%, duration of T1D= 11.2 +-3.9 yrs), especially among older patients and higher BMI.

At T1, (21%) perceived that have not been prepared to the transition to adult care, while reporting similar process of preparation than others patients. Rate of depression (ADRS scale) was 18% at T1 and 22,3 % at T2.

14 patients (23%) were out of diabetes follow up at the end of the study despite an organization of transition : 7 were lost in follow up at the time of transition and never attended adult clinics ; 7 others patients had discontinued their attendance to adult clinics during the study.

This high level of discontinuation in diabetes care requires improvement of organization between paediatric and adult services. However, this study shows the differences between subjects in their needs of support at the time of transition. Specific strategies are required for high risk patients.

It is like entering a kindergarden' Young hospitalized patients' experience of Rigshospitalet

Grete Teilmann, Pernille Grarup Hertz, Charlotte Blix, Kirsten Boisen

Copenhagen University Hospital Rigshospitalet, COPENHAGEN Ø, Danmark

Objectives: The aim of this study was to explore hospitalized adolescent patients' experiences and view on the health services at Copenhagen University Hospital Rigshospitalet. We focused on three main topics:

- contact to other adolescents
- feeling bored during admission
- knowledge about disease

Methods: We conducted a questionnaire survey among young hospitalized patients at Rigshospitalet in 2009 including 158 patients (mean age: 17,5 (12–22 years)). 54% was female.

Results: 82% of the adolescent patients had no contact with other young patients while 52% were interested in such a contact. 48% of the patients were not informed whether other teenagers were admitted to their ward.

47% felt bored all or most of the time, and the majority (72%) had not been offered specific adolescent-related activities during the hospitalization. When asked, 58% preferred to be admitted at an adolescent ward (67% among the 15–19 year old teenagers) although this is currently not an option.

70% had spoken with a doctor and 87% with a nurse without parental presence during the hospital stay. There is no information on the frequency or the subjects of this contact. 25% felt the need for more information about their disease / treatment.

Conclusions: Adolescent patients ask for more contact with other teenage patients and more activities for young people.

The majority of young patients would prefer an adolescent ward although this is not a current option.

There is a need for repeated information about disease and treatment – even for young people with congenital or chronic conditions.

Oral Session 2

O2-1

Sensitive health topics are rarely discussed with young patients. Young patients' experiences at Rigshospitalet

Kirsten A Boisen, Pernille Grarup Hertz, Charlotte Blix, Grete Teilmann

Copenhagen University Hospital Rigshospitalet, COPENHAGEN, Denmark

Objectives: We aimed to explore adolescent patients' experiences and view on the outpatient health service at Copenhagen University Hospital Rigshospitalet. We focused on parental presence at consultations and discussion of sensitive health topics in the outpatient clinics.

Methods: We conducted a questionnaire survey among young patients at the outpatient clinics at Rigshospitalet in 2009. 287 adolescents were included (mean age: 17,0 years (12-22 years)), 54% of the participants were female.

Results: 75% of the young patients were often/always accompanied by their parents at the clinic visits (51% among adolescents > 18 years of age). 60% had only seldom or never spoken with a physician without parental presence (41% among adolescents > 18 years of age).

Health professionals only seldom discussed health risk behavior (table 1), although it has been shown that chronically ill adolescents live just as risky as healthy teenagers¹.

The parents were often or always present in 48% of the cases where sensitive topics were addressed (33% among adolescents > 18 years of age). When discussing contraception the parents were often or always present in 20% of the cases (15% among adolescents > 18 years of age).

30% of the chronically ill adolescents felt the need for more information about their disease / treatment (40% among chronically ill adolescents > 18 years of age).

Conclusion: There is a need for health professionals to address health risk behavior in chronically ill adolescents. Adolescent patients should be offered time alone with health professionals during some of the outpatient clinic visits. There is a need for repeated information about disease and treatment - even for young people with congenital or long-term conditions.

References:

1. Suris JC, Michaud PA, Akre C, Sawyer SM. Health risk behaviors in adolescents with chronic conditions. *Pediatrics*. 2008;122:e1113-8.

Healthy bodies, healthy minds, vibrant futures: Developing a youth health policy in Australia

David Bennett, Fiona Robards, Susan Towns

The Children's Hospital at Westmead, SYDNEY, Australia

Introduction: In the field of adolescent health and medical care, we have established and deepened our understanding of young people's health and wellbeing, how they access health services, how the health system can better support them to achieve health and wellbeing, and the role that the entire community plays. Setting a new direction in young people's health is enhanced by the creation of government policy that sets out the vision and established goals and priorities for action.

Objective: The NSW Centre for the Advancement of Adolescent Health in a collaborative partnership with the New South Wales (NSW) Department of Health have developed a new youth health policy, the purpose of which is to identify a set of principles and priorities for improving the health and wellbeing of young people in NSW.

Methods: The development of the youth health policy involved several phases: (a) engagement - buy in and endorsement of the need for a policy by the decision makers; (b) considering the evidence and the policy context; (c) face-to-face and online consultation with key stakeholders (youth health services, non-government organisations, other government agencies, academics and health professionals), and young people; (d) policy formulation and implementation.

Results: Building on the latest research in youth health and a literature review focussing on 'what works' to increase resilience for at-risk and marginalised young people, stakeholder views contributed to the development of a comprehensive youth health policy with three overarching goals and 12 identified priorities.

Discussion: The policy identifies the importance of understanding and responding in positive and innovative ways to the health needs of young people. Opportunities for action exist at all levels including health services, governments and communities. The challenges in achieving the desired outcomes will be discussed.

Clustering of Health Risk Behaviors in Youth with Chronic Conditions Remains after Adjustment for ADHD

Ylva Tindberg¹, Charlotte Nylander², Carina Seidel³

¹Mälarsjukhuset, STRÅNGNÄS, Sverige

²Department of Pediatrics, ESKILSTUNA, Sweden

³Primary Care, MARIEFRED, Sverige

Experimental behavior is a normal part of development but sometimes develops into health risk behavior. In the present study we compared the frequency and clustering of risk behaviors between chronically ill and healthy adolescents.

Methods: A population-based cross-sectional questionnaire (Life and Health in Young - 2008) was distributed to all students in year 9 and year 2 of post mandatory school in the county of Sörmland, Sweden. Social background factors and risk behavior (smoking, alcohol use, using drugs, violent behavior, criminal acts, early sexual debut and self-harm behavior) were asked for. Further, general well-being, chronic diseases and functional disabilities (diabetes, epilepsy, IBD, severe asthma, severe allergy, hearing, sight and movement impairment plus ADHD) were inquired. The association between risk behavior and clustering of these in youth with chronic conditions as compared to healthy controls were analyzed with logic regression and adjusted for background factors, perceived well-being and self-reported ADHD. Results are presented as adjusted OR and 95% CI.

Results: The response rate was 79% (5771/7262). Chronic conditions were reported by 8% (n=459) while 55% (n=3186) denied this (healthy controls). ADHD was affirmed by 162 (3%). Ever using drugs, violent or criminal acts, early sexual debut and self-harm behavior were significantly more common among adolescents with chronic conditions. Youth with chronic conditions were more likely to report 2-3 (aOR 1.6 [95%CI 1.2-2.2]) and =4 risk behaviors (aOR 2.1 [95%CI 1.4-3.1]) than healthy controls.

Conclusion: Our data show that adolescents with chronic conditions engage in health risk behaviors more often than healthy controls and that these risk behaviors tend to cluster together. The association persists after controlling for perceived well-being and self-reported ADHD. This new information emphasize that health risk screening and preventive counseling need to be included - at all health care levels - in the work with youth with chronic conditions.

Trends in body mass index among Icelandic adolescents and young adults from 1992 to 2007

Sigríður Þóra Eiðsdóttir¹, Álfgeir Logi Kristjánsson², Inga Dóra Sigfúsdóttir², Carol Ewing Garber³, John P Allegrante⁴

¹Teachers College Columbia University, NEW YORK, USA

²Icelandic Centre for Social Research and Analysis, School of Health and Education, REYKJAVÍK, Iceland

³Department of Biobehavioral Sciences, Teachers College, Columbia University, NEW YORK, USA

⁴Department of Health and Behavior Studies, Teachers College, Columbia University, NEW YORK, USA

The aim of this study was to examine trends in BMI distribution among Icelandic adolescents and young adults over time. Levels of BMI among 14- to 20-year-olds were measured repeatedly from 1992 to 2007 in the population-based Youth in Iceland surveys. For adolescents under 18 years of age, the International Obesity Task Force (IOTF) age- and gender-specific cut-off points for underweight, overweight, and obesity were used. As recommended by the IOTF, the overweight group does not include the obese group. Mean BMI for both 14- and 15-year-olds increased by 0.5 kg/m², and for the 16- through 20-year-olds by 0.4 - 1.2 kg/m², respectively. A steady downward trend in rates of normal weight was detected across all age groups for both genders. The average decline was 10.9% among boys and 4.7% among girls. Rates of overweight and obesity increased for both genders across all age groups (except for a slight decline among 16-year-old obese girls) and was more pronounced in boys than girls and among older age groups for both genders. The greatest increase occurred in the oldest group, 13.0% and 7.7% respectively among boys and 7.1% and 3.7% among girls. Within the weight categories, the most profound change occurred in the obese group. The increase was substantial for boys in all age groups, especially among 17- and 20-year-olds, 2 kg/m² and 1.7 kg/m², respectively. In contrast, in girls there was a slight decrease in average obesity across all age groups, with the exception of 20-year-old girls, who experienced a mean increase of 3 kg/m². For adolescents and particularly for young adults, the entire distribution of BMI has shifted upward, indicating that few Icelandic adolescents and young adults are immune to the ecological factors that appear to account for the observed increase in weight gain.

Oral Session 3

03-1

Body composition indicators, fitness and lifestyle of 18 to 19 year old Icelandic students

Kári Jónsson

University of Iceland, LAUGARVATN, Iceland

The structure of the Western societies has changed in the last decades and has led to more inactivity. The purpose of this study was to report the status and relations of body composition indicators, physical fitness and lifestyle of 18 year-old Icelandic students. Students ($n=1181$) in eight schools were selected for lifestyle-questionnaire; 636 (54%) replied. In subgroups of the students, height, weight, waist circumference, and skinfold thickness at 4 sites on the body were measured. Physical activity (PA) was assessed over 6 days with accelerometers and maximum energy output (EO) was measured via graded bicycle test.

Main results: Sedentary lifestyle (screen time) after school was 3.5 ± 3.2 h on weekdays (WD) and 5.3 ± 3.4 h on weekends (WE) for boys ($n=261$), and 3.2 ± 2.8 h/WD and 4.5 ± 2.6 h/WE for girls ($n=357$). Most boys (70.9%) and girls (65.7%) used a private car for transport. More of the boys (39.3%) than girls (20.3%) participated in organised sports and leisure sports after school. 9.8% of the students were daily smokers and 70% drank alcohol and these behaviors were correlated ($r=0.42$). Lifestyle of inactivity ($r=-0.14$), smoking ($r=-0.21$) and drinking ($r=-0.12$) were correlated with worse grades in school ($p<0.01$). Mean body mass index for boys was 23.1 ± 2.7 kg/m² ($n=61$) and 22.2 ± 3.2 kg/m² for girls ($n=87$). Waist circumference for boys was 78.16 ± 7.97 cm and 70.01 ± 7.48 cm for girls ($p<0.01$). Skinfolts for boys were 42.3 ± 17.54 cm and 61.51 ± 21.35 for girls ($p<0.01$). Average EO among boys was 3.23 ± 0.51 W/kg ($n=38$) and 2.76 ± 0.42 W/kg among girls ($n=44$). PA was not significantly different between boys and girls.

Conclusions: The PA of most of these pupils is too little and the intensity is too low to affect maximum EO. Physical fitness is very low, which along with little PA, poses potential risk for health.

Independent Associations of Physical Activity and Adiposity with Fasting Insulin and Triglycerides in Icelandic Adolescents

Gunnhildur Hinriksdóttir, Kári Jónsson, Anna Ólafsdóttir, Sigurbjörn Arngrímsson

University of Iceland, LAUGARVATN, Iceland

Although physical activity (PA) and adiposity affect blood lipids, insulin resistance and inflammatory factors in adults, these associations have not been comprehensively investigated in adolescents.

Purpose: To examine the association of PA and adiposity with metabolic risk factors in adolescents.

Methods: Adiposity [body fat percentage (%Fat), android fat mass (aFM), body mass index (BMI), and waist circumference] was measured via dual-energy X-ray absorptiometry and PA with pedometers in 18 year-old adolescents (N=209, 105 males). Fasting levels of blood lipids, insulin and C-reactive protein (CRP) were also assessed.

Results: Gender-adjusted indices of fatness were positively (negative for high-density lipoprotein) related to blood lipids ($r=|0.15|-|0.29|$, $p<0.035$), CRP ($r=0.25-0.33$, $p<0.001$), and insulin ($r=0.41-0.53$, $p<0.001$) whereas PA was only associated with triglycerides ($r=-0.19$, $p=0.006$) and insulin ($r=-0.29$, $p<0.001$). The adiposity measures retained their relations to triglycerides and insulin ($r=0.17-0.51$, $p<0.015$) after further control for PA. Similarly, PA maintained its association to triglycerides ($r=-0.16$ to -0.18 , $p<0.020$) and insulin ($r=-0.24$ to -0.29 , $p<0.001$) after adjustment for adiposity. Multiple regression revealed that after controlling for gender, aFM ($p<0.001$) and PA ($p=0.020$) were independent predictors of triglycerides ($R=0.31$), and %Fat ($p<0.001$) and PA ($p<0.001$) independently predicted insulin ($R=0.57$). Based on recommended levels of adiposity and PA, activity-fatness categories were created. Using BMI, triglycerides were higher in overweight/obese inactive adolescents than the other groups ($p<0.030$). For insulin, the normal-weight active group had lower values than the other groups ($p<0.045$). By %Fat, the inactive fat group had higher insulin values than all other groups ($p<0.015$) but active fat adolescents did not differ from the active normal group ($p=0.234$) although they had higher values than the active lean group ($p=0.001$). Little differences were observed between groups for triglycerides.

Conclusion: Although adiposity has greater influence on metabolic risk than PA, both PA and adiposity independently predict fasting triglycerides and insulin.

C-Reactive Protein and the fitness-fatness debate in Icelandic Adolescents

Sigurbjörn Árni Arngrímsson, Ágústa Tryggvadóttir, Kári Jónsson, Anna Sigríður Ólafsdóttir
University of Iceland, LAUGARVATN, Iceland

Fitness and adiposity are associated with C-reactive protein (CRP) in adults but few studies have investigated the influences of directly measured fitness (VO₂max) and fatness (%Fat) on CRP in adolescents.

Purpose: To examine the relation of VO₂max and %Fat to serum levels of CRP in adolescents.

Methods: A population of high-fit (68.3% >60th percentile, 15.6% <40th percentile VO₂max via graded treadmill test) high-fat [51.0% overfat via dual-energy X-ray absorptiometry, 23.3% overweight/obese from body mass index (BMI)] 18 year-old adolescents (N=250, 130 males) were assessed for %Fat, VO₂max, and CRP.

Results: Gender-adjusted indices of fatness (%Fat, BMI, waist circumference, android fat mass) were positively related to CRP ($r=0.28-0.36$, $p<0.01$), whereas its relation to VO₂max was inverse ($r=-0.31$, $p<0.01$). After further control for VO₂max, all estimates of adiposity retained their relations to CRP ($r=0.16-0.22$, $p<0.01$), but only %Fat was related to CRP independently of other measures of fatness ($r=0.19-0.26$, $p<0.01$). Correcting for gender and %Fat rendered the VO₂max-CRP relation insignificant ($p=0.44$) but the relation was independent of other measures of fatness (-0.13 to -0.20 , $p<0.05$). Based on recommended levels of fatness and fitness, fit-thin, fit-fat, unfit-thin, and unfit-fat categories were created. Using BMI, CRP was lower in fit-thin adolescents than the other groups ($p<0.05$), but the fit-fat group did not differ from unfit groups ($p=0.07-0.85$). In contrast, by %Fat, CRP was lower in both fit-thin and fit-fat ($p<0.01$) adolescents than their unfit-fat equals, although the fit-thin group had lower CRP than the fit-fat group ($p=0.29$).

Conclusion: Although fatness is a stronger predictor of CRP than fitness in a population of high-fit high-fat adolescents, directly measured fitness better predicts CRP than anthropometric indices of adiposity. Similarly, via direct estimates of fitness and fatness, fit-fat adolescents have a better CRP profile than their unfit peers.

Appendicular lean soft tissue can be well predicted from simple anthropometric measurements

Gunnar axel Davidsson

University of Iceland, REYKJAVIK, Iceland

Background: Anthropometric measurements of the upper arm have been used to assess skeletal muscle (SM) and nutritional status. However, these assessments have never been validated.

Purpose: To evaluate the strength of the Frisancho equation (upper arm SM area) for predicting SM and to develop and cross-validate ALST from simple anthropometric measurements, using dual-energy X-ray absorptiometry (DXA) as the reference method.

Methods: Height, weight, upper arm circumference, seven (subscapular, triceps, chest, midaxillary, abdomen, suprailiac, and thigh) skinfolds (7SKF) and three (triceps, abdomen and thigh) skinfolds (3SKF) were measured in 245 (129 men: 182.1±6.4 cm, 76.6±12.1 kg, 49.8±10.3 cm², 105.2±50.2 mm, 53.6±24.0 mm; 116 women: 168.1±5.6 cm, 62.8±8.3 kg, 29.3±5.5 cm², 143.9±40.3 mm, 79.8±19.9 mm) healthy 18 year-olds. Estimates of whole body and regional body composition were obtained via DXA and ALST was used to calculate whole body SM. Subjects were randomized into developmental group (DEV=185) and cross-validation group (CV=60).

Results: No differences were found in the physical characteristics between the DEV and CV groups. The Frisancho equation predicted ALST (22.9±5.1 kg, $r=0.90$, $SEE=2.4$ kg, $P<0.001$), whole body SM (26.8±6.0 kg, $r=0.90$, $SEE=2.8$ kg, $P<0.001$), and upper arm LST (2.9±0.9 kg, $r=0.92$, $SEE=0.37$ kg, $P<0.001$) moderately well in the whole group. An equation predicting ALST from weight, 3SKF and gender cross-validated well ($R^2=0.90$, $SEE=1.7$ kg, $P<0.001$) as did equation based on weight, 7SKF and gender ($R^2=0.91$, $SEE=1.6$ kg, $P<0.001$). The slope and intercept did not differ from the line of identity ($P>0.05$). The final prediction equations were based on the whole sample: $ALST(3SKF)=1.572+0.372(\text{byngd})-0.086(?3SKF)+1.788(\text{kyn})$ and $ALST(7SKF)=0.176+0.387(\text{byngd})-0.045(?7SKF)+2.106(\text{kyn})$. The error scores in these equations were normally distributed, homoscedastic, and not related to predicted scores ($r=0.0$, $P>0.998$).

Conclusion: Although the Frisancho equation does indicate ALST and whole body SM, simple anthropometric measurements better predict ALST, which can be used to estimate whole body SM.

Normal weight obesity among 18 year old girls: associations with nutrition and physical activity

Anna S. Olafsdottir, Lara G Magnusdottir, Sigurbjorn A Arngrimsson

University of Iceland, REYKJAVIK, Iceland

The term normal weight obesity (NWO) has been used to describe people with normal body mass index (BMI), but high body fat (BF), who display a cluster of obesity-related characteristics, despite being normal weight. Although it has been suggested that this may be related to diet and physical activity behaviour, studies are scarce and findings inconclusive. Therefore, the aim of this study was to investigate diet and physical activity among NWO girls.

BMI was assessed measuring height- and weight and dual energy X-ray absorptiometry (DXA) was used to measure body composition. Of 130 participants 118 completed DXA and were divided into three groups: BMI<25kg/m² and BF<30% (NW, n=52), BMI<25kg/m² and BF=30% (NWO, n=44) and BMI=25kg/m² and BF=30% (OW, n=22). Fitness was measured by graded treadmill test (VO₂max) and dietary intake was assessed by 24-hour recalls. Additionally, questionnaires were used to estimate physical activity and dietary patterns.

VO₂max was highest in NW, but similar between NWO and OW (43.4(5.1), 38.3(4.5) and 36.5(4.4) ml/kg/min respectively, p<0.001). NWO reported being the least physically active among the groups and were most likely to self-rate their fitness as low (p=0.001-0.005). OW reported lower energy intake than NWO and NW (1677(688), 1937(684) and 2209(771) kcal/day respectively, p=0.015), and iodine was lowest in their diet (61(41), 110(103) and 117(117) µg/day respectively, p=0.014). Dietary choices of NWO did not differ significantly from the other groups, but some trends were observed.

First findings indicate less physical activity and fitness among NWO than NW girls, but diet seems to be less different between these groups. However, the impact and interaction between nutrition and physical activity associated with NWO has to be investigated further.

Oral Session 4

O4-1

Adolescent Substance Use, Sleep, and Academic Achievement: Evidence of Harm Due to Caffeine

Alfgeir Kristjansson¹, Jack James², Inga Dora Sigfusdottir¹

¹Reykjavik University, REYKJAVIK, Iceland

²National University of Ireland, Galway, REYKJAVIK, Iceland

Academic achievement is an important predictor of health risk, and has been found to be sensitive to substance use during adolescence. Using academic achievement as the key outcome variable, 7 377 Icelandic adolescents were surveyed for cigarette smoking, alcohol use, daytime sleepiness, caffeine use, and relevant potential confounders. Structural equation modeling was used to examine direct and indirect effects of measured and latent variables in two models: the first with caffeine excluded and the second with caffeine included. A substantial proportion of variance in academic achievement, which might otherwise have been attributed to the harmful effects of cigarette smoking and alcohol use, was found to be attributable to caffeine. Evidence was obtained that daytime sleepiness due to caffeine withdrawal may be a contributing factor. Findings suggest the importance of including measurements of caffeine consumption in future studies of adolescent substance use.

Random Student Drug Tests – a preventive method?

Nils Lundin

Student Health, HELSINGBORG, Sverige

Random drug tests are used in workplaces, whereas in school premises Random Student Drug Tests (RSDT) are rarely used in Sweden. Introducing RSDT in schools - the workplace for adolescents - with the support of the work environment act; is one way of preparing the adolescent into the forthcoming adult workplace. The use of RSDT in schools has been criticized by the Swedish Schools Inspectorate, the Department of Education and the Swedish National Institute of Public Health. One of the arguments against RSDT has been lack of evidence of preventive effect on student drug habits. To examine the preventive effect of RSDT a questionnaire covering use of and attitudes to drugs was answered by 414 students in total in one high school with RSDT and in four control schools without RSDT. More students in the school with RSDT agreed that RSDT was a good tool to keep drug use low ($p=0.001$; MWU). These students also tended to have a less tolerant view on drugs and fewer students signaled an interest in using drugs in comparison with controls. More students in the RSDT school felt that the school's education on drugs was good as compared to the opinion of the students from the control schools. The results showed that RSDT could have a drug preventive effect, strengthened by a distinct school drug policy.

In which social context do sportive adolescents misuse alcohol?

Richard E Bélanger¹, Fabien Ohl², Christina Akaré¹, Joan-Carles Suris¹

¹GRSA/IUMSP/UNIL, LAUSANNE, Switzerland

²ISSUL/UNIL, LAUSANNE, Switzerland

Objective: To determine the social context associated with drunkenness episodes of sportive adolescents.

Methods: Data are issued from a 2009 cross-sectional survey on sport practice and substance use among adolescents aged 16-20 in the French-speaking part of Switzerland. Based on their report of at least one drunkenness episode in the last month, sportive adolescents were divided into: heavy drinkers (HD; n=316) and non heavy drinkers (NHD; n=578). Three social contexts were defined depending on with whom they did usually go out: sportive (if with sportive friends), non sportive (if with non sportive friends) and mixed (if with both of them). Groups were compared at the bivariate level, and a logistic regression was performed, controlling for age, gender, socioeconomic status (high vs. other), academic track (student vs. other), sport type (team vs. individual) and sport practice (competition vs. leisure), using NHD as the reference category. Results are given as adjusted odds ratios (AOR [95% confidence interval]).

Results: 35.3% of all adolescents were identified as HD. In the bivariate analysis, HD reported more frequently non sportive social contexts (37.6% vs. 23.1%; p=0.006) and less frequently sportive ones (7.2% vs. 17.4%; p=0.002). In the multivariate analysis, compared to sportive social contexts, HD were more likely to report non sportive (AOR=4.25 [1.93-9.35]) and mixed social contexts (AOR=2.60 [1.28-5.25]).

Conclusions: This study confirms alcohol misuse to be quite frequent among sportive adolescents. Previous empirical observations have described these youths to typically get drunk during athletic celebrations. Yet, our results indicate that drunkenness episodes mostly occur in a non sportive social context. Therefore, preventive messages regarding alcohol misuse among sportive adolescents should not differ from those targeting their sedentary peers.

Internet use and psychosocial profile of adolescents in Cyprus.

Artemis Tsitsika¹, Noni Paleomilitou², Despina Economou², George Kormas³, Chrysi-Aikaterini Georgokosta³, Elpida Pantikidi³, Georgia Kourlaba³, Marios Kassinopoulos⁴, Elena Critselis³, Dimitrios Kafetzis⁵

¹Adolescent Health Unit (AHU), Second Dept. of Pediatrics, Univ. of Athens, ATHENS, Greece

²Cypriot Pediatric Association, NICOSIA, Cyprus

³Adolescent Health Unit (AHU), Second Dept. of Pediatrics, „P. & A. Kyriakou,, ATHENS, Greece

⁴Cyprus University of Technology, LIMASSOL, Cyprus

⁵Second Dept. of Pediatrics, „P. & A. Kyriakou,, Children's Hospital, Uni. of Athens, ATHENS, Greece

Background: Excessive internet use has been associated with psychosocial problems among adolescents. However, there is lack of data regarding the effect of internet use on the psychosocial profile among adolescents from Cyprus.

Objective: The aim of the current study was to evaluate the association between internet use and psychosocial characteristics of adolescents from Cyprus.

Methods: A cross-sectional study was conducted during 2009-2010 in randomly selected public schools (9th and 10th grade) in Cyprus. The source population (N=624) consisted of 316 (50.7%) boys and 308 (49.3%) girls. The evaluation of internet use/misuse was undertaken by self-completed questionnaires that included the Young Internet Addiction Scale. The psychosocial profiles of participants were assessed according to the Strengths & Difficulties Questionnaire (SDQ). Response rate among the source population was 82.4% (n=514). The Pearson χ^2 was used to assess the study objectives.

Results: Among the study population, 72% (n=370) were identified as internet users. Among adolescent internet users, 27.6% (n=102) were at risk dependent internet users, while 2.2% (n=8) were evaluated as having Internet Addiction. The proportion of participants with total psychosocial maladjustment was statistically significantly higher among internet addicted adolescents (62.5%) compared to those who were normal internet users (6.2%) or at risk dependent internet users (16.7%, $p < 0.001$). Finally, the percent of adolescents with abnormal emotional symptoms and hyperactivity scores were significantly higher among adolescents with internet addiction (37.5% and 37.5%, respectively) compared to the rest of adolescents ($p < 0.001$ in both analyses).

Conclusion: The findings of the current study indicate a strong association between internet addiction and psychosocial maladjustment among adolescents from Cyprus.

Posters Abstracts

Young People's Expectations of and satisfaction with transitional care from paediatric and adult care perspectives

Janet McDonagh¹, Akiko Watanabe¹, Karen Shaw¹, E Rankin²

¹University of Birmingham, BIRMINGHAM, United Kingdom

²University Hospital Birmingham, BIRMINGHAM, United Kingdom

Aims: To examine young people's expectations of and satisfaction with transitional care

Methods: Young people aged 11-21 years with a chronic condition diagnosed under 19 years requiring long term follow-up in secondary care were recruited from clinics (n= 17) in a paediatric hospital and it's neighbouring adult facility. Expectations of and satisfaction with health care delivery were assessed using the self-completed 'Mind the Gap' questionnaire which measures the gap between the adolescent's expectation of best care and their perception of the actual service provided. The response format is a seven-point Likert scale anchored by 'strongly disagree' at 1 and 'strongly agree' at 7. The scale measures three dimensions of health care: environment, provider characteristics and process issues.

Results: 405 young people participated in the study, 280 (median age 14.8) in paediatric clinics and 125 (median age 19.5) in adult clinics. There were no significant differences between the overall satisfaction and the three dimensions between the young people in the paediatric setting when compared to the adult setting. All participants rated provider characteristics as most important, environment as least important. Ratings of current service delivery were significantly lower than young people's expectations. Young people were least satisfied with the environment and most satisfied with health provider characteristics. Young people rated health provider's knowledge of the young person's condition including latest treatments, and their honesty as the most essential aspects of best practice.

Conclusions: The significant gap between young people's expectations of best care and their perception of the actual service provided in all domains in both settings suggests further improvement in transitional care delivery is needed by both paediatric and adult care providers. Since provider characteristics are most important to young people, support and investment for professional development for staff is integral to transitional care services.

Relationship between psychosocial well-being and peer group characteristics in 15 years old Turkish students

Oya Ercan¹, Mujgan Alikasifoglu¹, Ethem Erginoz¹, Omer Uysal¹, Deniz Kaymak Albayrak², Ozlem Yildirim², Suheyla Ocak¹, Gulsah OKtay¹, Baris Ekici¹, Ilker Kemal Yucel¹

¹*Istanbul University Cerrahpasa Medical Faculty, ISTANBUL, Turkey*

²*Bogazici University, ISTANBUL, Turkey*

The aim of this study was to determine the relationship between, psychosocial well-being and adolescents' peer groups characteristics.

Method: This study involved the completion of international version of 'Health Behavior in School Age Children (HBSC) 2005/2006' survey questionnaire by 1597 grade 9th and 10th students. Mental health and psychosocial well-being were measured by 'KIDSCREEN-10' which is a part of the questionnaire. Student t test, varians analyses and Pearson correlation test were used for statistical analyses.

Results: There were significant relationships between KIDSCREEN-10 score and having =3 close friends, spending more time with friends both after school and in the evening, having a group of friends with ages similar to their own, having a group of friends in which there is a long time relationship with at least one of its members, participating in decision- making in the peer group, having a group of friends who are supportive to each other, having a group of friends who are well accepted by the important adults around the adolescent and having a group of friends with prosocial behaviors.

The adolescent who had a special friend was more likely to have a high KIDSCREEN-10 score. There was a significant relationship between the quality of the relationship with the special friend and KIDSCREEN-10 score.

Conclusion: The results of this study showed that the number of close friends, the time spent with friends, the structure, functioning and behaviors of the peer group with whom adolescent spent most of his/her leisure time, the presence of a special friend and having a good quality relationship with him/her are important determinants of adolescent psychosocial well-being and mental health. Thus the importance of peers on adolescent health should be taken into account when planning health promotion programmes.

Assessing the career aspirations of Greek adolescents with eating disorders: a case-control study

Artemis Tsitsika¹, Victoria Alexandropoulou², Eleni Tzavela¹, Mari Janikian¹, Orestis Giotakos¹, Dimitrios Kafetzis³

¹Adolescent Health Unit (AHU), Second Dept. of Pediatrics, Univ. of Athens, ATHENS, Greece

²Karamantaneio Children's Hospital, Patras, Greece, PATRAS, Greece

³Second Dept. of Pediatrics, „P.& A. Kyriakou,, Children's Hospital, Uni. of Athens, ATHENS, Greece

Objectives: Adolescent vocational aspirations are linked to educational and vocational selection and adjustment. The vocational aspirations of adolescents with eating disorders (ED) have been largely overseen. This study aimed to investigate the association between ED and vocational domain choice. A comparative assessment of career aspirations was carried out between ED adolescents (cases) and non-ED matched controls.

Measures: A case-control study design was employed (N=152). Cases were 76 adolescent outpatients in the Adolescent Health Unit (AHU) diagnosed with an ED. Controls were the cases' best-friends. Career aspirations and their relevant immediate educational goals were assessed through an interview and classified according to the International Standard Classification of Education taxonomy (ISCED; UNESCO, 1997). Paired choices for each of the 17 ISCED educational domains were compared with McNeman's chi-square tests for matched pairs.

Results: It was revealed that ED adolescents were more likely than controls to choose the Health Care domain (cases: 22.4% vs. controls: 9.2%, $p < .05$), and the Behavioral Science domain (cases: 18.4% vs. controls: 1.3%, $p < .001$). The most popular career choices for ED adolescents were medical doctor, dietician, and psychologist. Cases appeared to disregard nationally popular educational domains, such as education and engineering, which were clearly favored by controls. In regard to the general intention to pursue post-secondary tertiary education, there were no differences between cases and controls. Furthermore, having an ED was unrelated to being undecided regarding educational/career plans.

Conclusion: The results suggest that ED adolescents' focus on body weight may be a core source of self-definition which makes them gravitate toward body- and health-related careers. Interventions could be implemented to help adolescents gain awareness of their core body concern and its connection to their career aspirations, and to facilitate exploration of alternative career paths.

Changes in Behavior and Health Related Markers during a Pilot Study of a Family-based Behavioral Treatment of Obesity

Thrudur Gunnarsdottir, Zuilma Sigurdardottir, Ragnar Bjarnason

University of Iceland, REYKJAVIK, Iceland

Background: Family-based behavioral treatment (FBBT) has been shown efficacious over a 25-year period. For the treatment to be considered an applicable intervention in general settings effectiveness studies are needed.

Methods: Participants were 16 obese children and a parent participating with each child. The families were randomly assigned to FBBT delivered over 16 weeks at two different times. Measures were obtained at baseline, 16 weeks, 12 months and 16 months (height and weight, health-related behaviors, biochemical markers). BMI and BMI-SDS were calculated. Both groups included 8 obese children (BMI > 2.4 SDS), 2 boys and 6 girls. The groups included children with a diagnosis of ADHD, low IQ (75 and 76 according to WISC-III) and emotional difficulties (peer problems, depression, anxiety). Children's mean age at start of treatment was 10.5 years.

Results: BMI-SDS remained constant for the eight children in the delayed treatment onset group from baseline until start of treatment at 11 months (mean BMI-SDS = 3.24 at baseline and 3.22 at 11 months, $p = 0.88$). Thirteen families completed 16 weeks of treatment during which the children lost an average of 2.9 kg from pre to post treatment ($p < 0.001$), and lowered their BMI-SDS by 0.33 points ($p < 0.001$). The children who received treatment first ($n = 7$) maintained their new BMI-SDS from post treatment to 1-year follow-up (2.95 vs. 2.92, respectively). During treatment children increased their daily consumption of fruits and vegetables by an average of 2.5 servings and daily exercise increased by an average of 36 minutes. Abnormal biochemical profiles at baseline (5/16) were undetectable post treatment (5/5).

Conclusions: FBBT required only minor changes for implementation with a diverse group of children in a general health-care setting. Results indicate that significant changes in behavior and health related markers can be achieved with FBBT.

Generalization of Family-based Behavioral Treatment of Obesity: Study from a Health-care Setting in Iceland

Thrudur Gunnarsdottir, Anna Olafsdottir, Urdur Njardvik, Ragnar Bjarnason

University of Iceland, REYKJAVIK, Iceland

Introduction: Family-based behavioral treatment (FBBT) has been shown to be efficacious. Small pilot studies have replicated treatment effects in general settings with other populations. However, larger studies are required for the treatment to be considered well-established.

Methods: Participants were 84 obese children (BMI SDS > 2.4, aged 7-13 years) and a parent participating with each child. The families received 12 outpatient sessions of FBBT delivered over 18 weeks at the Children's Medical Center in Iceland. The mean age at start of treatment was 11.0 years (7-13 years) and the group included 38 girls and 46 boys. Thirty-nine children (46.4%) had a concurrent diagnosis of a psychological and/or a learning disorder (e.g. children with dyslexia, emotional and/or a behavioral disorder, autism spectrum disorder). Measures were collected at baseline and post treatment.

Results: Of 84 families starting treatment 61 completed. No significant differences were detected in baseline characteristics between families who completed treatment and those who dropped out. During treatment children increased their daily consumption of fruits and vegetables by an average of 1.5 servings ($p < 0.001$), increased their daily exercise by 22 minutes ($p < 0.001$) and lost an average of 2.4 kg ($p < 0.001$, 7.1%BMI). Parents lost an average of 3.96 kg ($p < 0.001$, 4.78%BMI). Outcomes on psychological measures and self-reported social skills improved significantly (CDI: 48.3 vs. 44.9 ($p < 0.05$); MASC: 53.09 vs. 49.9 ($p < 0.05$); Piers-Harris: 56.9 vs. 60.4 ($p < 0.001$); SSRS-child; 57.6 vs. 60.8 ($p < 0.001$); SSRS-parent; 52.8 vs. 55.1 ($p < 0.001$)).

Conclusions: Significant short-term changes in health behaviors, weight, psychological well-being and self-reported social skills can be achieved with FBBT. Further testing of treatment effects is ongoing as participants, drop-outs and completers will be followed for two years and long-term changes in BMI-SDS compared to a general sample of obese Icelandic children not undergoing treatment.

Parental Expectations of and satisfaction with transitional care from paediatric and adult care perspectives

Janet McDonagh

University of Birmingham, BIRMINGHAM, United Kingdom

Aim: To examine parental expectations of and satisfaction with transitional care

Methods: Parents of young people aged 11-21 years with a chronic condition diagnosed under 19 years requiring long term follow-up in secondary care were recruited from clinics (n= 17) in a paediatric hospital and it's neighbouring adult facility. Expectations of and satisfaction with health care delivery were assessed using the self-completed 'Mind the Gap' questionnaire which measures the gap between the parent's expectation of best care and their perception of the actual service provided. The response format is a seven-point Likert scale anchored by 'strongly disagree' at 1 and 'strongly agree' at 7. The scale measures three dimensions of health care: environment, provider characteristics and process issues.

Results: 283 parents participated in the study, 246 in paediatric clinics and 37 in adult clinics, 57.1 % were mothers. There was a significant gap between parental expectations and the current care they were receiving in all 3 dimensions in both settings. Parents attending paediatric clinics rated provider characteristics as the most essential aspects of best practice. . There was no statistical difference between provider characteristics and process issues for best practice in parents attending adult clinics with their child (i.e. provider and process were both important). Parents were least satisfied with the current environment and most satisfied with health provider characteristics.

Conclusions: The significant gap between parental expectations of best care and their perception of the actual service provided in all domains in both settings suggests further improvement in transitional care delivery which addresses parental concerns is needed by both paediatric and adult care providers.

Could you please stay in the waiting-room, Mum? Establishing structured transitional care for young people with cystic fibrosis

Pernille Grarup Hertz, Grete Teilmann, Marianne Skov, Kirsten A. Boisen

Copenhagen University Hospital Rigshospitalet, COPENHAGEN, Denmark

Background: Patients with cystic fibrosis (CF) are now expected to survive into adulthood. Going through puberty with the burden of a chronic disease is a special task, and during the last decades the need for structured transition plans has become clear.

Objectives: Our aim is to establish structured transitional care for young people with CF followed at the RH according to international guidelines (1). In addition we aim to monitor the effect of such a programme with respect to patients' self-reported quality of life (QoL), knowledge about their disease, lung function and BMI.

Methods: The transition programme was developed in cooperation with CAM and the CF-team. The staff was trained in communication skills and introduced to the HEADS-model (2). From January 2010 all adolescents with CF aged 12-18 years (n=39) were invited to participate in the programme including adolescent-consultations (AC) with physicians (10 pr. year) and nurses (two pr. year). The adolescent are offered time alone at the beginning of the AC, and the parents are invited to participate in the last part. The primary focus of the consultations with the nurse is the psychosocial aspects of the young patients life.

Participants were asked to complete a questionnaire CFQ-R14+ (3) prior to the first consultation and after one year. Patients' knowledge about their disease will be evaluated by readiness-checklists every year, lung function and BMI are monitored monthly

Status: 33/39 CF-patients have participated since January 2010, and in total 75 ACs have been accomplished. 26/39 patients have filled in the CFQ-R14+. Time alone with health professionals was documented in 46% of ACs.

Conclusion: The experiences with the AC are in general positive for patients, parents and healthcare professionals.. However, we found, that it is a big challenge for the professionals to change practice in a busy hospital setting.

Where do they go? Tracking young people with chronic conditions in their journey to adult care

David Louis Bennett¹, Susan Towns¹, Bin Moore¹, Helen Bibby¹, Lynne Brodie²

¹*The Children's Hospital at Westmead, WESTMEAD, Australia*

²*NSW Department of Health, SYDNEY, Australia*

Background: In 2006, in Sydney, Australia, The Children's Hospital at Westmead (CHW) and the NSW Greater Metropolitan Clinical Taskforce (GMCT) set out to improve services for young people with chronic illness moving to adult health care. Although policy and practice guidelines had been developed, uptake was variable and the approach lacked coordination. A Transition Project Officer (TPO) was appointed to collaborate with existing transition coordinators based in adult hospitals.

Objectives: The initial focus of the Transition Project was to develop tools to assist specialty units to implement transition planning and promote the process throughout the Hospital. This study aimed to evaluate the impact of the project and identify areas for improvement.

Method: Data was obtained for the following key performance indicators: number of referrals to adult Transition Care Coordinators by CHW staff; number of hits on the transition intranet page that provides resources and tools for transition. Results were compared for the years 2006, 2007 and 2008.

Results: In 2006, it was estimated that 250 young people would transition from CHW's 24 subspecialty areas. However, only 71 (28%) were referred to the adult transition coordinators. By 2008, with the introduction of a coordinated transition process, referrals increased to 122. Increases in website use will also be presented.

Conclusions: Coordinated transition planning involves promoting sustainable engagement with adult health professionals or teams in any setting. An identifiable transition program with designated policies, resources and services, facilitated the identification of patients requiring transition, increased referrals to the adult transition coordinators, and enabled the transition process to be more easily embraced by subspecialty units.

Setting up a seamless transition programme within Haemoglobinopathy services and not Haematology

Rebecca Cooke

Birmingham Children's Hospital, BIRMINGHAM, United Kingdom

The journey from adolescence into adulthood is a challenging time for us all. Juggling physiological, emotional, social and vocational aspects is tricky, and upon reflection many adults would not like to repeat the experience. For those who live with a chronic, lifelong condition it is even more difficult. Imagine coming to terms with being diagnosed with Sickle Cell or Thalassaemia and learning the true ramifications this will have in life. Developing skills to positively manage your own health needs in union with Health care professionals is a big expectation for someone so young. This for most adolescents becomes all too much at this stage in their life which is already spiralling around uncertainty and constant change.

Following the recognition by the children's national service framework 2004, to provide a service which meets adolescent health care needs, I have been given the privilege as Transition Nurse Coordinator to develop and set up such a service. I work across two Trusts; Birmingham Children's Hospital and the adult Sickle Cell and Thalassaemia Centre, City Hospital, England.

As the Transition Nurse Coordinator I work closely with patients aged 11-24 years. I ensure they understand their condition, gain skills to best manage their needs whilst still leading a positive and fulfilling life. I support the family through this vital process as this change is equally difficult for them. I also propose where changes may need to occur within the service.

Assigned the task to drive this project forward is exciting and has challenged me in so many ways. This poster presentation will reflect on how I have begun to bridge the gap in adolescent health care. This is a role in working progress, I hope to inspire others and share some of the differences this project has already made to adolescents and their families.

Anorexia nervosa and celiac disease in adolescents

Maria Kaltsa¹, Maria Kostaki¹, Artemis Tsitsika², Maria Elia¹, Louisa Kontara¹, Eleni Georgouli¹

¹Second Dpt of Pediatrics, P & A Kyriakou, Children's Hospital, Athens Univ., ATHENS, Greece

²Adolescent Health Unit, P & A Kyriakou, Children's Hospital, Athens Univ., ATHENS, Greece

Introduction: Anorexia Nervosa (AN) which is considered as a serious mental health disorder has lately raised important public health concern causing severe medical and psychosocial morbidity and an increased mortality rate. Celiac disease (CD) is an immune-mediated enteropathy caused by permanent intolerance to gluten, the major storage protein of wheat and similar grains, in genetically susceptible individuals. Originally CD was considered to be a rare malabsorption syndrome of childhood, now it is recognized as a common condition that may be diagnosed at any age and that affects many organ systems.

Purpose: The aim of our study is to estimate the possible coexistence of AN and CD in an outpatient community-dwelling population of adolescents suffering from AN.

Material: Our sample is consisted of 70 children 9 to 19 years old suffering from AN. Patients was diagnosed with a full syndrome eating disorder according to the DSM-IV criteria. This population is characterized by a relatively homogeneous socioeconomic background.

Methods: All patients were tested for anti-gliadin (AGA) IgA, anti-endomysium (EMA) IgA and anti-tissue transglutaminase (TTG) IgA antibodies. IgA EMA in serum has been measured by means of indirect immunofluorescence assay while AGA and TTG by using an enzyme linked immunosorbent assay (ELISA) system. No patient was suffering from IgA deficiency in our sample.

Results: No patient was detected suffering from both diseases at the same time.

Conclusion: This is a prospective study. Our aim is to reassess all patients after they re-establish normal eating habits including variation of nutrition and adequate gluten intake. All screening serologic tests will be repeated. We suggest that a high clinical index of suspicion should be maintained for psychiatric patients because CD can present solely with neuropsychiatric conditions as well as untreated CD may predispose to mental and behavioral disorders such as AN.

Internet use/misuse and primary location of internet access among adolescents from Cyprus

Artemis Tsitsika¹, Despina Economou², Marios Kassinopoulos³, George Kormas⁴, Elpida Pantikidi⁴, Chrysi-Aikaterini Georgokosta⁴, Georgia Kourlaba⁵, Noni Paleomilitou², Elena Critselis⁴, Dimitrios Kafetzis⁶

¹Adolescent Health Unit (AHU), Second Dept. of Pediatrics, Univ. of Athens, ATHENS, Greece

²Cypriot Pediatric Association, NICOSIA, Cyprus

³Cyprus University of Technology, LIMASSOL, Cyprus

⁴Adolescent Health Unit (AHU), Second Dept. of Pediatrics, „P. & A. Kyriakou,, ATHENS, Greece

⁵ADOLESCENT HEALTH UNIT (AHU), ATHENS, Greece

⁶Second Dept. of Pediatrics, „P. & A. Kyriakou,, Children's Hospital, Uni. of Athens, ATHENS, Greece

Objective: The aim of the current study was to evaluate the association between internet use/misuse and the primary location of internet access among adolescents from Cyprus.

Methods A cross-sectional study was conducted during 2009-2010 in randomly selected public schools (9th and 10th grade) in Cyprus. The source population (N=624) consisted of 316 (50.7%) boys and 308 (49.3%) girls. Self-completed questionnaires were applied for assessing the primary location of internet access. Moreover, the evaluation of internet use/misuse was obtained by using the Young Internet Addiction Scale. The Pearson χ^2 was used to assess the study objectives.

Results: Among the study population, 72% (n=370) were internet users. The majority of participants reported that their primary location of internet access was their home (82.4%), while 16.3% reported that the primary location was both their home and internet café and only 1.3% of participants reported only internet café. Moreover, 27.6% were at risk dependent internet users and 2.2% had internet addiction. The proportion of adolescents who were normal internet users was significantly lower among those who reported that the primary location of internet access was both their home and internet café (58.7%) as compared to those who had internet access solely from their home (70.8%) or solely from internet café (80.0%, $p=0.017$). On the other hand, the percentage of adolescents with internet addiction was higher among those who had internet access in both their home and internet café (7.9%) as compared to the rest of participants ($p<0.001$).

Conclusion: The findings of the current study indicate that the adolescents who have internet access from both their home and internet café are more likely to be at risk dependent internet users or internet addicted as compared to those who have internet access from solely either their home or internet café.

Changes in parental depression are unrelated to changes in children's self-reported psychological well-being during family-based behavioral treatment for childhood obesity

Olof Bjornsdottir¹, Thrudur Gunnarsdottir¹, Unnur Valdimarsdottir¹, Urdur Njardvik¹, Anna Olafsdottir¹, Orn Olafsson¹, Ragnar Bjarnason²

¹University of Iceland, REYKJAVIK, Iceland

²Landspítali University Hospital, REYKJAVIK, Iceland

Background: Childhood obesity is a chronic, prevalent disease that has been associated with child psychological maladjustment. Associations have been found between maternal psychopathology and obese children's psychological problems. Furthermore, improved maternal psychopathology has been associated with changes in parent-reported child psychological problems during family-based behavioral treatment (FBBT).

Objective: To examine the effects of familial demographic factors and changes in parental depression on the changes in children's psychological well-being during FBBT. Methods: Participants were 61 obese children (BMI-SDS>2.4, aged 7-13) and one parent with each child who completed an 18-week treatment at the Children's Medical Center in Iceland. Demographics were measured before treatment. Anthropometry, parental depression (BDI-II) and child psychological depression (CDI), anxiety (MASC), and self-concept (Piers-Harris) were measured before and after treatment.

Results: Child and parental weight status decreased from pre to post treatment ($p<0.001$). Significant improvements were also observed for both parental depression ($p<0.05$) and child depression ($p<0.05$), anxiety ($p<0.05$), and self-esteem ($p<0.001$). Changes in mothers' depression were not associated with self-reported changes in children's psychological depression ($r=-.014$, $p=0.881$), anxiety ($r=.011$, $p=0.905$) and self-concept ($r=.049$, $p=0.601$)

Conclusions: The method used to measure obese children's psychological problems seems to affect whether an association is observed between children's and parental measures of psychological concerns. Therefore, to best describe this relationship preferably both parent- and self-report measures should be used. This methodological issue should be taken into consideration in future research of the association between parental and child psychological well-being.

Sense, a national sex education and care approach in the Netherlands

Onno Sijperda¹, Yolanda van Weert²

¹*Community Medicine, Youth Health, JH ZWOLLE, The Netherlands*

²*National Institute for Public Health and Environment, BA BILTHOVEN, The Netherlands*

Already for many years there has been a good practice of sex education and care for youngsters in the Netherlands. It has been carried out by several institutions, organizations and professionals often with a suitable cooperation, a good coherence and a sufficient accessibility for the youngsters.

However, more integration of efforts was needed.

After a preparative period of many years the Sense project is now running since 2008 as a national approach and it has turned out to be promising. The starting point for the sex education is the interactive website <http://www.sense.info> for youngsters. It contains broad information about all possible subjects regarding sexual health and sexuality in general.

In the lecture a short presentation of the website is given.

Furthermore every regional Health Service in the Netherlands has its own Sense center. This is linked to the School Health department, the department of

Infectious Diseases and Sexually Transmitted Diseases and the advice Centers for Travelers Vaccinations.

In Sense special attention is given to contraception, sexual violence, unwanted pregnancy, sexual problems and STD. Moreover we focus on several target groups as low-educated youngsters and immigrants.

We will give some information about daily work issues in these centers and we will show some results over the past two years.

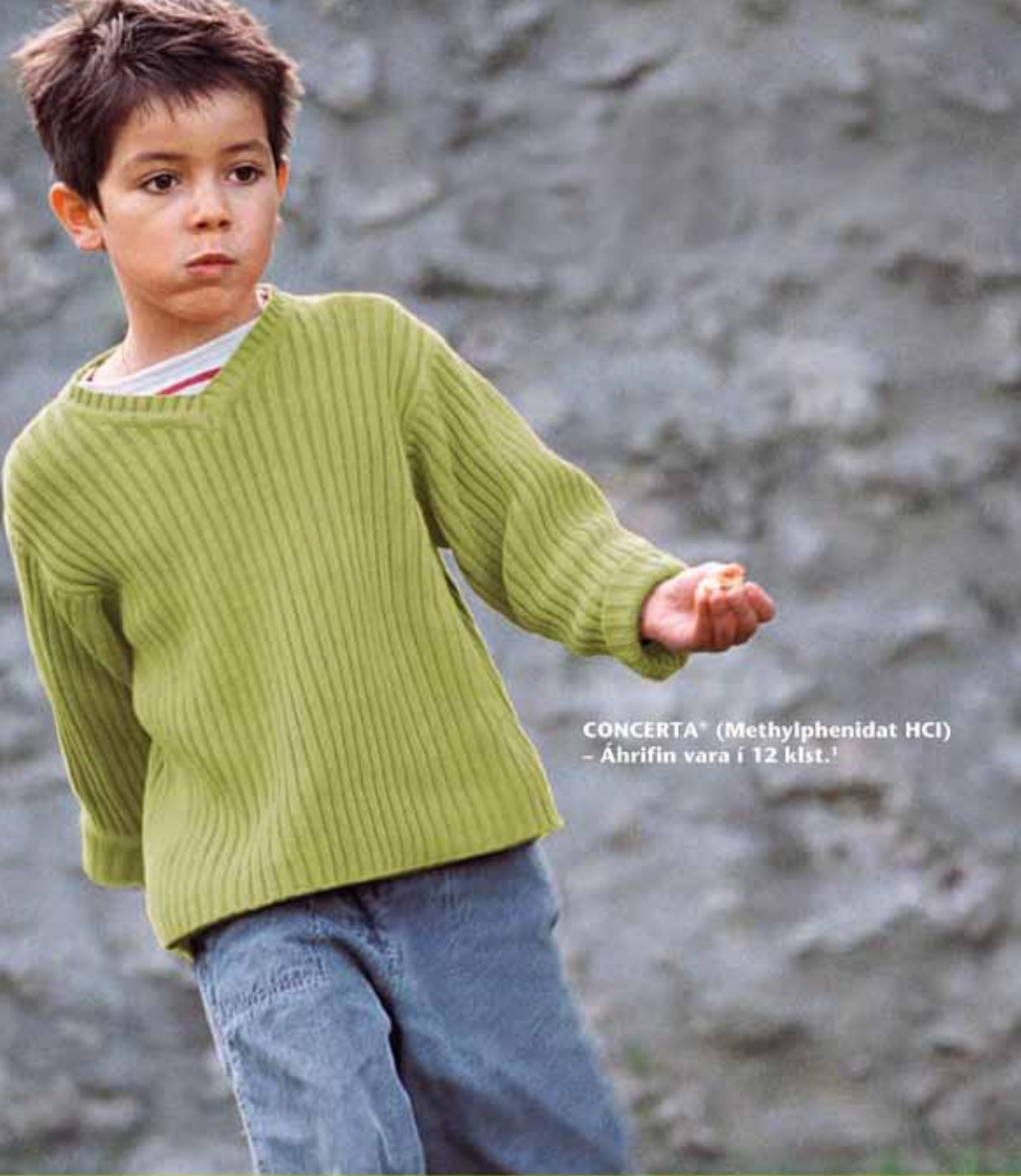
Author Index

NAME	ABSTRACT NO	NAME	ABSTRACT NO
Akre, Christina	01-1, 04-3	Kassinopoulos, Marios.....	04-4, P11
Albayrak, Deniz Kaymak.....	P02	Kontara, Louisa	P10
Alexandropoulou, Victoria	P03	Kormas, George.....	04-4, P11
Alikasifoglu Mujgan	P02	Kostaki, Maria.....	P10
Allegrente, John P	02-4	Kourlaba, Georgia	04-4, P11
Arngrímsson, Sigurbjörn Á.....	03-2, 03-3, 03-5	Kristjánsson, Alfgeir Logi	02-4, 04-1
Benan, Nina	01-2	Levy-Marchal, Claire.....	01-3
Bennett, David	02-2	Lundin, Nils.....	04-2
Bennett, David Louis	P08	Magnusdóttir, Lara G.....	03-5
Bélanger, Richard E	04-3	McDonagh, Janet.....	P01, P06
Bibby, Helen	P08	Moore, J. Bin.....	P08
Bjarnason, Ragnar.....	P04, P05, P12	Njardvik, Urdur.....	P05, P12
Bjerke, Mads	01-2	Nylander, Charlotte	02-3
Bjornsdóttir, Olof	P12	Ocak, Suheyla	P02
Blix, Charlotte	01-4, 02-1	Ohl, Fabien	04-3
Boisen, Kirsten A	01-4, 02-1, P07	OKtay, Gulsah	P02
Brodie, Lynne	P08	Olafsdóttir, Anna	03-5, P05, P12
Carel, Jean-Claude	01-3	Olafsson, Orn.....	P12
Cooke, Rebecca.....	P09	Ólafsdóttir, Anna Sigríður.....	03-2, 03-3
Critselis, Elena.....	04-4, P11	Paleomilitou, Noni.....	04-4, P11
Davidsson, Axel, Gunnar.....	03-4	Pantikidi, Elpida	04-4, P11
Du pasquier, Laurence	01-3	Rankin, E	P01
Economou, Despina.....	04-4, P11	Robards, J Fiona.....	02-2
Eiðsdóttir, Sigríður Þóra	02-4	Rutishauser, Christoph.....	01-1
Ekici, Baris	P02	Seidel, Carina	02-3
Elia, Maria	P10	Shaw, L Karen	P01
Ercan, Oya	P02	Sigfúsdóttir, Inga Dóra.....	02-4, 04-1
Erginoz, Ethem.....	P02	Sigurdardóttir, Zuilma	P04
Garber, Carol Ewing	02-4	Sijperda, Onno	P13
Georgokosta, Chrysi-Aikaterini	04-4, P11	Skov, Marianne	P07
Georgouli, Eleni.....	P10	Suris, Joan-Carles.....	01-1, 04-3
Giotakos, Orestis	P03	Teilmann, Grete.....	01-4, 02-1, P07
Grarup Hertz, Pernille	01-4	Tindberg, Ylva	02-3
Guitard, Christiane	01-3	Towns, J Susan.....	02-2, P08
Gunnarsdóttir, Thrudur.....	P04, P05, P12	Tryggvadóttir, Ágústa	03-3
Hertz, Grarup Pernille	P07, 02-1	Tsitsika, Artemis	P03, 04-4, P10, P11
Hinriksdóttir, Gunnhildur.....	03-2	Tubiana, Nadia.....	01-3
Houdan, Julie	01-3	Tzavela, Eleni	P03
Jacquin, Paul.....	01-3	Uysal, Omer	P02
James, E. Jack	04-1	Valdimarsdóttir, Unnur.....	P12
Janikian, Mari	P03	Watanabe, Akiko	P01
Jónsson, Kári.....	03-1, 03-2, 03-3	Weert, van Yolanda	P13
Kafetzis, Dimitrios.....	04-4, P03, P11	Yildirim, Ozlem	P02
Kaltsa, Maria.....	P10	Yucel, Ilker Kemal.....	P02

CONCERTA® Samantekt á eiginleikum lyfs.

CONCERTA® 18 mg, 27 mg, 36 mg og 54 mg forðatöflur. Hvert tafla inniheldur 18 mg, 27 mg, 36 mg eða 54 mg metýlfenidathýdróklóríð. **Ábendingar:** CONCERTA er ætlað til notkunar sem þáttur í viðfermi meðferð við athyglisbresti með ofvirkni (ADHD, Attention Deficit Hyperactivity Disorder) hjá börnum 6 ára og eldri þegar stuðningsúræði ein og sér nægja ekki. Greining skal vera samkvæmt DSM-IV skilmerkjum eða leiðbeiningum í ICD-10, og til grundvallar skal liggja heildar sjúkrasaga og mat á sjúklingnum. Meðferð með CONCERTA á ekki við fyrir öll börn með ADHD og ákvröðun um notkun lyfsins skal tekin á grundvelli mjög ítarlegs mats á því hve alvarleg og langvinn einkenni barnsins eru að teknu tilliti til aldurs þess. **Skammtar og lyfjagjöf:** Gleypa skal CONCERTA í heilu lagi með vökva og ekki má tryggja lyfið, skipta því eða mylja. Nota má CONCERTA með eða án matar. *Börn (yngri en 6 ára):* Ekki hefur verið sýnt fram á öruggi og verkun CONCERTA hjá börnum yngri en 6 ára. *6 ára og eldri:* CONCERTA er tekið einu sinni á dag að morgni. **Eftirlit á meðan á meðferð stendur:** Fylgjast á reglulega með vexti, sálfræðilegu ástandi og ástandi hjarta- og æðakerfis. *Skammtaauðgun:* Í upphafi meðferðar með CONCERTA er nauðsynlegt að fari fram nákvæm skammtaauðgun. Hefja á skammtaauðgun með minnsta mögulega skammti. Yfirleitt eru skammtar stilltir með viku millibili. Stærri dagsskammtur er 54 mg er ekki ráðlagður. **Frábendingar:** Þekkt ónæmi fyrir metýlfenidati eða einhverju hjálparefnum, glúka, krómflíkaexli, ofstarfsemi skjaldkirtils (hyperthyroidismi), greining eða saga um alvarlegt þunglyndi, lýstarstól/átraskanir, sjálfsvígstillheingingu, einkenni geðveilu, alvarlega skapbrest, oflæti, geðklofa eða síðblindu. Aður greindir hjarta- og æðsjúkdómur þar með talið háþrýstingur, hjartablaut, kransæðastífla, hjartaöng, meðfeddur hjartasjúkdómur, hjartadrepp, hjartsláttartruflanir sem geta verið lífsþættulegar. Undirliiggjandi sjúkdómur í heilættum. Ekki má nota CONCERTA samhliða ósértækum, óafturkræfum MAO-hemlum né heldur í a.m.k. 14 daga eftir að meðferð með ósértækum, ósérkræfum MAO-hemlum hefur verið hætt. **Sérstök varnarorð og varúðarreglur við notkun:** *Langtíma meðferð (lengur en í 12 mánuði) hjá börnum og unglingum:* Metýlfenidat meðferð á ekki og þarf ekki að vera til frambúðar. Fylgjast skil stöðugt með sjúklingum á langtíma meðferð hvað varðar hjarta og æðar, vöxt, matarlyst, þrón yfira geðræna vandamála eða versnun þeirra sem voru fyrir. *Hjarta og æðar:* Sjúklingur skal gangast undir nákvæma lækniskönnun til að meta hvort til staðar séu hjartasjúkdómur. Greiningar á göngum úr klínískum rannsóknum á metýlfenidati hjá börnum og unglingum með ADHD sýndu fram á að alengt getur verið að hjá sjúklingum sem nota metýlfenidat hækki slagbláþrýstingur og þambláþrýstingur um meira en 10 mmHg miðað við samanburðarþög. Gæta skal varúðar við meðhöndlun sjúklinga þegar hækkaður blóðþrýstingur eða aukinn hjartsláttur getur haft áhrif á sjúklinga með undirliiggjandi sjúkdóma. Fylgjast skil vandlega með hjarta- og æðakerfi. Skrá á blóðþrýsting og hjartslátt á línurit við hverja skammtabreytingu og síðan amk á 6 mánaða fresti. *Geðræn vandamál:* Sjúklingar með ADHD eiga oft einnig við geðræn vandamál að stríða og taka skal tillit til þess þegar ávisað er orvandi lyfjum. *Árásargirni eða fjandsamleg hegðun:* Árásarhegðing getur komið fram eða versnað meðan á meðferð með orvandi lyfjum stendur. *Kippir:* Metýlfenidat hefur verið tengt því að hreyfi- og raddkippir hafa komið fram eða versnað. *Kvíði og uppátt:* Metýlfenidat hefur verið tengt versnun undirliiggjandi kvíða, uppánns og spennu. *Geðhvarfasýki:* Gæta þarf sérstaklega varúðar þegar metýlfenidat er notað til að meðhöndla ADHD hjá sjúklingum sem einnig eru með geðhvarfasýki vegna hættu á að oflæti geti komið fram. Hafa skal eftirlit með þróun eða versnun geðsjúkdóma við hverja skammtabreytingu og síðan að minnsta kosti á 6 mánaða fresti og í hverri heimskóla. *Vöxtur:* Við langtímanotkun metýlfenidats hjá börnum hefur verið greint frá lítið eitt skertri þyngdaraukningu og vaxtarhömlun. Fylgjast skil með vexti meðan á meðferð stendur. Skrá skal hæð, þyngd og matarlyst amk á 6 mánaða fresti og útbúa skil vaxtarlínur. *Flog:* Nota skal metýlfenidat með varúð hjá sjúklingum með flogaveiki. Metýlfenidat getur lækkað krampaprúðskul sjá þessum sjúklingum. *Lyfjansöfnun, röng notkun og breytingar á notkun:* Gæta skal varúðar hjá sjúklingum með þekktu lyfja-eða áfengismissöfnun vegna hugsanlegrar missöfnunar, rangrar notkunar eða breytinga á notkun. *Meðferð hætt:* Fylgjast þarf vel með sjúklingum þegar notkun lyfsins er hætt, vegna þess að þá getur komið í ljós dulit þunglyndi og langvinn óvirkni. *Preya:* Ekki má nota lyfið til að koma í veg fyrir eða meðhöndla venulegt þreytustand. *Galaktósaóþol:* Lyfið inniheldur mjólkursukur. Sjúklingar með sjaldgæfu arfgenu sjúkdóma galaktósaóþol, Lactactasaóþol eða vanfrásög glúkósa-galaktósa eiga ekki að nota þetta lyfið. *Lyfjapróf:* Metýlfenidat getur gefið falskt jákvætt svar við prófi fyrir amfetamínum. *Áhrif á blómynd:* Öryggi langtíma meðferðar ekki að fullu þekkt, íhuga þarf að stöðva meðferð ef breytingar á blómynd koma fram. *Hugsanleg teppa í meltingarvegi:* Vegna þess að CONCERTA töflur halda formi sínu og lögum þeirra breytist ekki umtalsvert í meltingarveginum, á almennt ekki séð að gefa þær sjúklingum með alvarleg þreglsli í meltingarvegi eða sjúklingum sem eru með kyngingartregðu eða eiga mjög erfitt með að gleypa töflur. Vegna forðahönnunar CONCERTA töflunnar á aðeins að nota hana handa sjúklingum sem geta gleypst töfluna í heilu lagi. Upplýsa á sjúklinga um að gleypa verði CONCERTA í heilu lagi með vökva. Ekki má tryggja töflurnar, skipta þeim eða mylja þær. Lyfið er í skel sem frásagast ekki og er hönnuð þannig að hún getur frá sér lyfið með jöfnum hraða. **Milliverkanir við önnur lyf og aðrar milliverkanir:** *Lyfjahlvarfamtilliverkanir:* Ekki er þekkt hvernig metýlfenidat gæti haft áhrif á plasmabættni lyfja sem eru notað samhliða. Greint hefur verið frá tilvikum sem benda til þess að metýlfenidat geti hamlað umbrotum segavarnarlyfja af flokki cumarína, krampastíllandi lyfja (t.d. fenemal, fenytoin, primidon) og sumra þunglyndislyfja (þríhringla og sér-tækra endurþptökumhela serotoninis). Nauðsynlegt getur verið að minnka skammt þessara lyfja þegar þau eru notað samhliða metýlfenidati. *Lyfjhrifamtilliverkanir:* Metýlfenidat getur dregið úr verkun blóðþrýstingslækkandi lyfja. Sjúklingar sem eru á meðferð (nú eða innan síðustu 2 vikna) með ósértækum, óafturkræfum MAO-hemlum mega ekki nota metýlfenidat vegna hugsanlegrar háþrýstingskreppu. *Notkun samhliða svæfingarlýfjum sem innihalda halógen:* Hættu er á skyndilegri blóðþrýstingshækkun meðan á skurðaðgerð stendur, ekki skal því nota metýlfenidat daginn sem skurðaðgerð fer fram. *Notkun samhliða dópamínvirknum lyfjum:* Gæta skal varúðar hjá sjúklingum sem meðhöndlaðir eru með metýlfenidati samhliða dópamínvirknum lyfjum, þar með talið geðrofslyfjum. **Meðanga og þrjóstgjöf:** *Meðanga:* Takmörkuð gögn liggja fyrir um notkun CONCERTA á meðöngu. *Þrjóstgjöf:* Metýlfenidat hefur fundist í brjóstamjólk hjá konu sem meðhöndluð var með CONCERTA. **Áhrif á hærni til aksturs og notkunar véla:** Metýlfenidat getur valdið sundri, svefnröng og sjóntruflunum, tvísýni og þokusýni. **Aukaverkanir:** Algengustu aukaverkanir (meira en 10%) eru höfuverkur og svefnleysi. Algengar aukaverkanir (innan við 10%) geta verið kvíðverkir, niðurgangur, uppköst, ógleði og minnkuð matarlyst, sundl, hjartsláttartruflanir, háþrýstingur og munþurrkur. Sjaldgæfari aukaverkanir (innan við 1%) geta verið: þunglyndi, skapbreytingar, reiði, æsingur, taugaveiklun, gráthlökkvi, geðorf, eirarleysi, sjálfsvígshugsanir, svefnhöfi, skynhreyfivirkni, skjálfti, þokusýni, tvísýni, brjóstverkur, hjartsláttarönot, mæði, hæðatregða, hárlós, útbrot, vöðvæverkir, líöverkir, vöðvakippir, ónæmisviðbrögð eins og ofsafjögur, eyrnabólga, ofsakláði, klámti, þreita, brjóstverkur, aukning lífrænsins. **Öfskömmun:** Taka skal tillit til losunarhraða metýlfenidats úr lyfjaformum með breyttan losunarhraða við meðhöndlun sjúklinga eftir öfskömmun. Einkenni öfskömmunar: Þráð öfskömmun getur leitt til uppkasta, esings, skjálfta, ofviðbragða (hyperreflexía), vöðvakoppa, krampa, vellíðunarástans, ringls, ofskynjana, óráðs, svitamyndunar, hitaróða, höfuðverjka, ofurhita, hraðtaks, hjartsláttaröna, háþrýstings, slímhimnuþurks. Meðferð felst í viðeigandi stuðningsmeðferð.

Handhafi markaðsleyfis: Janssen-Cilag AB, P.O. Box 7073, 192 07 Sollentuna Svíþjóð. **Umboð á Íslandi:** Vistor hf., Hörgatani 2, 210 Garðabæ. **Pakkningar og hámarksverð:** 1. júní 2010: 18 mg forðatöflur 30 stykki 11.111 kr., 27 mg forðatöflur 30 stykki 12.728 kr., 36 mg forðatöflur 30 stykki 14.248 kr., 54 mg forðatöflur 30 stykki 16.722 kr. Afgreiðsluhiðningur: R, X. Greiðsluþáttaka: 0. Eftirritunarskilyrt **Dagsetning fyrstu útgáfu markaðsleyfis:** 26. september 2002. **Dagsetning endurskoðunar textans:** 9. September 2009. Nánari upplýsingar er að finna í sérlyfjaskrá á vef Lyfjastofnunar.



CONCERTA® (Methylphenidat HCl)
– Áhrifin vara í 12 klst.¹

 JANSSEN-CILAG

 **CONCERTA®**
(METHYLPHENIDAT)