with Attention Deficit/Hyperactivity Disorder (ADHD) in children. The objective of this abstract is to present the results on the burden (intangible costs) ADHD imposes on the individual, the family and society in terms of symptom persistence, violence, antisocial behaviour, crime, substance misuse, social adjustment, academic performance. METHODS: The international literature search was complemented by country-specific literature searches in France, Germany, Italy, Netherlands, Spain and the UK. In each country, a clinical expert was interviewed and reviewed the country-specific information. RESULTS: Sources reporting the intangible consequences/costs of ADHD were limited with literature from the UK, France, Spain and Sweden. Literature suggests that pervasively hyperactive symptoms in childhood is a risk factor for poor outcomes in later development with ADHD symptoms persisting into school leaving age and nearly half of hyperactive children given a psychiatric diagnosis. The literature review found reports indicating that hyperactivity was a determinant of violence, aggression, defiant and disruptive behaviours, stealing, shoplifting, joyriding, vandalism, offending and contact with the police. Reports suggest a causal link between ADHD and substance misuse but there is no consensus. Childhood hyperactivity was reported to be a strong predictor of relationship problems with links between hyperactivity and moderate to severe problems in social functioning. Reports from UK, France and Spain indicate that academic problems in school were more frequent in children displaying hyperactive symptoms with language disorders, reading, writing, cognitive and/or social development difficulties. CONCLUSION: The consequences of ADHD for the individual are potentially very severe and we can infer this imposes a significant burden upon the family unit and society. ADHD symptoms can persist into adolescence, and the hyperactive element of ADHD can be predictive of violence, antisocial behaviour, crime, poor social adjustment, substance abuse, and academic problems.

**ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD): A RECOGNISED DISORDER FOR CHILDREN IN EUROPE**

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OBJECTIVE: An international literature review assessed the epidemiology, treatment patterns and costs associated with Attention Deficit/Hyperactivity Disorder (ADHD) in children. The objective of this abstract is to present the results on definition, gender characteristics, recognition, delay between onset and diagnosis. METHODS: The international literature search was complemented by country-specific literature searches in France, Germany, Italy, Netherlands, Spain and the UK. In each country, a clinical expert was interviewed and reviewed the country-specific information. RESULTS: Definition of ADHD is not uniform across countries as the literature reflects the use of both the ICD-10 definition of Hyperkinetic Disorder (HD), and the DSM-IV definition of ADHD. DSM-IV offers a broader, more encompassing definition of ADHD when compared to HD. Reports of male to female prevalence found conflicting evidence as male cases may outnumber females by as much as 9:1, but other sources reported a 1:1 ratio. ADHD/HD differences in gender is currently debated with the view that boys exhibit more distinguishable symptoms. The literature indicated that diagnosis may be complicated by many...
co-morbid disorders. Literature from the UK and Netherlands report a delay between first contact with a GP and diagnosis ranging from months to years. One UK report found that many general practitioners were skeptical of ADHD and that parents felt rebuked by the GP when they first presented a hyperactive pre-school child. One FR specific report found that of those referred, 62% had not received any previous medical advice. CONCLUSION: Diagnosis may be hindered by co-morbid disorders, GP skepticism of hyperactivity as a behavioural disorder, and parents feeling they are not taken seriously. Once recognised as having an emotional/behavioural problem, referral to a specialist is unlikely resulting in significant delays between first contact with a GP and diagnosis/treatment. Hence, some sufferers, especially females, may not be diagnosed.

**CORRESPONDENCE COURSE FOR GPS IMPROVED QUALITY AND PERSISTENCY OF ANTI-DEPRESSIVE THERAPY (RESULTS FROM THE IMPROVE-D STUDY)**

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OBJECTIVES: To improve quality and persistency of anti-depressive therapy in primary care by a correspondence course for GPs focusing on interaction between patient and physician. METHODS: One hundred sixty-nine depressive patients in two groups were observed in a cohort study. GPs in the education group (84 patients) received training material on therapy of depression. A parallel control group of 85 depressive patients recruited by physicians not obtaining training material were observed to compare effectiveness. In both groups patients were on Citalopram treatment. Measures: demographics, prescriptions, Clinical Global Impression Scale (CGI) and Hamilton Depression Scale (HAM-D). Additionally, patients were asked to answer questions concerning their treatment satisfaction and quality of life (SF-36). They were observed over a 6-month period. For external comparison of therapy duration to non-study conditions, data from the prescription database MediPlus (IMS HEALTH) were analysed. RESULTS: Comparing the two groups there were no differences in clinical data (CGI, HAM-D) and quality of life (SF-36). However, the following differences were found: In comparison to control group, patients in education group had more contacts to their GP. Especially in the beginning of therapy, there were shorter intervals between visits. Patients in education group received anti-depressive medication for a longer period. In education group the rate of discontinuing the pharmaceutical therapy within the recommended 6-month period was only 36% in comparison to 44% in the control group (reduction of 18%). When related to MediPlus data, the discontinuation rate was lowered by 46%. CONCLUSIONS: The IMPROVE-D training material for GPs improved therapy quality and persistency. The training resulted in more frequent physician contacts and careful drug prescription. Patients felt more bound to the physician’s instructions and showed a better compliance. This resulted in a longer therapy duration which experts link to a reduced risk for relapsing.

**MENTAL HEALTH—Methodology Issues**

**SIMULATING THE COURSE OF SCHIZOPHRENIA USING DISCRETE EVENTS MODELLING**

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Published models for schizophrenia in literature are generally Markov models, which entail many methodological disadvantages. OBJECTIVE: To build a disease progression model for schizophrenia that circumvents the problems of Markov modelling. The model is designed to simulate individual histories of schizophrenic patients from the age of onset until death, but it can easily be adapted to shorter time horizons. A patient enters the model when he visits the psychiatrist because he suffers from a relapse. At each visit the psychiatrist will re-evaluate the visiting scheme, the patient’s treatment and his location. Furthermore, the psychiatrist will estimate the patient’s severity of disease (PANSS, QALY, Danger). At any time the patient can decide to be non-compliant. METHODS: The model is characterised by four steps: 1) definition and description of patient characteristics, 2) calculation of the progression of schizophrenia for that individual patient in each of the compared treatment strategies, 3) calculation of the costs and effects generated in each of the strategies; and 4) when previous steps are performed for a specific patient population, calculation of the average medical and economical outcomes per strategy. RESULTS: The model is able to simulate individual patient histories with patient-specific probabilities. Unlike Markov models, we do not assume a direct link between a health state and costs. Moreover, we individualise the relations between what happens to a patient and the expected costs and effects. Also, we take account of unobserved heterogeneity. CONCLUSIONS: The outlined model is complex and needs much input. Moreover, many estimates are surrounded by uncertainties. However, it needs to be stressed that simpler models implicitly need the same input, but they hide assumptions that are explicit in this model. Therefore, the presented model is subtler, more transparent and closer to clinical practice.