Access to dental care and dental ill-health of people with serious mental illness: views of nurses working in mental health settings in Australia

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Abstract. People with serious mental illness experience higher rates of oral and dental health problems than the wider population. Little is known about how dental health is viewed or addressed by nurses working with mental health consumers. This paper presents the views of nurses regarding the nature and severity of dental health problems of consumers with serious mental illness, and how often they provide advice on dental health. Mental health sector nurses (n = 643) completed an online survey, including questions on dental and oral health issues of people with serious mental illness. The majority of nurses considered the oral and dental conditions of people with serious mental illness to be worse than the wider community. When compared with a range of significant physical health issues (e.g. cardiovascular disease), many nurses emphasised that dental and oral problems are one of the most salient health issues facing people with serious mental illness, their level of access to dental care services is severely inadequate and they suffer significantly worse dental health outcomes as a result. This study highlights the need for reforms to increase access to dental and oral health care for mental health consumers.

Additional keywords: dental health, oral health.

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Introduction

It is reported that people who have been diagnosed with serious mental illnesses (SMI), such as schizophrenia and bipolar disorder, are more commonly diagnosed with a range of physical health problems, such as cardiovascular disease (Carney and Jones 2006; Carney et al. 2006; De Hert et al. 2011; Bradshaw and Pedley 2012; Gray 2012). The higher physical co-morbidity rates for people with SMI result from various health concerns (Robson and Gray 2007; Scott and Happell 2011; Blythe and White 2012; Chadwick et al. 2012), among them, a lack of dental and oral care (McCreadie et al. 2004; McCloughen et al. 2012). A meta-analysis conducted by Kisely et al. (2011) found that consumers with SMI, compared with the general population, had over three times the risk of complete tooth loss. Common correlates of SMI, such as smoking (Scott and Happell 2011), poor diet (Simonelli-Muñoz et al. 2012) and use of anti-psychotic medications that often result in xerostomia (dry mouth) (De Hert et al. 2011), and lack of oral self-care, substantially increase the risk of poor dental and oral health (Robson and Gray 2007; Matevosyan 2010). Dental and oral problems of people with SMI negatively affect their quality of life (Persson et al. 2010), such as pain and discomfort when consuming food (Kilbourne et al. 2007), altered taste and embarrassment (Sanders et al. 2009), and dental-related stigma can affect employment and pay (Loureiro et al. 2011).

Dental health care access is a major public health issue in Australia. Dental health care is not part of the universal health care coverage (Medicare), and dental health service fees are relatively high compared with other types of health service. Due to the socioeconomic disadvantage and marginalisation that is common for people with SMI (Waghorn and Lloyd 2005), the general barrier of cost for dental services is heightened for this group, and also amplified by positive symptomology of SMI (e.g. stimuli in waiting rooms) and stigma of mental illness in primary health care (Happell et al. 2012a).

There is very little literature in health services on the dental health problems of consumers with SMI. Examining the views of nurses in mental health care is of great value as they see consumers regularly, have an understanding of the way consumers interact with a variety of health services (Happell et al. 2008), advocate, refer and accompany the consumer to dental appointments and provide direct care (Kisely et al. 2011), and generally support physical health care roles for nurses (Hultsjö and Hjelm 2012; Robson et al. 2012).
The current paper forms part of a larger study that involved an online survey of a cross-section of nurses employed in mental health services in Australia. The purpose of the national survey study was to attain nurse views on the level of physical health of consumers with SMI and how well nurses and other health care services are meeting a range of physical health needs, one of which was dental health. A major impetus for this study was the conviction that nurse-based initiatives and care provision could be a potential avenue for improving the access consumers with SMI have to quality physical health care (e.g. nurses’ involvement in health assessment, health education, referral to specialists). Nurse views on the dental and oral health of consumers and their level of involvement in providing advice to consumers on dental care was one of many questions in the survey.

Methods

Study design

The national survey was conducted via the internet. The advantage of conducting the survey online was to reach nurses employed throughout Australia. The online mode also provided the flexibility to gather both quantitative and qualitative data from nurses by asking a mix of dichotomous, Likert-scale and open-ended questions.

Participants were asked, ‘How would you rate the health of consumers of mental health services, compared with members of the wider community for each of the following issues?’ Later, participants were presented with a question from Robson and Haddad’s (2012) Physical Health Attitude Scale (with permission from the lead author) and asked, ‘How often do you undertake each of the following practices with consumers?’ The response scale ranged from ‘never’ to ‘always’. There were 17 nurse practices listed, such as ‘monitoring consumers’ blood pressure’ (for 13 practices from the original list, see Robson and Haddad 2012, p. 81). The direct item on dental health was: ‘Giving consumers advice on dental health’. Participants could also provide open comments throughout the survey.

Sample

Participants were members of the Australian College of Mental Health Nurses (ACMHN). Although the ACMHN does not capture the entire population of nurses working in mental health services in Australia, it was deemed by far the most effective way to gain the most comprehensive sample possible, as the ACMHN is the only national accrediting body in Australia. Although the precise size of membership to the ACMHN is not known, at the time of data collection (May–July 2012) it was estimated to be 2852. Nurse participants were employed in both public and private sectors of the mental health system across all states and territories, and encompassed both inpatient and acute services, as well as community mental health. Over one-third were situated in community care settings.

Ethics

The current survey study was approved by the Central Queensland University ethics committee. Invitees to the survey were informed of the confidentiality arrangements and that participation was strictly on a voluntary basis. The invitation to participate was sent by the ACMHN and the research team did not have access to the member’s email addresses.

Data analysis

Thematic data analysis as described by Braun and Clarke (2006) was adopted to organise, dissect and consider the open comments (qualitative data). Open comments that included reference to dental health and services were aggregated. Then, following Braun and Clarke (2006) guidelines, responses were evaluated and then grouped into themes, before the process was repeated by each member of the research team to ensure consistency. Quantitative analysis involved examining the raw distribution and percentages of responses.

Results

The response rate was 22.2% (643/2852). This response rate, although small, was likely to be lower than the actual response rate as not all members would necessarily access their emails. It should also be noted that response rates to online surveys are typically lower than for hard-copy mailed surveys (Borkan 2010).

Table 1 presents the responses to the comparative question of rating consumers with SMI to those in the wider community.

<table>
<thead>
<tr>
<th>Type of ill-health</th>
<th>Much worse, (n=250)</th>
<th>Somewhat worse, (n=303)</th>
<th>About the same, (n=88)</th>
<th>Somewhat better, (n=1)</th>
<th>Much better, (n=1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular disease</td>
<td>38.9%</td>
<td>47.1%</td>
<td>13.7%</td>
<td>0.2%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>51.0%</td>
<td>40.6%</td>
<td>7.9%</td>
<td>0.3%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Obesity</td>
<td>62.2%</td>
<td>31.7%</td>
<td>5.4%</td>
<td>0.5%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Respiratory conditions</td>
<td>42.0%</td>
<td>45.4%</td>
<td>12.1%</td>
<td>0.3%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Oral dental conditions</td>
<td>71.4%</td>
<td>26.0%</td>
<td>2.3%</td>
<td>0.0%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>
Table 1 shows that 71.4% of nurses surveyed (n = 451) rated oral health conditions as being much worse for consumers with SMI. Only two participants rated consumers with SMI as having better oral—dental health than the wider community. Overall, almost all (97.4%, n = 626) nurses rated people with SMI as being worse in terms of oral—dental conditions.

Nurses generally considered dental health to be the condition in which the gap between those with SMI and the general population was the widest. This is evidenced in Table 1 by oral health conditions receiving the highest proportion of responses of ‘much worse’ and ‘worse’ in general (the cumulative percentage of ‘somewhat worse’ and ‘much worse’) amid all other listed health conditions, including cardiovascular disease, diabetes, obesity and respiratory conditions. Approximately half of all participants reported regularity in ‘giving consumers advice on dental health’: 8% responded ‘never’ (n = 53), 34% ‘rarely’ (n = 220), 32% ‘often’ (n = 203), 18% ‘very often’ (n = 114) and 8% ‘always’ (n = 53).

For open comments, many nurses wanted to highlight issues specifically related to dental and oral health. The issue of dental health was frequently raised in the second section (nursing health was frequently raised in the data reported earlier (Table 1) suggest that perceived poor dental health as participants who did not, the quantitative comments on any topic (dental or other) were provided by 268 of (general comments) of the survey. For these sections, open comments on any topic (dental or other) were provided by 268 of the participants (41.7%). Although it could not be determined whether participants who provided comments shared the same views on dental health as participants who did not, the quantitative data reported earlier (Table 1) suggest that perceived poor dental health was typical of the sample, and the forthcoming quoted comments were highly representative of those who did state their views.

Through evaluation of the open comments that referred to dental issues, four themes emerged: increased dental problems; declining access; declining support; and more common problems, yet more neglect.

**Increased dental problems**
Participants highlighted cases of major dental and oral problems of their clients. One commented on the early onset of dental problems:

*Have recently worked with a number of consumers with extremely poor dental health. Undetected and untreated for many years and in one case resulting in the consumer having all his teeth removed due to decay. This man was in his thirties and has a psychotic illness.* (ID183)

Dental issues were not only representative of physical problems but affected consumers’ journey of dealing with mental health issues:

*...the dental health of some consumers is very distressing and impacting on people’s ability to cope thereby worsening their depression/anxiety/illness.* (ID435)

**Declining access**
One participant emphasised the limit to general access to dental health for consumers as overwhelming:

*Dental care for acute consumers is almost impossible to acquire, 99% impossible.* (ID384)

A significant barrier to dental health expertise and treatment was identified as cost:

*Dental care is unobtainable for those patients in the mental health system. This is due to exorbitant costs and poor public dental systems.* (ID447)

One participant pointed out that inclusion criteria were not broad enough to capture consumers with SMI who did not have the resources for much-needed dental services:

*Dental care for those on low income is terrible. Many mental health clients are younger therefore are not eligible for the chronic disease dental plan...* (ID763)

A nurse who had experienced multiple settings concluded that consumers fared better in dental health when connected with GPs:

*I now work across 2 GP practices and the physical health of these consumers compared with psychiatric consumers I have seen in the emergency departments and community mental health services is very different. The GP consumers have improved physical health and dental care.* (ID730)

These differences may be due to better dental health access via primary care services. Shortage of access may be exacerbated by location within Australia. Availability of dental health services is limited in rural parts of Australia, particularly with regard to private dental clinics. According to a participant, the combination of shortages and high demand translated into extended waiting times in the public dental system:

*The waiting time for dental care is up to five years in the rural area as there is only one public dentist, so unless you have a problem you don’t get seen. There is no preventative treatment available. The cost of private dental care is out of the reach of most client(s) with a mental illness.* (ID506)

The low economic resources of consumers would become a barrier to dental services and the alternative of public services was not viewed to be sufficient:

*...lack of funds can make it difficult to access dental care as dentists [are] very expensive and the public system – where I live anyway – is HOPELESSLY inadequate.* (ID25)

**Declining support**
A good working relationship between consumers with SMI and health care staff is important, and in one area a participant described such a relationship taking place in a dental setting; however, it did not continue:

*Dental deterioration due to use of alcohol and illicits, plus poor diet, is a real issue, esp. after mental hospital dental services, who developed a real rapport and understanding with MH [mental health] clients, were disbanded 2 years ago.* (ID497)

Another potential reason for declining support is discrimination. The following case suggests that consumers
with SMI receiving inadequate services was dependent on general demand:

Our hospital has a visiting dentist once a fortnight for a day, which in itself is insufficient for our consumer population. This visit is often cancelled when the needs for the larger public community exists, i.e. large waiting lists at the base hospital dental service (we are under the same health district). Our clients then become even more marginalised. (ID346)

However, there were exceptions, where a service took the initiative to ensure that dental health care was available:

Our service set up a dental program with a local Dental Hospital which has enabled all of the consumers in our service have access to dental health. (ID501)

The receding of special support programs was described by a participant as neglecting a preventative approach:

Poor dental health is just one area that has an impact on mental health. The cessation of the dental health scheme for low income/disability pensioners will effect [sic] many consumers’ short, medium and long term health outcomes. (ID23)

More common, more neglected

Participants noted numerous physical health problems of their consumers. Among the descriptions of general neglect, dental problems were singled out as a seriously overlooked problem. The marginalising of dental compared with other health problems was indicated by one participant:

Dental care is usually the last of their health care needs, addressed. (ID47)

Despite the fact that dental care is often overlooked, the comment below reflects a view that poor dental health is more common than other physical health conditions:

... I see ... a lot of dental problems with people who have, for example, used drugs or have poor hygiene in conditions such as schizophrenia. But other conditions don’t have the same rate of problems. (ID469)

Discussion

The current findings provide confirmation from nurses in the field of numerous reports in the literature that dental and oral health problems among consumers with SMI are of significant concern (Kilbourne et al. 2007; Robson and Gray 2007; De Hert et al. 2011). In addition, while the lack of access to dental health services for the general public in Australia is common due to fee-for-service, shortage of public dental services and limited eligibility for free dental services (Schwarz 2006), the comments by nurses in the current study suggest that the gap between dental health service access and the dental care needs of consumers with SMI is even more profound. Systemic and health care arrangement problems in Australia affect the overall population and are amplified for people experiencing mental illnesses, adding further to the need for significant reforms.

Ratings on dental health were consistent with open comments of participants in the assertion that dental ill-health may be the most salient of physical health problems of consumers with SMI, and also one of the most neglected with respect to access to physical health services. Five physical health conditions were rated by participants and in this comparison of the wider community to consumers with SMI, the most contrasting view (worse versus better health) was with respect to dental and oral conditions. In conjunction with this pattern, of the range of physical health problems that were the topic of the survey, it was striking that in the open comments dental health and access issues were frequently singled out by nurses.

On the whole, participants in the survey reported regularly providing ‘advice on dental health’ to their consumers. The engagement of nurses with consumers on dental matters is promising, and it has been proposed in the literature that nurses are an important part of the strategy for lifting attention to dental health needs (Kisely et al. 2011). Mental health nurses work under highly demanding care environments (Cleary 2004) and adapt to them, including taking everyday opportunities to discuss health issues with consumers (Happell et al. 2012b). Greater attention by mental health nurses to the dental and oral health of consumers may be required; however, nurse efforts may amount to little if the consumers’ initiatives and those of nurses are not accompanied by structural and system supports, such as access to dental services. Access to dental health care remains a major public health issue in Australia (Schwarz 2006). Consumers with SMI should be a priority for improved dental health care access. Risk of dental-related ill-health (e.g. decay of teeth, periodontal disease and xerostomia) is associated with diagnosis of SMI (Matevosyan 2010; De Hert et al. 2011), periodontal disease is connected to higher incidence of cardiovascular disease (Scannapieco et al. 2003), and people with SMI experience poorer quality of life (e.g. pain in the mouth), stigma and work-based discrimination (Kilbourne et al. 2007; Persson et al. 2010; Loureiro et al. 2011).

Study limitations

Although the study included a generous sample size encompassing nurses from a variety of settings across Australia, the response rate to the online survey was not high (22%). This limitation has been experienced by another study that surveyed the same population, and had a response rate of 8% (Marks 2012). This suggests that the limited response rate is common to online studies of nurses in mental health in Australia, perhaps due to the high demands of the job and lack of time nurses have to participate in such activities. A further limitation is that it is likely that nurses more concerned with the physical health of consumers with SMI would participate in the survey. Given issues of both response rate and the likelihood of over-representation of nurses concerned about the physical health issues of people with SMI, we have been cautious with respect to the current findings. A study with a larger sample and higher response may clarify whether the salience of nurse concerns on dental health is generalisable.

Conclusion

Nurses working in mental health services in Australia view the dental and oral health of their consumers as poor, and believe
that the acuity of oral health problems for consumers with SMI may have been underestimated. Given the salience of concern nurses have for the dental health of consumers with SMI they may be an important avenue for consumers to access dental health care, such as providing advice and facilitating referrals.

The dental health problems identified by nurses further highlight the importance of national health reforms in dental health care and raise the issue of whether consumers with SMI should be a priority sub-group for improved services, given heightened oral health problems and common social and economic disadvantage.

Conflicts of interest
None declared.

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References


