P. Graham. Institute of Child Health, London, UK

Ethical issues around the use of integrative approaches in child and adolescent psychiatry arise in relation to diverse aspects of practice but especially in collaborative work with other disciplines. Child and adolescent psychiatrists work with nurses, social workers, psychologists, psychotherapists, family practitioners, paediatricians, those working in the juvenile justice system and educationists. Different ethical issues arise in relation to work with different disciplines and examples will be given. But there are common ethical issues arising from different standards of confidentiality and the communication of information as well as in the exercise of medical responsibility. Ethical issues can sometimes hinder the delivery of effective, evidence-based care. This is paradoxical for failure to deliver such care itself offends against ethical principles.

PS01.02

Collaboration between industrialized and developing countries in psychiatry

D. Moussaoui. Ibn Rushd Niversity Psychiatric Centre, Casablanca, Morocco

There is no possibility of progress for psychiatry in the world if there is a too wide gap between the quality of psychiatric practice and research in developing and in industrialized countries. The reason for that is because bad image which might emerge from developing countries, in a media globalized world, impacts negatively on the mental health work all over the world. Examples will be given for such statement.

On the other hand, collaboration existed for a long period of time between these two categories of countries in the education of psychiatrists. It is necessary, but at the same time creates major problems, such as the brain drain which is a direct consequence of learning psychiatry abroad for students coming from developing countries. There are more psychiatrists from Pakistan, India or South Africa practicing in the UK or the USA than in their country of origin. Another problem is the lack of transcultural sensitivity, making the training of these students insufficient when they come back home.

On the other hand, collaboration in research must take into account the cultural specificities of the developing country, and in anyway should avoid a "safari research". Respect of ethical guidelines in all collaborative studies is an essential ingredient of success.

PS01.03

Ethical questions in integrating standard therapies and alternative therapies in psychiatry

H. Helmchen. Klinik Für Psychiatrie Und Psychotherapie, Charite, Berlin, Germany

Increasing predominance of evidence-based therapies and standardisation of their clinical application as well as financial limitations narrow the therapists view and leaving out of account the patients' individual specificities and demands. Consequently patients try to get their subjective needs met by alternative approaches, such as self-medication, procedures of unknown quality, consultation of healers outside the medical professions. According to the prevailing ethical principles the following ethical questions will be discussed:

 Respect of the patients' dignity and autonomy means to take him/ her seriously. However, what are the limits of taking the view of the patient, particularly in cases of a discrepancy between the

- patients will and his welfare, and especially in cases of incapacity to decide competently on therapeutic alternatives?
- Harm avoidance should keep away from the patient unproven approaches with both the risks of unknown unwanted effects and of omission of an efficient treatment. But how to sail safe through the narrowness of Skylla and Charybdis: to convince the patient of the advantages of the proposed quality proven approach without chasing him away out of medical services to unqualified and uncontrolled approaches?
- With regard to justice it seems clear that approaches without proven quality should not be paid by insurance companies in order not to reduce the limited resources for the whole of all its members. However, will this be acceptable also in cases in which there are no efficient treatments, but the alternative approach demanded by the patient may improve his quality of life?

Symposium: ADHD across the lifespan: Genetics, learning, comorbidity and circadian rhythm

S21.01

Attention deficit/hyperactivity disorder and dyslexia: evidence for shared genetic susceptibility

C.L. Barr ^{1,2}, K. Wigg ¹, N. Laurin ¹, V. Misener ², T. Cate-Carter ², L.W. Maureen ², E. Kerr ², J. Couto ¹. ¹ Genetics and Development Division, The Toronto Western Hospital, Toronto, ON, Canada ² Program in Neurosciences and Mental Health, The Hospital for Sick Children, Toronto, ON, Canada

Objective: Many individuals ascertained for developmental dyslexia (DD) are also diagnosed with attention-deficit hyperactivity disorder (ADHD) and approximately 20% of individuals with ADHD will have evidence for DD. The basis for this overlap is not completely understood but twin studies have provide support for common genetic influences, particularly for inattention symptoms. Genetic linkage studies have found significant evidence for linkage of DD to chromosomes 1p34-p36, 15q, 6p21.3-22, 2p15-16, 6q11.2-q12 and 18p11.2. Evidence for linkage/association to ADHD has also been found to overlap for some of these regions. The objective of this study is to identify genes contributing to both.

Methods: We examined evidence for the involvement of specific genes in these chromosomal regions using two samples of families, one ascertained through a proband with DD (n= 273 families) and the other through a proband with ADHD (n= 390 families).

Results: Our studies of the 6p region indicate that the sample of DD families is associated to markers in this region and to ADHD but not to the same markers within the linked region. For the 15q region, we have found significant evidence for association for both the ADHD and reading phenotypes in both samples (Wigg et al., 2004; Wigg et al., 2005). We have also found evidence for the gene for the dopamine receptor D1 to be associated to the inattention symptoms in both samples

Conclusions: While the studies of the overlap in ADHD and DD are preliminary, they are promising in that they will ultimately help to disentangle the causal relationship.

References

- [1]. Wigg K, Couto J, Feng Y, Crosbie J, Anderson B, Cate-Carter TD, Tannock R, Lovett MW, Humphries T, Kennedy JL, Ickowicz A, Pathare T, Roberts W, Malone M, Schachar R, Barr CL. 2005. Investigation of the relationship of attention deficit hyperactivity disorder to the EKN1 gene on chromosome 15q21. Scientific Studies of Reading 9(3): 261-283.
- [2]. Wigg KG, Couto JM, Feng Y, Anderson B, Cate-Carter TD, Macciardi F, Tannock R, Lovett MW, Humphries TW, Barr CL. 2004. Support for EKN1 as the susceptibility locus for dyslexia on 15q21. Mol Psychiatry 13: 13.

S21.02

Adult ADHD and the Circadian rhythm

J.J.S. Kooij, M.M. Van Veen, A.M. Boonstra. *PsyQ, Psycho-Medical Programs, Program Adult ADHD, Den Haag, The Netherlands*

Background: Children with ADHD may have chronic sleeping problems, associated with circadian rhythm disturbances. Little is known about sleep in adults with ADHD.

Methods: We studied the prevalence and type of sleeping problems in 120 adults with ADHD using an interview questionnaire.

Results: 78% of the 120 adults with ADHD had difficulty to go to bed in time (between 1 and 3 am). Almost 70% reported sleep onset problems, more than 50% had difficulty sleeping through. Almost 70% had difficulty getting up in the morning and 62% felt sleepy during the day. In more than 60% these sleeping problems had been there all their lives. These results are very similar to earlier data presented by Dodson (Dodson, 1999). Several explanations for these sleeping problems may be considered (Kooij ea, 2001; Oosterloo ea, 2006; Boonstra ea, 2007). However, the frequently occurring sleeping pattern of being a 'nightowl', with restless sleep and difficulty getting up in the morning, may be associated with the delayed sleep phase syndrome, as was recently shown in children with ADHD and sleep onset problems (van der Heijden ea, 2006; van der Heijden ea, 2005; Weiss ea, 2006). We currently study the circadian rhytm in adults by measuring the Dim Light Melatonin Onset (DLMO) in saliva in ADHD patients with sleep onset problems (ADHD+SO), compared to ADHD patients without sleep onset problems (ADHD-SO).

Conclusions: About 70% of adults with ADHD have sleep onset problems compatible with a delayed sleep phase pattern. First data of DLMO in adult ADHD patients with and without sleep onset problems will be discussed.

References

- [1]. Dodson, W. W. (1999). The prevalence and treatment of sleep disorders in adults with Attention Deficit / Hyperactivity Disorder: Presented at the American Psychiatric Association Annual Convention, Washington D.C.
- [2]. Boonstra, A.M., Kooij, J.J.S., Oosterlaan, J., Sergeant, J.A., Buitelaar, J.K. & van Someren, E.J.W. Hyperactive night and day? Actigraphy studies in adult ADHD: a baseline comparison and the effect of methylphenidate. In press, 2007.
- [3]. Kooij, J. J. S., Middelkoop, H. A. M., Van Gils, K., & Buitelaar, J. K. (2001). The effect of stimulants on nocturnal motor activity and sleep quality in adults with ADHD: An open-label case-control study. Journal of Clinical Psychiatry., 62(12), 952-956.
- [4]. Oosterloo, M., Lammers, G. J., Overeem, S., de Noord, I., & Kooij, J. J. S. (2006). Possible confusion between primary

- hypersomnia and adult attention-deficit/hyperactivity disorder. Psychiatry Research, 143(2-3), 293-297.
- [5]. van der Heijden, K. B., Smits, M. G., & Gunning, W. B. (2006). Sleep hygiene and actigraphically evaluated sleep characteristics in children with ADHD and chronic sleep onset insomnia. Journal of Sleep Research, 15(1), 55-62.
- [6]. van der Heijden, K. B., Smits, M. G., Van Someren, E. J., & Gunning, W. B. (2005). Idiopathic chronic sleep onset insomnia in attention-deficit/hyperactivity disorder: a circadian rhythm sleep disorder. Chronobiology International, 22(3), 559-570.
- [7]. Weiss, M. D., Wasdell, M. B., Bomben, M. M., Rea, K. J., & Freeman, R. D. (2006). Sleep hygiene and melatonin treatment for children and adolescents with ADHD and initial insomnia. Journal of the American Academy of Child & Adolescent Psychiatry, 45(5), 512-519.

S21.03

The prevalence of ADHD in adults with bipolar II disorder

M.B.J. Blom. Department of Mood Disorders, Parnassia Psychiatric Institute, Den Haag, The Netherlands

Background: Bipolar II disorder and ADHD share several clinical characteristics. Identifying patients with either Bipolar II or ADHD is therefore not an easy task. Little is known about the co-occurrence of both disorders and its treatment.

Methods: In a large outpatient clinic for Mood Disorders all patients with a bipolar II disorder were asked to fill in the ADHD rating scale, a screening instrument for adult ADHD. Patients who were above threshold were asked to participate in further diagnostics. This included a semi-structured interview for adult ADHD and an interview with an important other. Outcome was rated by two independent experts in adult ADHD.

Results: The total sample consisted of 62 bipolar II patients. Forty-two participated in the first screening. The ratings of 22 patients were not above threshold. Of the 20 patients with a positive score, 6 refused further participation. Of the 14 remaining, 11 satisfied full ADHD criteria in childhood as well as adulthood.

Patients with co-occurring ADHD were significantly more often female (82%) and had more relationships in the past. All other demographic variables were not significantly different. None of the treating physicians had prior to the study been aware of the diagnosis of ADHD in the bipolar II patients.

Conclusions: In adults with bipolar II disorder, ADHD is a common co-occurring disorder. Almost 18% of patients with bipolar II disorder also applied for a lifetime diagnosis of ADHD. Especially female patients with bipolar II disorder had relatively often co-occurring ADHD. Since this study was carried out in a specialized centre for mood disorders, further confirmation of this high prevalence rate should be object of further study.

S21.04

ADHD frequency and characteristics in students suffering from learning disabilities

I. Manor ¹, S. Medad ¹, Z. Zamishlani ¹, N. Vurmbrand ². ¹ ADHD Clinic, Geha Mental Health Center, Petach Tikva, Israel ² "MAHUT" Center, Seminar Hakibutzim,, Tel-Aviv, Israel

Attention Deficit and Hyperactivity Disorder (ADHD) is a common disorder, estimated to occur in 4-6% of the adult population. Learning disabilities (LD) are a group of heterogenic disorders