The effectiveness of sexual health interventions for people with severe mental illness: a systematic review

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Scientific summary

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Background

Severe mental illnesses (SMIs), such as schizophrenia and bipolar disorder, persist over time and can cause extensive disability leading to impairments in social and occupational functioning. While some individuals have long periods when they are well and are able to manage their illness, people with SMI have higher morbidity and mortality due to physical illness than the general population. Many of these individuals will also have co-existing drug and alcohol problems and difficulties in establishing stable and sexual relationships. These issues mean that they may be more likely to engage in high-risk sexual behaviour such as unprotected intercourse, having multiple partners, involvement in the sex trade and illicit drug use than the general population. As a consequence, they are at risk of poorer sexual health outcomes including sexually transmitted infections such as human immunodeficiency virus (HIV) and unintended pregnancies. Sexual health promotion interventions (such as educational and behavioural interventions, motivational exercises, counselling and service delivery), developed and implemented for people with SMI, may improve participants’ knowledge, attitudes, beliefs or behavioural practices (including assertiveness skills) and could lead to a reduction in risky sexual behaviour.

Objectives

The aim of this review was to evaluate the effectiveness of sexual health interventions for people with SMI and their applicability to the UK NHS setting, and to identify key areas for primary research.

Methods

Thirteen electronic databases and research registers were searched from inception to December 2012. Searches were supplemented by hand-searching relevant articles (including citation searching), systematic keyword searches of the internet and mental health organisation websites, and contacting experts in the field. The systematic review included all controlled trials (randomised or non-randomised) that met the following criteria: any sexual health promotion intervention or combination of interventions (e.g. educational, behavioural, psychological, counselling, etc., delivered at the individual, group or community level) intended to change the knowledge, attitudes, beliefs, behaviours or practices of individuals with SMI (defined as adults aged ≥ 18 years who have received a diagnosis of schizophrenia or bipolar disorder) living in the community. Adults with dementia, personality disorder or intellectual disability were excluded as they were not included in our definition of SMI. The methodological quality of each included study was assessed using the Effective Public Health Practice Project tool for quantitative studies. Data were tabulated and discussed in a narrative review. A meta-analysis was not possible because of the heterogeneity of study designs, interventions and types of outcome data available.

Results

The literature searches identified 2590 citations. Of these, 13 randomised controlled studies (representing 14 references) met the inclusion criteria. The methodological quality of the included studies varied considerably with only a minority of studies (n = 2) being considered as having very few methodological limitations. The content of the health promotion interventions for improving sexual health varied between studies but generally included strategies to increase knowledge, assess and reduce sexual health risk, change behaviour and develop condom skills. The duration of the interventions ranged from four to
15 sessions. Standard usual care included educational sessions on HIV, money management, or HIV and substance misuse, waiting list or no treatment, or health promotion covering a variety of topics. Most studies included participants with a range of psychiatric diagnoses, which included schizophrenia, schizoaffective disorder, bipolar affective disorder and major depressive disorders. Despite wide variations in the study populations, interventions (e.g. programme content and duration), comparators and outcomes, four studies showed significant improvements in all measured sexual risk behaviour outcomes (e.g. HIV knowledge and behaviour change) in the intervention groups compared with the control groups. In contrast, four studies found significant improvements in the intervention groups for some outcomes only and three studies found significant improvements in certain subgroups only, based on either gender or ethnicity. Finally, two studies reported no significant differences in any sexual risk behaviour outcomes between the intervention and control groups. Moreover, positive findings were not consistently sustained at follow-up in many studies.

**Discussion and conclusions**

Owing to the large between-study variability (especially in the populations, interventions, comparators and reported outcomes) and mixed results, there is insufficient evidence to fully support or reject the identified sexual health interventions for people with SMI. In addition, there are considerable uncertainties around the generalisability of these findings to the UK setting as all the evidence is based on studies from the USA. The ethnic groups represented in the included studies, for example, are not directly comparable to those in the UK. On account of study heterogeneity, issues with generalisability and the methodological quality of the included studies, the findings need to be interpreted with caution. Further research recommendations include well-designed, UK-based trials of sexual health interventions for people with SMI and an assessment of the location and costs of proposed services, as well as training and support for staff implementing sexual health interventions. In addition, patient acceptability of proposed interventions also needs to be given careful consideration.

**Study registration**

This study is registered as PROSPERO:CRD42013003674.

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