

Minerva Access is the Institutional Repository of The University of Melbourne

Author/s:

Corbett, R;Elsom, S;Sands, N;Prematunga, R

Title:

An exploratory investigation of sexual health screening in the first 12 weeks of case management in populations with severe mental illness

Date:

2017-04-01

Citation:

Corbett, R., Elsom, S., Sands, N. & Prematunga, R. (2017). An exploratory investigation of sexual health screening in the first 12 weeks of case management in populations with severe mental illness. *International Journal of Mental Health Nursing*, 26 (2), pp.160-169. <https://doi.org/10.1111/inm.12257>.

Persistent Link:

<https://hdl.handle.net/11343/291713>

An exploratory investigation of sexual health screening in the first 12 weeks of case management in populations with severe mental illness

Sexual Health Screening

Rebecca Corbett^{1*},

Stephen Elsom²,

Natisha Sands³,

Roshani Prematunga⁴

¹Mental Health, Drugs and Alcohol Education Team

Barwon Health

Geelong, Australia

²Centre for Psychiatric Nursing

The University of Melbourne

Melbourne, Australia

³School of Nursing and Midwifery, Faculty of Health

Deakin University

Geelong, Australia

⁴Centre for Psychiatric Nursing, Faculty of Medicine, Dentistry & Health

Sciences

The University of Melbourne

Melbourne, Australia

Correspondence: Rebecca Corbett, Barwon Mental Health Education Team,
The Geelong Hospital, P.O. Box 281, Geelong, Australia. Email:

rebcor@barwonhealth.org.au

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: [10.xxxx/inm.12257](https://doi.org/10.xxxx/inm.12257)

This article is protected by copyright. All rights reserved

Rebecca Corbett, BN(mh) RPN, MANP.

Stephen Elsom, BA, MNurs, PhD, RN, MHN.

Natisha Sands, RPN, BN(Hons), PhD.

Roshani Prematunga BComm. PgDip Sci MPH.

Author contribution: RC design, data collection, data analysis, interpretation, manuscript writing, SE design, data analysis, interpretation, manuscript writing, NS design, interpretation, manuscript writing, RP data analysis and statistical consultation

Abstract

The sexual health of people with mental illness is commonly overlooked, neglected or inadequately addressed in mental health care, despite evidence showing that people with severe mental illness are more vulnerable to sexually transmitted infections (including HIV), sexual side-effects, and sexual dysfunction than the general population. This article reports a study that investigated sexual health screening in five community mental health clinics within a large a regional health service in Victoria, Australia. The aim of the study was to examine the extent to which sexual health screening is currently undertaken on newly admitted case-managed consumers, and to identify the types of screening undertaken. An exploratory design using retrospective file audit was used in the study. A total of 186 medical records met the study inclusion criteria. The study found that less than 40% of consumers were provided with sexual health screening during their first 12 weeks of case management. The study also found that sexual side-effects, issues of fertility, sexual self-esteem, safe sexual practices, and sexual dysfunction were rarely screened for. Poor sexual health screening has implications for the safety and quality of mental health care and requires targeted research to improve understandings and approaches to care.

Keywords

community mental health

mental illness

sexual health

sexual health screening

sexuality

Introduction

The World Health Organization's sexual health framework (World Health Organization Department of Reproductive Health and Research 2010) positions sexual health as fundamental to the physical and psychological health and wellbeing of individuals, families and societies, and integral to social and economic development. Contemporary definitions of sexual health extend beyond just reproductive health to acknowledge the central importance of sexuality and sexual relationships to human health and wellbeing, and include sexual diversity, sexual safety, sexual dysfunction and disability (Straw & Porter 2012, World Health Organization Department of Reproductive Health and Research 2010). WHO acknowledges sexual health as a fundamental human right, but also notes the significant variations in achieving sexual health in different population groups related to factors such as lack of access to information, good-quality sexual health care, and environments that promote sexual health.

There is a growing body of research confirming that people with severe mental illness (SMI) have poorer physical health outcomes than the general population on a range of measures, including significantly lowered life expectancy (Thornicroft 2011, Wahlbeck *et al.* 2011). There is evidence to suggest that the sexual health of people with SMI may also be poor (Grover *et al.* 2014, Kaltenthaler *et al.* 2014, Schmidt 2012), and that sexual health problems may be inadequately identified in mental health settings (Happell *et al.* 2012, Howard & Gamble 2011, Marengo *et al.* 2015, Quinn & Browne

2009, Quinn *et al.* 2013). This article reports research that investigated sexual health screening in five community mental health clinics within a large regional mental health service in Victoria, Australia. Consistent with the language of contemporary mental health policy and practice in Australia, the term ‘consumer’ is used throughout this manuscript rather than terms such as ‘patient’, ‘client’ or ‘service-user’.

Background

There is little research that describes sexual health screening practice in mental health clinical settings. A multi database search including CINAHL, PsycINFO, Web of Science, and Scopus was undertaken for this study spanning 2006–2016 using the key words terms: ‘sexual health’ ‘sexual health screening’ ‘assessment’ ‘mental health’, ‘mental illness’ singularly and in multiple combinations. This search strategy yielded no study titles specific to sexual health screening in mental health settings. Previous research related to sexual health in populations with mental illness has focused on sexual dysfunction associated with some antipsychotics (Serretti & Chiesa 2011) and antidepressants (Baldwin & Foong 2013, Serretti & Chiesa 2009, Williams *et al.* 2010), mental illness and sexually risky behaviour (Brown *et al.* 2010, Higgins *et al.* 2006, Meade 2006), sexual orientation and mental health (Herek & Garnets 2007, King *et al.* 2008, Sandfort *et al.* 2006), and mental illness and transmission of sexually transmitted infections (Brown *et al.* 2008, Khan *et al.* 2009). This is consistent with sexual health research in general populations, which has tended to focus on defined and limited sexual health indicators (Lagios & Deane 2007, Pinxten & Lievens 2013).

There are compelling reasons for clinicians to include routine sexual health screening in the care of people with SMI, yet to date no research has investigated the rate and type of sexual health screening in either hospital or community mental health settings. Failure to adequately screen and provide

interventions for sexual health problems has implications for the safety and quality of mental health care (Australian Commission on Safety and Quality in Health Care 2010). From the safety perspective, the side-effect profile of many antidepressant and antipsychotic medications commonly includes sexual dysfunction (Clayton *et al.* 2014, Young *et al.* 2015), and sexual dysfunction is known to be an important factor in consumer non-adherence to medication (Clayton *et al.* 2014, DiBonaventura *et al.* 2012). Sexual dysfunction refers to disturbance to or pain during any phase of the sexual response cycle (desire, arousal, plateau, orgasm and refractory phases) which causes significant distress to the person/couple concerned, and which persists for a 6-month or more period (American Psychiatric Association 2013). Medication induced sexual side-effects which are known to occur in antidepressant and antipsychotic use can also lead to sexual dysfunction, with the diagnostic time frame being shorter for drug induced sexual dysfunction (American Psychiatric Association 2013). Sexual dysfunction is also an indicator for other physical health conditions such as cardio-vascular disease (Dong *et al.* 2011, Jackson *et al.* 2006), which is also prevalent in people with SMI (Brown *et al.* 2009, De Hert *et al.* 2009).

From a quality perspective it follows that holistic mental health nursing care pertaining to sexual health should involve more than just physical health monitoring and assessment of side-effects and risks; sexual health should incorporate a holistic approach (Quinn *et al.* 2013) that is mindful of the psychological wellbeing dimensions of sexuality (Quinn & Browne 2009, World Health Organization Department of Reproductive Health and Research 2010). It is not uncommon for physical and/or mental illness and treatment to adversely affect how people experience their physical body, and how their body responds sexually (McCann & Clark 2004, Williams *et al.* 2010), and opportunities should be provided for consumers to discuss any sexual

concerns or issues impacting their psychological health and wellbeing (Quinn *et al.* 2013).

Research suggests that if a consumer is not asked directly, they will rarely divulge sexual health problems (Matevosyan 2009). It is therefore important for nurses and other health professionals working directly with people with SMI to proactively screen for sexual health problems (De Hert *et al.* 2011, Quinn *et al.* 2013). At present there are no clinical practice guidelines that stipulate the frequency and type of sexual health screening that should be undertaken in case-managed consumers with SMI, however De Hert *et al.* (2011) recommend that basic sexual health screening (eg. libido, erectile dysfunction, pregnancy, prolactin) should be undertaken at baseline, at 12 weeks, and at one year. Our study aimed to establish the extent to which sexual health screening (of any type) was undertaken on case-managed consumers during the first 12 weeks of case-managed care in a regional mental health service in Victoria, Australia.

Materials and Methods

Aims

The primary aim of this study was to investigate the frequency and type of sexual health screening undertaken on consumers within the first 3 months of commencing case management. A secondary aim of the study was to explore any relationships between consumer characteristics and sexual health screening.

Research questions

1. What is the frequency and type of sexual health screening provided to mental health consumers in the first three months of case management?

2. What is the relationship between consumer characteristics and the rates and types of sexual health screening provided within the first three months of case management?

Design

The study employed an exploratory descriptive design involving a retrospective file audit.

Setting

The research was undertaken at five community mental health clinics within a large regional health service in Victoria, Australia. The community mental health service is staffed by multidisciplinary mental health clinicians who provide case-management services to a total of XX consumers in the region.

Ethical approval

The study was granted ethical approval by the Health Service Human Research and Ethics Committee (ID: 10/66) and by University of Melbourne Health Human Research and Ethics Committee (ID: 1035155). The conduct of the research conforms to the Declaration of Helsinki.

Sample

Convenience sampling was used to attain the study sample. A sampling frame for sexual health screening of 12 weeks was identified based on De Hert *et al.* (2011) recommendations for time intervals for sexual health screening, and therefore assumed that sexual health screening would potentially take place twice during the consumers first 12 weeks of health care.

Inclusion criteria

The files of all adult consumers (aged 25 to 65) who had received case management services for 12 consecutive weeks during the period of data collection were eligible for inclusion in the study.

Data collection

All relevant medical records from the five community mental health clinics were audited to identify consumers who had commenced case-management in the previous 3 months. Electronic files were systematically searched for evidence of any form of sexual health screening. This involved searching the most recent clinical documentation (crisis plans, triage/intake documents, care plans, psychosocial assessments) to least recent (admission documents, correspondence, Mental Health Act forms) for evidence of sexual health screening. Findings were then recorded on the audit tool by hand and later transcribed into an electronic format for analysis.

Instrument

A 38-item audit tool incorporating four consumer demographic items, three clinical items, 29 sexual health screening items identified in the literature as important to sexual health (De Hert *et al.* 2011, Quinn *et al.* 2013, World Health Organization Department of Reproductive Health and Research 2010), and two staff demographic items was used for data collection. The audit tool was pilot tested for utility on the first 10 medical records and was found to be fit for purpose with no modifications. Table 1 presents the sexual health screening items used in the audit tool:

Data analysis

Data analysis was performed using SPSS v 22.0 (Armonk, NY, USA). Descriptive statistics including frequencies and percentages were computed to describe the data. Bivariate associations between consumer variables and

screening were analysed using the Chi-square test and where applicable, Fisher's exact test was used. Logistic regression was used to predict sexual health screening using the diagnosis type as a predictor.

Results

Demographic characterises

A total of 186 consumer files were included in the study. Of the 186 files audited, 95 of the consumers were female (52%) and 91 were male (48%). Ages ranged between 25 and 65, with the mean age being 41 years. Approximately half of the females were partnered (48%), whereas slightly less (39%) of the males had partners. More of the female consumers had children (61% as opposed to 42% in males). Similar number of males and females were partnered with children, however more than twice as many women (29%) as men (13%) were single parents.

Clinical information

Depression (34%) was the most common diagnosis, followed by bipolar disorder (22%), schizophrenia (15.6%), schizoaffective disorder (8.6%), psychosis (7.5%), posttraumatic stress disorder (4.3%), substance use disorder (3.2%), borderline personality disorder (2.2%), acquired brain injury (1.07%) and situational crisis (.54%). Just over half of the consumers ($n = 114$) had an acute admission in this episode of care (61.2%). Seventeen consumers (11 male and six female) were recorded as having sexual delusions (31.62%).

Evidence of sexual health screening

A little over one third of consumers ($n = 73$, 39.2%) received sexual health screening during the 12-week period of care. Of the 73 consumers who were sexually screened, 54 were female (72.6%) and 19 were male (27.4%). For the majority of consumers ($n = 113$, 60.8%) no documented evidence of sexual screening was found.

Sexual side-effects

Three consumers were recorded as having sexual side-effects from mental health medications (1.6% of the total sample).

History of sexual abuse

Just under a third of the sample ($n = 55$) was screened for a history of sexual abuse (29.56%). Of those screened, 41 consumers reported a history of sexual abuse, and 17 reported no sexual abuse in their history. On three occasions there was a record of sexual abuse in the history that was not recorded in the current episode of care. Sexual abuse was the most commonly screened for sexual issue.

Safe sex practices

A small proportion of consumers ($n = 15$) were recorded as being sexually active (8.06%), two with a recorded history of sex work (1.07%). Ten consumers were recorded as having been offered safer sexual education (5.37%) and seven were referred to other health services for testing/support (3.76%).

Sexual dysfunction

One consumer was recorded as having sexual dysfunction (.537% of the total sample).

History of sexual offending

Eight consumers were recorded as having a history of sexual offending (14.88%). Of the eight consumers with a history of sexual offending, seven were provided with sexual health screening. The types of sexual health screening activities typically undertaken included assessment of current sexual

status (recent sexual history, sexually active, partnered), and referral to specialist sex offender services.

Fertility problems

Five consumers were currently pregnant (2.68%), and five were screened for future plans to become pregnant (2.68%). In all cases these consumers were referred to specialist services.

Relationship problems

Less than 10% of consumers ($n = 13$) reported problems with their relationship and of those, six were referred to other services for assistance.

Sexual self esteem

Six people reported being unhappy with their sex lives, and one person reported problems with gender identity issues. None of these people were referred for assistance to other services.

Other sexual health screening

Of the total ($n = 186$) sample, 21 (11.29%) completed the Basis 32 self-rating outcome measure, which includes a question (#27) about whether the consumer experiences difficulty with sexual activity or preoccupation. Fourteen consumers rated 0, which equates to no difficulty. Two consumers rated 1, which equates to a little difficulty. One consumer rated 2, which equates to moderate difficulty. One consumer rated 3, which equates to quite a bit of difficulty. Three consumers rated 4, which equates to extreme difficulty. Of the consumers who reported a score of 2 and above ($n = 5$), two received sexual health screening.

A blood borne virus (BBV) question, which is embedded in the organisation's documentation suite, was completed in 91 of 186 consumer

files (48.9%). In four cases the consumer answered yes and testing was offered.

Staff demographics and sexual health screening

The disciplinary composition of the case management team included nurses (86%) and allied health such as psychology, social work, and occupational therapy (14%). Of the 73 consumers who were screened, 45 (61.6%) had female case managers and 28 (38.4%) had male case managers. No significant relationship was found between screening and gender of case manager. Of the 73 consumers that received sexual screening, 53 (73%) occasions were staff initiated, and 20 occasions were recorded as consumer initiated (27%).

Association between consumer clinical and demographics and sexual health screening

A significant correlation was evident between the age of consumers and the frequency of sexual health screening. As the consumers' age increased, they were less likely to be screened for sexual health issues ($r = 0.154$, $P < 0.05$). Those who were screened were more likely to be female than male ($\chi^2(1, n = 186) = 22.285$, $P = 0.000$). Those who were partnered were more likely to be screened than those who were not ($\chi^2(1, n = 186) = 5.625$, $P = 0.013$).

There was no difference in screening between those that had an acute admission (61.29% of the total sample) and those that received community care only (39.5% of those admitted received screening as opposed to 38.9% of outpatients).

Other consumer factors found to be significantly associated with an increased likelihood of receiving sexual health screening included: a history of sexual abuse ($\chi^2(1, n = 186) = 65.390$, $P = 0.000$), a history of sex offending

($\chi^2(1, n = 186) = 8.163, P = 0.006$), being recorded as sexually active ($\chi^2(1, n = 186) = 25.256, P = 0.000$), and having sexual relationship problems ($\chi^2(1, n = 186) = 21.635, P = 0.000$).

Diagnosis and sexual health screening

Logistic regression analysis revealed that people diagnosed with depression were three times more likely to be screened for sexual health problems than those diagnosed with schizophrenia (OR = 3.08, $P < 0.05$). People diagnosed with bipolar disorder were eight times more likely to be screened for sexual health problems than those diagnosed with schizophrenia (OR = 8.00, $P < 0.05$). Table 2 reports the results of the logistic regression for screening associated with diagnosis type.

Discussion

This study found that more than 60% of case-managed consumers with SMI received no sexual health screening during the first 12 weeks of their care. At the 12-week mark it would be expected that all consumers would have a completed Recovery and Treatment Plan as per the organisational policy and procedure, which should include detailed assessment information used to guide treatment planning. De Hert *et al.* (2011) suggest that by the 12th week of treatment, consumers should ideally have had two physical health assessments completed, including sexual health screening. The low overall rate of screening is consistent with findings from previous research suggesting that the sexual health of people with SMI is often inadequately addressed in mental health settings (Higgins *et al.* 2006, Hughes & Gray 2009, Quinn & Browne 2009).

Formal and informal consumer assessment is a fundamental, routine clinical activity in mental health nursing (Robson & Gray 2007, Varcarolis *et al.* 2013), and mental health nurses (MHNs) therefore are well placed to initiate sexual health screening as part of routine bio-psychosocial assessment.

Available literature, however, suggests that MHNs often avoid or neglect sexual health assessment (Higgins *et al.* 2006, Quinn & Browne 2009). A grounded theory study (Higgins *et al.* 2008) involving 27 Irish MHNs found that reluctance to assess for sexual health problems was mainly due to a perceived lack of competence and confidence in matters related to consumer sexual health. In a review of literature examining sexuality, mental health consumers, and the role of mental health nurses, Quinn and Browne (2009) identified that nurses lack knowledge about sexuality, hold conservative attitudes, and experience anxiety when discussing sexual issues with consumers. Higgins *et al.* (2009) suggest that mental health nurses may ignore consumer sexuality as a result of cultural 'seepage', where the absence of sexual health education and positive role models has resulted in the traditional silence on consumer sexuality and sexual health being perpetuated generationally in nursing. Robson and Gray (2007) note that it is not necessary for MHNs to carry out the sexual health testing (checks), but infer that MHNs are capable of proactively screening for physical health problems, including sexual health, and referring consumers for testing. They further suggest that protocols to guide physical health assessment should be in place to support practice.

Around one third of the sample was screened for a history of sexual abuse, and of those who were screened; nearly 75% (22% of the total sample) reported a history of sexual abuse. Research on the prevalence of sexual abuse among those with SMI suggests that up to 50% of consumers have a history of sexual abuse (Matevosyan 2009). A more recent study (Alvarez *et al.* 2011) of the prevalence and impact of childhood trauma in people with SMI confirmed that almost 50% of SMI consumers have a trauma history, and those with a history of sexual abuse were more than twice as likely to attempt suicide. A systematic review and meta-analysis of sexual abuse and diagnosis of psychiatric disorder (Chen *et al.* 2010) showed that a history of sexual abuse

was significant to the development of a range of mental illnesses, such as anxiety disorder and depression, and also a risk factor for suicide and suicidal behaviour. Given the prevalence of sexual abuse history and the associated heightened risk for suicide in people with SMI; sexual health screening warrants inclusion into routine physical health screening practice.

Despite studies confirming that people with SMI are at a greatly increased risk of STIs, in particular HIV (Blank *et al.* 2011, Collins *et al.* 2008, Lagios & Deane 2007), the sexual screening rate for unsafe sex in this study was low. In an older study, Raja and Azzoni (2003) suggest that there is reluctance by mental health staff to support those with SMI to be tested for blood borne viruses (BBV), despite their increased risk for STIs. Our study revealed that only 8.06% of the sample was recorded as being sexually active, and only half of those consumers were referred for screening for potential BBV. In a recent study involving a randomized trial to examine the effectiveness of a nurse led intervention to improve treatment adherence in people with SMI and HIV, Blank *et al.* (2011) established that nurse interventions, including medication management, psychoeducation, care coordination and practical tools such as pill-boxes and reminder systems can be successful in improving outcomes in this population.

The diagnostic overrepresentation in screening of those with affective disorders (bipolar disorder, depression) found in this study (as compared to schizophrenia) is interesting and could possibly be attributed to sexually disinhibited behaviour typically attributed to those with bipolar disorder (Fletcher *et al.* 2013, Meade *et al.* 2008). Alternatively, consumers with positive and negative symptoms of schizophrenia and concurrent social factors (e.g. lack of housing, income, self-care) may be viewed, as is suggested by Raja and Azzoni (2003) and Perry and Wright (2006), as less sexual and less desirable partners, which may in turn influence clinician

attitudes and assumptions and this may influence decisions to initiate sexual screening by staff.

Sexual side-effects were only recorded in three of the 186 cases. Given sexual dysfunction is a common side-effect of antipsychotic and antidepressant medications, this finding may point to inadequate screening. This finding is consistent with Higgins *et al.* (2008) and Östman (2008) who point out that despite sexual side-effects being one of the most common reasons why consumers may cease their medication, they are rarely screened for. Nakopoulou *et al.* (2009) conducted a study on the attitudes of Greek nurses ($n = 44$) to sexual health, which showed that nurses did not view sexual history taking as within the scope of their professional role tasks.

Implications for Practice

The findings from this study suggest that sexual health screening may not be routinely undertaken with newly admitted case-managed consumers, in spite of the fact that most consumers would have been commenced on psychotropic medications, some of which have known sexual side-effects. In the context of contemporary mental health care that emphasises the importance of physical health screening to improving consumer outcomes (Happell *et al.* 2012, Howard & Gamble 2011), the lack of attention to sexual side-effects is significant.

The avoidance and at times neglect of the sexuality and sexual health of consumers can have important consequences for the quality and safety of consumer care. A key focus of quality and safety in healthcare is on reducing preventable harms and risks (Australian Commission on Safety and Quality in Health Care 2010). Failure to undertake sexual health screening and intervention is a lost opportunity to potentially reduce sexual health related risks in consumers receiving case management services. It is well known that people with SMI often have poor access to mainstream health services (REF);

thereby reducing the likelihood that sexual health screening will be undertaken in other health settings. Poor consumer access to mainstream health services and the well known poor physical health status of people with SMI provides a clear imperative for mental health services to provide comprehensive health screening and intervention, inclusive of sexual health (Rosenberg *et al.* 2010).

Some authors have suggested that a lack of comprehensive training in sexual health care has resulted in staff reverting to their own personal values, discomforts and embarrassment around sexuality, resulting in avoidance of issues, rather than adopting a neutral professional approach (Higgins *et al.* 2008, Higgins *et al.* 2009, Quinn & Happell 2013). Conversely, studies that have trialled and evaluated staff training programmes on focused on how to approach sexuality and sexual health issues with consumers have shown that training increases awareness of, and confidence in, screening for sexual health concerns (Quinn & Happell 2013, Tennille *et al.* 2014). Furthermore, behavioural interventions such as sexual health screening (which may include information, education and referral) have been shown to significantly reduce sexual health risks in sexually vulnerable young people (Johnson *et al.* 2011). Using a standardized approach to sexual health screening that staff feel confident in administering has the potential to significantly improve the sexual health care of consumers receiving case management services (Rosenberg *et al.* 2010). Further research is required to improve current understandings of how clinicians view sexual health screening, and how best to approach sexuality and the sexual health care of people with SMI in community settings.

Limitations

This study has several limitations. The sample was drawn from a regional mental health service, which may not be generalizable to urban or

ethnically diverse populations. Retrospective audit is limited in that it only captures what is written in medical records, and may not reflect accurately the actual work that is done. There is every possibility that conversations around sexual health occurred that were not recorded by staff. The study did not include the lived experience or views and wishes of consumers, nor attitudes, opinions and experiences of staff. Further research is required to gain a deeper understanding of these perspectives to inform the theory and practice of sexual health care in community mental health settings.

Conclusion

Targeted educational programmes designed to increase knowledge about sexual health and SMI and support clinicians in improving sexual health screening practice are required to address current practice gaps (Quinn & Browne 2009, Quinn *et al.* 2013). To improve the evidence-base for sexual health care in community mental health settings, and inform future service planning and provision, large multi-site studies are required to measure the extent of sexual health problems in case-managed SMI populations, and the level of screening and sexual health intervention currently provided.

Controlled trials would assist in determining which interventions lead to improvements in detection, intervention and care for the sexual health needs of people with SMI receiving case-management services.

References

- Alvarez, M. J., Roura, P., Osés, A., Foguet, Q., Solà, J. & Arrufat, F. X. (2011). Prevalence and clinical impact of childhood trauma in consumers with severe mental disorders. *Journal of Nervous and Mental Disease*, 199, 156–161.
- American Psychiatric Association (2013). *The Diagnostic and Statistical Manual of Mental Disorders*, 5th edn. Arlington, VA: American Psychiatric Publishing.

- Australian Commission on Safety and Quality in Health Care (2010). National consensus statement: Essential elements for recognising and responding to clinical deterioration. [Cited 4 April 2016]. Available from: http://www.safetyandquality.gov.au/wp-content/uploads/2012/01/national_consensus_statement.pdf
- Baldwin, D. S. & Foong, T. (2013). Antidepressant drugs and sexual dysfunction. *The British Journal of Psychiatry: the Journal of Mental Science*, 202, 396–397.
- Blank, M. B., Hanrahan, N. P., Fishbein, M. *et al.* (2011). A randomized trial of a nursing intervention for HIV disease management among persons with serious mental illness. *Psychiatric Services*, 62, 1318–1324.
- Brown, A. D. H., Barton, D. A. & Lambert, G. W. (2009). Cardiovascular abnormalities in patients with major depressive disorder: autonomic mechanisms and implications for treatment. *CNS Drugs*, 23, 583–602.
- Brown, A. P., Lubman, D. I. & Paxton, S. J. (2008). STIs and blood borne viruses: risk factors for individuals with mental illness. *Australian Family Physician*, 37, 531–534.
- Brown, L. K., Hadley, W., Stewart, A. *et al.* (2010). Psychiatric disorders and sexual risk among adolescents in mental health treatment. *Journal of Consulting and Clinical Psychology*, 78, 590–597.
- Chen, L. P., Murad, M. H., Paras, M. L. *et al.* (2010). Sexual abuse and lifetime diagnosis of psychiatric disorders: systematic review and meta-analysis. *Mayo Clinic Proceedings*, 85, 618–629.

- Clayton, A. H., Croft, H. A. & Handiwala, L. (2014). Antidepressants and sexual dysfunction: mechanisms and clinical implications. *Postgraduate Medicine*, 126, 91–99.
- Collins, P. Y., Elkington, K. S., Sweetland, A., Von Unger, H., Wright, E. R. & Zybert, P. A. (2008). Relationship of stigma to HIV risk among women with mental illness. *American Journal of Orthopsychiatry*, 78, 498–506.
- De Hert, M., Cohen, D., Bobes, J. *et al.* (2011). Physical illness in patients with severe mental disorders. II. Barriers to care, monitoring and treatment guidelines, plus recommendations at the system and individual level. *World Psychiatry*, 10, 138–151.
- De Hert, M., Dekker, J. M., Wood, D., Kahl, K. G., Holt, R. I. G. & Möller, H. J. (2009). Review: Cardiovascular disease and diabetes in people with severe mental illness position statement from the European Psychiatric Association (EPA), supported by the European Association for the Study of Diabetes (EASD) and the European Society of Cardiology (ESC). *European Psychiatry*, 24, 412–424.
- DiBonaventura, M., Gabriel, S., Dupclay, L., Gupta, S. & Kim, E. (2012). A patient perspective of the impact of medication side effects on adherence: results of a cross-sectional nationwide survey of patients with schizophrenia. *BMC Psychiatry*, 12, 1–7.
- Dong, J. Y., Zhang, Y. H. & Qin, L. Q. (2011). Erectile dysfunction and risk of cardiovascular disease meta-analysis of prospective cohort studies. *Journal of the American College of Cardiology*, 58, 1378–1385 1378p.

- Fletcher, K., Parker, G., Paterson, A. & Synnott, H. (2013). High-risk behaviour in hypomanic states. *Journal of Affective Disorders*, 150, 50–56.
- Grover, S., Ghosh, A., Sarkar, S., Chakrabarti, S. & Avasthi, A. (2014). Sexual dysfunction in clinically stable patients with bipolar disorder receiving lithium. *Journal of Clinical Psychopharmacology*, 34, 475–482.
- Happell, B., Scott, D., Platania-Phung, C. & Nankivell, J. (2012). Should we or shouldn't we? Mental health nurses' views on physical health care of mental health consumers. *International Journal of Mental Health Nursing*, 21, 202–210.
- Herek, G. M. & Garnets, L. D. (2007). Sexual orientation and mental health. *Annual Review of Clinical Psychology*, 3, 353–375.
- Higgins, A., Barker, P. & Begley, C. M. (2006). Sexual health education for people with mental health problems: what can we learn from the literature? *Journal of Psychiatric & Mental Health Nursing*, 13, 687–697.
- Higgins, A., Barker, P. & Begley, C. M. (2008). 'Veiling sexualities': a grounded theory of mental health nurses responses to issues of sexuality. *Journal of Advanced Nursing*, 62, 307–317.
- Higgins, A., Barker, P. & Begley, C. M. (2009). Sexuality and mental health nursing in Ireland: weaving the veil of socialised inhibition. *Nurse Education Today*, 29, 357–364.
- Howard, L. & Gamble, C. (2011). Supporting mental health nurses to address the physical health needs of people with serious mental illness in

- acute inpatient care settings. *Journal of Psychiatric & Mental Health Nursing*, 18, 105–112.
- Hughes, E. & Gray, R. (2009). HIV prevention for people with serious mental illness: a survey of mental health workers' attitudes, knowledge and practice. *Journal of Clinical Nursing*, 591–601.
- Jackson, G., Rosen, R. C., Kloner, R. A., Kostis, J. B. & Goldstein, I. (2006). The Second Princeton Consensus on Sexual Dysfunction and Cardiac Risk: New Guidelines for Sexual Medicine. *Journal of Sexual Medicine*, 3, 28–36.
- Johnson, B. T., Scott-Sheldon, L. A. J., Huedo-Medina, T. B. & Carey, M. P. (2011). Interventions to reduce sexual risk for human immunodeficiency virus in adolescents: A meta-analysis of trials, 1985-2008. *Archives of Pediatrics & Adolescent Medicine*, 165, 77.
- Kaltenthaler, E., Pandor, A. & Wong, R. (2014). The effectiveness of sexual health interventions for people with severe mental illness: a systematic review. *Health Technology Assessment*, 18, 1–74.
- Khan, M. R., Kaufman, J. S., Pence, B. W. *et al.* (2009). Depression, sexually transmitted infection, and sexual risk behavior among young adults in the United States. *Archives of Pediatrics & Adolescent Medicine*, 163, 644–652.
- King, M., Semlyen, J., Tai, S. S. *et al.* (2008). A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC Psychiatry*, 8, 70–70.
- Lagios, K. & Deane, F. P. (2007). Severe mental illness is a new risk marker for blood-borne viruses and sexually transmitted infections.

- Australian and New Zealand Journal of Public Health, 31, 562–566.
- Marengo, E., Martino, D. J., Igoa, A. *et al.* (2015). Unplanned pregnancies and reproductive health among women with bipolar disorder. *Journal of Affective Disorders*, 178, 201–205.
- Matevosyan, N. R. (2009). Reproductive Health in Women with Serious Mental Illnesses: A Review. *Sexuality & Disability*, 27, 109–118.
- McCann, T. V. & Clark, E. (2004). Embodiment of severe and enduring mental illness: finding meaning in schizophrenia. *Issues in Mental Health Nursing*, 25, 783–798.
- Meade, C. S. (2006). Sexual risk behavior among persons dually diagnosed with severe mental illness and substance use disorder. *Journal of Substance Abuse Treatment*, 30, 147–157.
- Meade, C. S., Graff, F. S., Griffin, M. L. & Weiss, R. D. (2008). HIV risk behavior among patients with co-occurring bipolar and substance use disorders: Associations with mania and drug abuse. *Drug & Alcohol Dependence*, 92, 296–300.
- Nakopoulou, E., Papaharitou, S. & Hatzichristou, D. (2009). Patients' Sexual Health: A Qualitative Research Approach on Greek Nurses' Perceptions. *Journal of Sexual Medicine*, 6, 2124–2132.
- Östman, M. (2008). Severe depression and relationships: the effect of mental illness on sexuality. *Sexual and Relationship Therapy*, 23, 355–363.
- Perry, B. L. & Wright, E. R. (2006). The sexual partnerships of people with serious mental illness. *Journal of Sex Research*, 43, 174–181.

- Pinxten, W. & Lievens, J. (2013). Towards a typology of sexual health: a comprehensive approach using latent class analysis. *Sexuality in Theory and Practice, Abstracts. Presented at the Sexuality in Theory and Practice (ESA RN23–2013)*.
- Quinn, C. & Browne, G. (2009). Sexuality of people living with a mental illness: a collaborative challenge for mental health nurses. *International Journal of Mental Health Nursing*, 18, 195–203.
- Quinn, C. & Happell, B. (2013). Talking about sexuality with consumers of mental health services. *Perspectives in Psychiatric Care*, 49, 13–20.
- Quinn, C., Happell, B. & Welch, A. (2013). The 5-As framework for including sexual concerns in mental health nursing practice. *Issues in Mental Health Nursing*, 34, 17–24.
- Raja, M. & Azzoni, A. (2003). Sexual behavior and sexual problems among patients with severe chronic psychoses. *European Psychiatry*, 18, 70–76.
- Robson, D. & Gray, R. (2007). Serious mental illness and physical health problems: A discussion paper. *International Journal of Nursing Studies*, 44, 457–466.
- Rosenberg, S. D., Goldberg, R. W., Dixon, L. B. *et al.* (2010). Assessing the STIRR model of best practices for blood-borne infections of clients with severe mental illness. *Psychiatric Services*, 61, 885–891.
- Sandfort, T. G. M., Bakker, F., Vanwesenbeeck, I. & Schellevis, F. G. (2006). Sexual orientation and mental and physical health status:

- Findings from a Dutch population survey. *American Journal of Public Health*, 96, 1119–1125.
- Schmidt, H. M. (2012). Management of sexual dysfunction due to antipsychotic drug therapy. *Cochrane Database of Systematic Reviews*, 11, CD003546.
- Serretti, A. & Chiesa, A. (2009). Treatment-emergent sexual dysfunction related to antidepressants: a meta-analysis. *Journal of Clinical Psychopharmacology*, 29, 259–266.
- Serretti, A. & Chiesa, A. (2011). A meta-analysis of sexual dysfunction in psychiatric patients taking antipsychotics. *International Clinical Psychopharmacology*, 26, 130–140.
- Straw, F. & Porter, C. (2012). Sexual health and contraception. *Archives of Disease in Childhood. Education and Practice Edition*, 97, 177–184.
- Tennille, J., Solomon, P. & Bohrman, C. (2014). Using the FIELD Model to prepare social work students and field instructors on sexuality and intimacy for persons with psychiatric disabilities. *Sexuality & Disability*, 32, 469.
- Thornicroft, G. (2011). Physical health disparities and mental illness: The scandal of premature mortality. *The British Journal of Psychiatry: the Journal of Mental Science*, 199, 441–442.
- Varcarolis, E. M., Carson, V. & Shoemaker, N. (2013). *Foundations of Psychiatric Mental Health Nursing: A Clinical Approach*, 7th Edn. Saunders Elsevier.
- Wahlbeck, K., Westman, J., Nordentoft, M., Gissler, M. & Laursen, T. M. (2011). Outcomes of Nordic mental health systems: Life

expectancy of patients with mental disorders. *The British Journal of Psychiatry: the Journal of Mental Science*, 199, 453–458.

Williams, V. S. L., Edin, H. M., Hogue, S. L., Fehnel, S. E. & Baldwin, D. S. (2010). Prevalence and impact of antidepressant-associated sexual dysfunction in three European countries: replication in a cross-sectional patient survey. *Journal of Psychopharmacology*, 24, 489–496.

World Health Organization Department of Reproductive Health and Research (2010). Developing sexual health programmes: A framework for action. [Cited 4 April 2016]. Available from: http://apps.who.int/iris/bitstream/10665/70501/1/WHO_RHR_HRP_10.22_eng.pdf

Young, S. L., Taylor, M. & Lawrie, S. M. (2015). "First do no harm." A systematic review of the prevalence and management of antipsychotic adverse effects. *Journal of Psychopharmacology* (Oxford, England), 29, 353–362.

Table 1. Sexual Health Screening items

<i>Patient demographics</i>	<i>Sexual dysfunction</i>
Age	Screened yes/no
Gender	Sexual dysfunction yes/no
Partnered yes/no	Referred yes/no
Children yes/no	
	<i>History of sexual offence</i>
<i>Clinical information</i>	Screened for yes/no
Diagnosis	History of sexual offence yes/no
IPU admission yes/no	
Sexual delusions yes/no	<i>Fertility problems</i>

	Screened yes/no
<i>Evidence of sexual health screening</i>	Pregnant yes/no
Evidence yes/no	Planning pregnancy yes/no
	Referred yes/no
<i>Sexual side-effects</i>	
Screened yes/no	<i>Relationship problems</i>
General Meds yes/no	Screened for relationship problems yes/no
Referred yes/no	Referred for relationship problems yes/no
Psych meds yes/no	
<i>History of Sexual Abuse</i>	<i>Sexual self esteem</i>
Screened for yes/no	Happy with sex life yes/no
History of sexual Abuse yes/no	Gender/sex orientation issues yes/no
Referred yes/no	Referred yes/no
	<i>Staff demographics</i>
<i>Safe sex</i>	Gender Case manager
Screened yes/no	Gender Doctor
Sexually active yes/no	
History of sex work yes/no	
Safe sex education yes/no	
Referred yes/no	

Table 2. Logistic Regression Results for screening associated with diagnosis type

	Coefficient	SE	df	P-value	OR	95% CI
Diagnosis Type						

Ref = Schizophrenia

Depression	1.12	0.55	1	0.04*	3.08	1.04	9.12
Schizoaffective disorder	0.78	0.73	1	0.29	2.18	0.52	9.12
Psychosis	0.27	0.82	1	0.74	1.31	0.26	6.48
Bipolar	2.08	0.59	1	0.00*	8.00	2.52	25.44
Other	1.39	0.65	1	0.03*	4.00	1.11	14.35

Note. CI, confidence interval; df, degrees of freedom; OR, odds ratio; SE, standard error.

* $P < 0.05$