Clinical effectiveness and cost–consequences of selective serotonin reuptake inhibitors in the treatment of sex offenders

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Executive summary

Health Technology Assessment 2002; Vol. 6: No. 28
Executive summary: Selective serotonin reuptake inhibitors for sex offenders

Background
A sex offence is defined as any violation of established legal or moral codes of sexual behaviour. Sex offending can be seen as a major public health problem. According to the UK Home Office, about 1% of all recorded crimes are sexual offences. Of men born in England and Wales in 1953, seven in 1000 have a conviction for a sexual offence against a child by the age of 40 years. Currently, about 7000 sexual offenders have a conviction for a sexual offence with about 4000 residing in prison. However, these figures must be seen as an under-estimate because many sexual assaults go unreported. For those cases that do come to police attention, there is no further action in 56%, only 35% of offenders are charged and < 10% are convicted. Furthermore, men convicted of sexual offences against children claim five or more undetected sexual assaults for which they have never been apprehended or caught. Current estimates from the Prison Service suggest that 15% of those sexual offenders leaving prison are re-convicted for a further sexual offence within 2 years.

The prevalence of sexual offences against children is alarming. The National Society for the Prevention of Cruelty to Children reports that 16% of girls and 7% of boys have been sexually assaulted before the age of 13. In England, the incidence of children aged < 18 years placed on child protection registers for sexual abuse is six in 10,000. Hence, there is an urgent need to assess the effectiveness of treatment strategies for sex offenders.

Current service provision
Programmes for the treatment of sexual offenders take place both in the community (probation service) and in prison within England and Wales. Cognitive behavioural therapy is the standard treatment, however, such programmes typically do not directly target deviant sexual arousal and fantasies reported by many sexual offenders during treatment. Antiandrogens to decrease an offender’s general level of arousal are sometimes used as an adjunct to treatment in psychiatric settings (e.g. special hospitals, medium secure units), but are not regularly prescribed outside of these settings due to side-effects. Pharmacological treatment of sex offenders with selective serotonin reuptake inhibitors (SSRIs) has been proposed to have additional beneficial effects, such as reducing the intensity and intrusiveness of fantasies. However, to date, no systematic review of SSRIs for the treatment of sex offenders has been conducted.

Objective
Systematic review of the currently available evidence on the clinical effectiveness and cost–consequences of the use of SSRIs for the treatment of sex offenders.

Methods
For the systematic review of effectiveness, searches of bibliographic databases, including MEDLINE, EMBASE and PsycINFO were conducted up to October 2001, and supplemented by searches of the Internet, recent conference abstracts and the National Criminal Justice Reference System. Enquiries were made to pharmaceutical companies and experts in the field. The inclusion criteria were predefined and allowed a wide range of research designs, including case series. The quality was assessed according to criteria suggested by the Cochrane Collaboration. The analysis was qualitative. The economic analysis consisted of a systematic review of past economic evaluations, collation of information about costs and a cost–consequences analysis. The search for the economic evaluation focused on MEDLINE and the NHS EED.

Results
Number and quality of studies and direction of evidence
The effectiveness review included nine case series. The methodological quality of these was generally poor: only two enrolled consecutive patients, only one was prospective and only two explicitly stated that participants were sex offenders. The length of follow-up was insufficient to assess major long-term consequences on re-offence. Two-thirds of the studies reported some significant changes from baseline in the frequency of masturbation and the...
intensity of deviant fantasies. However, the scales used in assessing the outcomes were subjective and the validities not stated. This, together with the openness to bias of the study designs employed, suggested that the results should be approached with caution. Data on adverse events were reported in five of the nine studies, and, although apparently minor, were affected by the same provisos concerning internal and external validity.

Costs and efficiency
The search did not identify any cost-effectiveness studies on SSRI treatment of sex offenders. Three cost–benefit analyses assessed the efficiency of treatment of sex offenders in general, and may provide valuable frameworks for future assessment of the efficiency of SSRI treatment. The main costs associated with SSRI treatment were drug costs, estimated to be a maximum of £750/annum. The optimal duration of treatment was a major source of uncertainty concerning the total cost of SSRI treatment. Considering the main identifiable costs and consequences indicated that assessing the efficiency of SSRIs is overly speculative at present, particularly in the absence of valid information on their effectiveness and the magnitude of any effect on recidivism.

Conclusions
Although SSRIs are an intervention of clear potential importance for the treatment of sex offenders, there is great uncertainty about their effectiveness suggesting that further research should be the main priority.

Need for further research
A double-blind randomised controlled trial needs to be conducted, preferably with several participating centres, comparing existing best treatment plus SSRIs with best treatment plus placebo. Practically, psychometric methods and/or measures of sexual arousal to assess the progress of sexual offenders over at least 2 years may need to be employed. The need to assess the cost-effectiveness of SSRIs should also be anticipated in future research. Decision analytic modelling may contribute directly and help further define information to which estimates of cost-effectiveness are sensitive. Due to the fact that sex offences are not a uniform entity, distinction needs to be made between different types in future research. The relationship between benefit and cost of SSRI treatment may vary considerably.

Publication
The NHS R&D Health Technology Assessment (HTA) Programme was set up in 1993 to ensure that high-quality research information on the costs, effectiveness and broader impact of health technologies is produced in the most efficient way for those who use, manage and provide care in the NHS.

The research reported in this monograph was commissioned by the HTA Programme on behalf of the NHS National Programme on Forensic Mental Health Research and Development. Technology assessment reports are completed in a limited time to inform policy development by the NHS National Programme on Forensic Mental Health Research and Development. The review brings together evidence on key aspects of the use of the technology concerned.

The research reported in this monograph was funded as project number 01/30/01.

The views expressed in this publication are those of the authors and not necessarily those of the HTA Programme, the NHS National Programme on Forensic Mental Health Research and Development or the Department of Health. The editors wish to emphasise that funding and publication of this research by the NHS should not be taken as implicit support for any recommendations made by the authors.

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