A service evaluation of oral health needs amongst old age psychiatric inpatients

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Introduction

The term 'mental illness' is used to describe clinically recognisable patterns of psychological symptoms or behaviour causing acute or chronic ill-health, personal distress or distress to others (WHO). Over 300 mental and behavioural disorders are classified in ICD-10.

When considering age related mental illness, despite popular belief that the disease with the highest prevalence is dementia, globally it is in fact depression, affecting approximately 7% of the world's older population (WHO 2017). With time trends may change: the number of people living with dementia is set to rise to 1.6 million in the UK by the year 2040 (Alzheimer's society). A multitude of other mental illnesses are also common in the older population which significantly impair quality of life. For example, it is estimated that at least 20% of older people develop psychotic symptoms by age 85.

The prevalence of mental health disorders in older adults (>65 years) is currently estimated to be between 20-25% (Andreas 2017). Given the ageing population, with predictions that by 2046 one in four people will be aged over 65 (ONS 2017), the proportion of older adults with mental health problems is also set to considerably increase.

People with mental health problems are more likely to experience significant co-morbidities, compared with the general population, resulting in long term physical health needs (Public Health England, 2018). It is recognised that oral health is poorer in this patient population (Happell *et al*, 2015), and unfortunately the oral health of psychiatric patients can be overlooked in routine care, particularly those receiving inpatient treatment (Teng *et al*, 2011).

Background

It is well documented that patients with mental health problems experience worse oral health than the general population. Mental health diagnoses frequently present with negative and positive symptoms, both of which have been associated with poor oral health. Negative symptoms which have been reported to have positive correlations with poor dental health (Arnaiz *et al*, 2011) include:

- Amotivational states
- Lack of interest in self-care
- Lack of daily structure
- Poor lifestyle choices, including diet, alcohol and recreational drug use
- Long periods of sedation from medication
- Limited social interaction
- Lack of support from family or friends.

Furthermore, positive psychotic symptoms, dental fears or specific phobias may also contribute to poor oral health (Aljabri *et al,* 2018).

Not only do mental health problems have implications on oral health due to the nature of the condition itself, but the side effects of medications used to manage such conditions have a number of undesirable oral side effects. These may be due to direct affects of the medication on the mouth, for example xerostomia, or by systemic effects which subsequently may affect the dentition, such as nausea, vomiting and increased hunger. These patients therefore are at increased risk of developing dental caries, periodontal disease, oral infections and tooth surface loss.

Furthermore, patients with mental health problems experience a number of barriers when accessing oral care (Figure 1). These barriers are somewhat exacerbated in the older population, particularly those who are hospital inpatients.

Figure 1: Barriers patients with mental illness may experience in achieving good oral health

Access	Accessibility	Increased frailty and mobility difficulties Patient's mental state may mean they are unable to leave the hospital environment
	Availability	May require specialised dental care, or domiciliary care May undergo multiple transfers between mental health establishments and/ or discharge meaning contact details change
	Accommodation	Appointment times (considering medication regimes) Be understanding of potential reasons for Did Not Attends Short appointment duration Arrange appointments during periods of mental state stability
	Affordability	Inpatients detained under the mental health act require escorted leave to attend dental appointments, which may impact on hospital staffing. Specific transport arrangements may be required Cost of treatment may pose a further barrier if the patient is not exempt from NHS fees
	Acceptability	High levels of anxiety Low perceived dental need / Refusal to attend appointment Stigma from dental professionals Low priority given to oral health by mental health & medical professionals
Communication & Consent	Work in line with MCA 2005 Patients preferred method of communication Capacity can fluctuate day to day	
Clinical	Considerations surrounding treatment modality, infection control, guidelines relating to mental health and oral health (BSDH 2000, NICE).	
Education	Preventative education (in line with DoH guidance) for patient/ carers/ support staff/ medical teams. Availability of oral hygiene equipment and products in mental health hospitals.	
Social:	Social networks, previous employment and lifestyle factors may all influence perceptions and past oral health behaviours.	
Side effects:	Physical	Dyskinesia, dysphasia, dysphagia
	Systemic	Liver disease, bone marrow suppression, platelet disfunction, metabolic syndrome, drug interactions
	Oral	Xerostomia and hypersalivation, increased caries risk, tooth surface loss, poor oral hygiene and increased periodontal disease, oral ulceration, increased risk of infections, delusions of dental origin

Aims

- To gain an understanding of the oral health needs of older age psychiatric inpatients.
- To evaluate the oral hygiene habits of this patient group.
- To determine the accessibility of professional dental input.

Objectives

- To raise awareness of oral health implications of mental illness .
- To promote good oral health within the establishment by educating staff and patients.
- To develop knowledge of referral processes and improve patient access to dental care.

Methodology

Ethical approval was not required due to the nature of this evaluation.
A questionnaire assessing patient perception of oral health was developed for use on a 40 bed inpatient ward for older adults at Fountain Way Mental Health Hospital, Salisbury. The questionnaire was undertaken with patients on a functional ward, who had diagnoses such as depression, bipolar and schizophrenia. The patient's diagnosis and gender was recorded.
The following inclusion criteria (Figure 2) was applied:

Figure 2: Inclusion and exclusion criteria

Inclusion criteria
- Aged 65 and over.
- Receiving inpatient treatment.
- Have capacity to consent to take part.

Exclusion criteria
- Under 65 years old.
- Not receiving treatment on an in-patient basis.
- Did not have capacity to consent.

20 patients agreed to take part after the aims of the study were explained to them. The questionnaire took less than 5 minutes to complete and was conducted by Dr Alistair Ledsam, Psychiatry SHO. The questionnaire consisted of 5 questions (Figure 3). No patient identifiable data was collected during this project.

Figure 3: Questionnaire

Questionnaire
1. Do you have a toothbrush/ toothpaste?
2. How often do you brush your teeth?
3. Do you have any problems or pain from your mouth?
4. Do you think you need to see a dentist?
5. Do you find it difficult to access a dentist?

Results

- In total 8 females and 12 males took part. All were aged over 65 years old and all had remaining teeth and/ or wore dentures.
- 13 were detained under Sections 2 or 3 of the Mental Health Act 2007, and 7 were voluntary admissions
- 16 patients (80%) had a toothbrush in hospital, and 4 (20%) did not.
- The majority of the patients questioned were carrying out toothbrushing at least once daily (Figure 5)
- 65% felt they needed to see a dentist and a similar proportion reported problems with their mouth.
- Half of those questioned found it difficult to access professional dental care.

Figure 6: Patient diagnoses

Mental health diagnosis	Number of participants
Schizophrenia	2
Personality Disorder	1
Depression	9
Bipolar	6
Schizoaffective disorder	2

Figure 5: Graphical representation of tooth brushing frequency

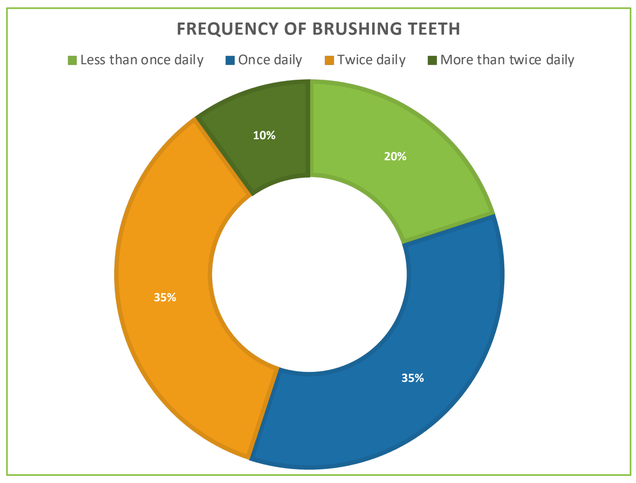
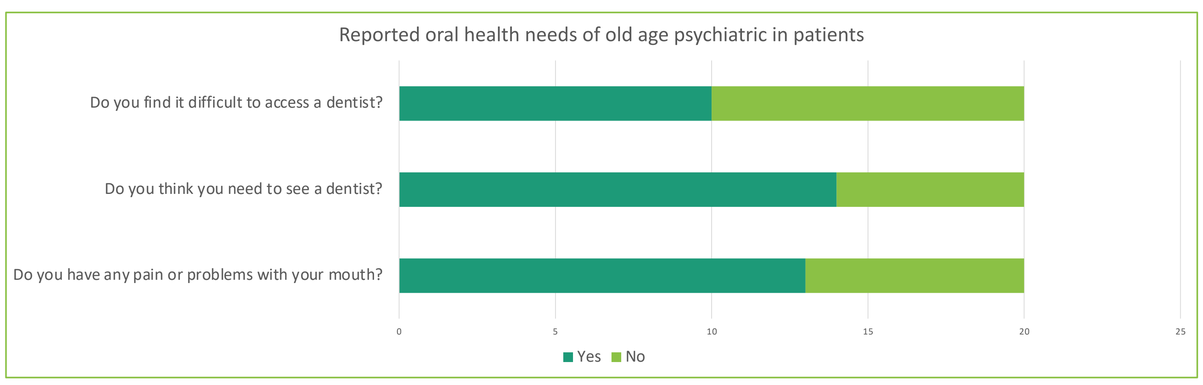


Figure 7: Reported oral health needs



Discussion

These findings confirm the high demand for dental care and uncertainties/ difficulties in accessing this in adult psychiatric inpatient populations. Although this small service evaluation did not specifically consider the details of the barriers that patients face when accessing dental care, of the wide range of factors previously described a number could be transferred to this particular hospital setting.

Oral health is often neglected in this patient group, as a result of lack of motivation and interest in self care, conflicting priorities and poor lifestyle choices. Furthermore, oral health promotion is often given low priority among the competing responsibilities of mental health professionals. This is demonstrated by the fact that 20% of those questioned did not have access to a toothbrush.

Although only 65% reported having oral problems, it is known that patients with a psychotic illness have impaired pain recognition (Stubbs *et al,* 2015), which means they may not recognise oral-related pain until it is severe. This can result in a delay to seeking professional dental advice and treatment, and frequently means the dental disease is more challenging to treat.

Recommendations and actions

A number of recommendations were made following this service evaluation:

- To formally assess oral health and current dental status on admission to the mental health hospital.
- Oral care products and equipment to be issued to patients who do not have their own.
- To educate ward staff on the importance of maintaining good oral health,
- To inform healthcare professionals of the established referral pathway to the local Community/ Special Care Dental service. Copies of the document *'Guidelines for referral to the special care dental service in Wiltshire and Swindon'* were made accessible.

Conclusion

Psychiatric inpatient settings provide important opportunities for oral health promotion and intervention. Unfortunately, this is currently a neglected component of inpatient care. This service evaluation has highlighted the importance of basic oral health education and a clear system for accessing dental services.

It would be of benefit to this patient group to have an oral assessment, noting the presence of dental problems and pain, incorporated into the admission process. Despite the Quality Network for Older Adults in Mental Health Services (Royal College of Psychiatrists 2019) stating that patients should have access to a referral service for 'dental assessment and dental hygiene services', there is no mention of an oral assessment being undertaken during admission, nor any mention regarding the provision of self/ assisted oral care, and concerningly, no mention of the integral role of oral health on an individuals physical and mental health and wellbeing.

Although there has been a shift in the management of severe mental health disorders over the past 50 years from inpatient settings to outpatient and primary care, it is likely that many of the findings from this project would also be found within the community.
Mental Health problems are the second most common reason for GP consultation. As a GP trainee I feel it is important that holistic, patient- centered approach is practiced amongst the profession. Awareness and understanding of the implications which mental illness has on oral health will have a positive impact on patient care and result in improved patient outcomes.

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