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NICE GUIDANCE ON ADHD

Diversion and abuse of methylphenidate

Psychostimulants were approved for use in children by the National Institute for Health and Clinical Excellence (NICE) in 2006, but, for the first time, methylphenidate, atomoxetine, and dexamphetamine have now been recommended for adult pharmacotherapy.¹

We want to endorse NICE's advice: healthcare professionals should be aware of the potential of these drugs for misuse and diversion. Recent data show great variation in prescribing to young people,² with a 23-fold difference between the highest and lowest prescribing areas.

Given the short consultation time available to general practitioners and patients' or carers' access to information via the internet, there is increased scope for inappropriate prescribing through misdiagnosis, faking of symptoms, or patient pressures.³ Our research in an area with one of the highest rates of prescriptions indicated that diversion was common, and the lifetime prevalence of illicit methylphenidate use in young people (31%) was second only to cannabis (Woolfall K. Substance use among young people in Wirral, Merseyside. Liverpool: Liverpool John Moores University, 2006—unpublished report for local funders).

In adults, obtaining methylphenidate was harder, but pharmaceutical preparations of stimulants such as methylphenidate and dexamphetamine were available illicitly for as little as £0.30 per tablet.⁴ Extending prescriptions to adults will mean that access to illicit stimulants will be made easier.

We believe that without adequate monitoring of prescription rates and compliance, and appropriate investigation of anomalies, it is likely that with the introduction of NICE

guidance, misuse of these drugs in both adults and young people will increase.

In line with NICE guidance we support prescription by experienced clinicians after clear diagnostic criteria have been met. Furthermore we would also argue that drug (and alcohol) action teams need to be made fully aware of local prescribing and diversion rates and have in place appropriate responses to misuse.

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- 1 Kendall T, Taylor E, Perez A, Taylor C, on behalf of the Guideline Development Group. Diagnosis and management of attention-deficit/hyperactivity disorder in children, young people, and adults: summary of NICE guidance. *BMJ* 2008;337:a1239. (24 September.)
- 2 Department of Health. Table showing data on methylphenidate items dispensed for each year from 2003 to 2008, broken down by age and PCT. DEP2008-1888 House of Commons Library 2008, 10/07/2008.
- 3 Mayes R, Bagwell C, Erkulwater J (2008) ADHD and the rise of stimulant use among children. *Harvard Review of Psychiatry* 16:151-66.
- 4 Geraghty O. An exploration of the black market availability and costs of licensed medicines in the north west. Liverpool, Liverpool John Moores University School of Pharmacy and Chemistry, 2008. (MPharm dissertation)

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NICE recommendations could expose many to harm

The National Institute for Health and Clinical Excellence's (NICE's) single most important recommendation is for medication to be used as a first line treatment in "severe" attention-deficit/hyperactivity disorder (ADHD).¹

Like other systematic reviews of ADHD medication treatment, NICE notes the inadequate reporting of study methodology, possible bias, limited reliability of results, and inadequate data regarding adverse events, correctly concluding that the evidence does not support using medication as a first line treatment for mild or moderate ADHD.

Yet NICE concludes that medication should be used as a first line treatment in "severe" ADHD, with only one reference cited in support of this² (which is a reanalysis of the data from the largest trial comparing medication and behavioural treatments), which concludes that the more severe subgroup showed a larger

decrease in symptoms with medication than with behaviour therapy. However, these data were gathered 14 months after the beginning of the study. Swanson et al, analysing the same group of patients after 36 months, could not find support for long term benefits of medication over behaviour therapy, even in those with more severe symptoms.³

These guidelines are likely to expose many children and adults to unnecessary harm. The recommendations are not supported by the evidence analysed by NICE. The evidence should lead to the conclusions that ADHD is a disorder of questionable validity, particularly as a diagnosis for adults, and use of medication should be a "research only" recommendation.

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Competing interests: Sami Timimi was invited to give evidence to a one day conference organised by NICE ADHD Guidelines development group, and has commented on earlier drafts of the guideline. Jonathan Leo was a peer reviewer for the first draft of the NICE ADHD guidelines, examining the "validity" of ADHD.

- 1 Kendall T, Taylor E, Perez A, Taylor C, on behalf of the Guideline Development Group. Diagnosis and management of attention-deficit/hyperactivity disorder in children, young people, and adults: summary of NICE guidance. *BMJ* 2008;337:a1239. (24 September.)
- 2 Santosh P, Taylor E, Swanson J, et al. Refining the diagnoses of inattention and overactivity syndromes: A reanalysis of the Multimodal Treatment study of attention deficit hyperactivity disorder (ADHD) based on ICD-10 criteria for hyperkinetic disorder. *Clin Neurosci Res* 2005;5:307-14.
- 3 Swanson JM, Hinshaw SP, Arnold LE, et al. Secondary evaluations of MTA 36-month outcomes: propensity score and growth mixture model analyses. *J Am Acad Child Adolesc Psychiat* 2007;46:1003-14.

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NICE should produce guidance on infant mental health

I read the summary of the latest guidance from the National Institute for Health and Clinical Excellence (NICE) on attention-deficit/hyperactivity disorder (ADHD) with a mounting sense of dismay.¹ I would like to highlight the increasing neuroscientific evidence of the impact that a child's early environment, particularly in the context of the developing attachment relationships with caregivers, has on their developing brain. What happens

between babies and their parents will have consequences for their developing emotional, social, and cognitive skills.²

The strategic development of overactivity as a response to poorly developing attachment relationships has been captured on video and written about by a key researcher in the field.³ What is more, the cost effectiveness of early intervention is beginning to be documented.⁴ Finally, the quality of attachments formed in the early years is being increasingly shown to have a far reaching effect well beyond infancy—for example, on adaptation to chronic ill health and the care needs of elderly people.⁵

Yet, despite many efforts, the Association for Infant Mental Health UK cannot persuade NICE to address the question of infant mental health. This is an area where interventions could conceivably have a notable impact at little cost on the future mental health of babies across their lifespan and on how they parent the next generation. However, this is little known, accepted, or even understood by commissioners and providers of mental health care across the country.

Without NICE guidance for infant mental health we are never going to see any change or hope that in the future we may be able to prevent mental distress rather than just treat it.

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- 1 Kendall T, Taylor E, Perez A, Taylor C, on behalf of the Guideline Development Group. Diagnosis and management of attention-deficit/hyperactivity disorder in children, young people, and adults: summary of NICE guidance. *BMJ* 2008;337:a1239. (24 September.)
- 2 Fonagy P, Target M. Bridging the transmission gap: An end to an important mystery of attachment research? *Attach Hum Dev* 2005;7:333-43.
- 3 Crittenden PM. Attachment, information processing and psychiatric disorder. *World Psychiatry* 2002;1:72-5.
- 4 Svanberg PO. Promoting a secure attachment through early screening and interventions: a partnership approach. In: Barlow J, Svanberg PO, eds. *Keeping the baby in mind*. London: Routledge (in press).
- 5 Bradley JM, Cafferly TP. Attachment among older adults: current issues and directions for future research. *Attach Hum Dev* 2001;3:200-21.

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PATTERNS OF SKELETAL FRACTURES IN CHILD ABUSE

“Unexplained” fractures

The systematic review by Kemp et al of skeletal fractures in children and the accompanying editorial gloss over the substantial medical uncertainties in this area that result in parents being wrongfully accused of injuring their children.^{1,2} It might seem self evident that deliberately inflicted injury must be the probable cause

of an “unexplained” fracture—where “unexplained” in this context means there is no plausible history of accidental trauma, and those conditions that predispose to bone fragility—such as osteogenesis imperfecta—have been excluded.

The uncertainty arises in that unexplained category where there is a marked discrepancy between the clinical presentation of the child and purported abusive nature of the fracture: where the child appears well cared for by responsible parents and with no circumstantial evidence in the form of bruising or soft tissue swelling that would be expected were he or she the victim of physical assault.

This discrepancy is particularly apparent in our experience as a parent support group in the more than 100 cases with which we have been involved over the past five years, where a skeletal survey after an apparently spontaneous fracture reveals further multiple, symmetrical metaphyseal fractures, especially around the knees and ankles. The prevailing view among paediatric radiologists is that these fractures are characteristic of abusive injury induced either by violent shaking or “direct wrenching or twisting of the limbs.”³

It must, however, be unlikely on clinical and common sense grounds to suppose that apparently responsible parents should deliberately shake or twist the limbs of their babies so as to cause the same pattern of fractures—but in such a way as to leave no external stigma of physical assault. Rather, it is reasonable to presume the probable cause of this pattern of fractures, which importantly only occurs in the first six months of life, is a developmental bone disorder of as yet unknown (or overlooked) cause.⁴ Regrettably, paediatricians in this situation tend to defer to the historically legitimated opinion of paediatric radiologists that these fractures are indicative of abuse—with predictably devastating consequences for parents and their families.

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Competing interests: RN, DB, and JLF are involved in the work of the Eaton Foundation for Parents Accused of NAI.

- 1 Kemp AM, Dunstan F, Harrison S, Morris S, Mann M, Rolfe K, et al. Is this fracture due to abuse? A systematic review of the patterns of skeletal fractures in child abuse. *BMJ* 2008;337:a1518. (11 October.)
- 2 Sugar NF. Diagnosing child abuse. *BMJ* 2008;337:a1398. (2 October.)
- 3 Kleinman P, Marcs SC, Blackburne B. The metaphyseal lesion in abused infants: a radiologic-histopathologic study. *Am J Radiol* 1986;146:895-905.
- 4 Miller M. The lesson of temporary brittle bone disease: all bones are not created equal. *Bone* 2003;433:466-74.

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AUTOMATED EXTERNAL DEFIBRILLATORS

Defibrillators are only as good as the provider

Descatha and Baer point out the evidence of providing defibrillators in the workplace and elsewhere, along with the need for a training programme.¹ My story emphasises that this need is just as great as having the defibrillator in the first place.

I recently witnessed a cardiac arrest in a shopping centre of around 310 stores. With all the recent literature on the benefit of defibrillators in such a place I expected there to be one to hand. Sudden cardiac arrest is a leading cause of death in Europe, affecting more than 700 000 people each year.² The chance of successful defibrillation declines at a rate of 7-10% with each minute of delay.

I was told there was not a single automated external defibrillator (AED) in the centre and, unfortunately, despite vigorous basic life support the person died before the ambulance crew could get him to a defibrillator. Afterwards I found out that the centre had in fact three defibrillators. The explanation given to me as to why I was not given one of them was that the staff's training certificates for using the equipment had expired.

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- 1 Descatha A, Baer M. Automated external defibrillators in the workplace. *BMJ* 2008;337:a1816. (8 October.)
- 2 Sans S, Kesteloot H, Kromhout D. The burden of cardiovascular diseases mortality in Europe. Task Force of the European Society of Cardiology on Cardiovascular Mortality and Morbidity Statistics in Europe. *Eur Heart J* 1997;18:1231-48.

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