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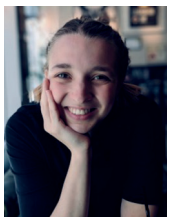

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Why does Patient Mental Health Matter? Part 1: The Scope of Psychiatry within Dentistry

Abstract: This is the first article in a series looking at psychiatric presentations in dentistry. This article explores the scope of psychiatry within dentistry including oral presentations associated with common mental disorders. A fictionalized case-based discussion is used as an example to illustrate the presentation of deliberate oral self-harm (DOSH) and how the dentist proceeds.

CPD/Clinical Relevance: This article relays the links between psychiatry and dentistry for the GDP and highlights the clinical impact of psychiatric conditions.

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Psychiatry is the branch of medicine that deals with mental disorders and their treatment. As healthcare professionals, dental practitioners will inevitably encounter patients with mental health problems, ranging from those with established diagnoses of mental illness who are stable in their mental state, to those with new or acute psychiatric symptoms. These presentations may be associated with dental symptoms and pathology, or may be completely independent thereof. The General Dental Council states that dental graduates should be able to 'identify, explain and manage the impact of medical and psychological conditions as part of patient management'.[1] In practice, this means dentists need to recognize and respond to mental health problems by liaising with general medical, psychiatric or emergency services as appropriate.

Some general dental practitioners (GDPs) feel limited in their knowledge and skills in the identification and management of such patients. One survey identified that only 9% of GDPs referred dental patients with possible mental health problems to their general medical practitioner (GMP).[2] This might be due to constraints of knowledge or confidence: infrequent referrals were associated with poor awareness of how to broach the subject with the patient and where to refer them.[2] Barriers to addressing psychiatric problems in the dental setting appear to be rooted in practitioners lacking confidence about their assessment, or concerns that asking about mental health problems could negatively affect the patient–dentist relationship.[3,4] Indeed, one study suggested that dentists feared their patients might deny the condition or be insulted by a discussion of mental health.[4]

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Dentists have a unique opportunity to recognize and assess the relevance of psychiatric disorders to oral health. From a psychiatric perspective, the longitudinal dentist–patient relationship is important: the aetiological factors of psychiatric disorders are usually classified as a chronological process, split into three key stages:[5]

- **Predisposing factors** that increase the potential of a person being vulnerable to a mental illness throughout the course of their life, eg genetics;
- **Precipitating factors** that occur around the time of developing a mental illness, eg bereavement or financial hardship;
- **Perpetuating factors** that encourage an existing mental illness to continue, eg social isolation or withdrawal.

Dentistry lends itself to understanding these three aetiological factors. Dentists are trained to ask about family conditions when exploring medical histories and may witness personal struggles or bereavement. A patient may withdraw from regular appointments, becoming increasingly self-conscious about their dental condition and perhaps less able to sustain good oral hygiene.

Mental health in dentistry: the patient perspective

Poor mental health is common. In the UK, one in four people will experience a mental health problem within a given year, and the annual prevalence is increasing.[6] Table 1 shows the prevalence of common mental disorders experienced by adults in England.[6]

Patients experiencing poor mental health may lack insight into their mental illness, posing a risk to their own health and safety and in some situations, a risk towards others. Patients with mental health problems are also significantly vulnerable to being victims of violence.[7] It is vitally important when treating patients with mental health difficulties to avoid stigmatizing and/or making assumptions about their capabilities. A study of patients with a history of addiction and mental illness, found that negative stereotyping led to patients feeling 'unworthy, labelled as 'different' and 'excluded from the decision-making process'. These patients perceived a lack of understanding about their 'life conditions'.[8] This ultimately impacted upon patients accessing health and dental care.

A bird's eye view classifying common mental disorders, and the dental presentations associated with each condition, are presented in Table 2.[5,9–14]

For patients experiencing severe mental illness, the duration of the illness is one of the most significant predictors of suboptimal oral health, second only to the patient's age.[12] Patients with severe mental illness are 'almost 50 times as likely to have periodontal disease'.[9] Determinants such as poor oral hygiene, reduced access to dental care and the low capacity of the dental team to manage those with severe mental illnesses were the three largest determinants of suboptimal oral health.[12]

For patients experiencing mental illness, these determinants hold more weight than smoking, high sugar intake and substance abuse.[12] Poor mental health for patients can result in poor oral health-related quality of life. For the dental team, this can mean increased difficulty in patient management.

Mental health in dentistry: the practitioner perspective

Dentists will encounter patients experiencing a variety of mental health conditions, as outlined in Table 2. Dentists are not required to diagnose the psychiatric condition, but they should be able to identify probable psychiatric symptoms and respond by initiating follow up of these problems. This response could range from writing to share concerns with the patient's doctor, or even to contacting emergency services if there is an immediate concern for safety.

How to ask about mental health

Should a patient disclose current symptoms, report having a psychiatric diagnosis or a history of mental health problems, certain questions should be asked to better understand the nature of their condition:[15]

- **Explore the severity.** Awareness of the severity of a suspected or reported psychiatric condition is more informative than simply knowing the diagnosis. A simple question about existing patient support, for example access to a counsellor, therapist or psychiatrist, can lead to insights on in- or outpatient care and naturally onto questions about management.
- **Explore the interventions.** Asking about current or previous treatment can help the dentist understand the effects of that treatment. For example, ask if the patient has been prescribed medication, whether they are able to take it, the response to the medication and previous or recent alterations to dose or drug.

Sometimes a patient may display signs of a hitherto undiagnosed mental illness with or without related dental disease. In this circumstance, related dental disease will be difficult to manage unless psychiatric intervention is sought. One example of this is the presentation of chronic pain conditions, such as persistent idiopathic facial pain. Mental health disorders are frequently found in those accessing specialist dental pain clinics[16] and psychological management can improve outcomes for these patients.

Ultimately, whether a psychiatric disorder is diagnosed or undiagnosed, and regardless of the nature of the mental illness, patient mental health has wide implications for the dental team. Table 3 tabulates the ways in which patient mental health is relevant within dentistry.[16]

Case-based discussion: deliberate oral self harm

NICE defines self-harm as 'self-poisoning or self-injury, irrespective of the apparent purpose of the act' and clarifies that self-harm is an 'expression of personal distress' and can be linked to various mental health conditions.[17] In young people, self-harm is more likely to be associated with anxiety disorders, while suicide is more likely to be associated with a major depressive disorder.[18] Self-harm is itself a known risk factor for suicide attempts in the longer

term. Both suicidal thoughts and self-harm are relatively prevalent within the community: 20.6 in 100 people have had suicidal thoughts; 6.7 in 100 people have attempted suicide; and 7.3 in 100 people have self-harmed.[6]

At the start of the 21st century, mental health disorders were already established as prevalent in young people, with 10% of children aged between 5 and 16 years having a clinically diagnosable mental health condition;[19] however, 70% of those needing help 'have not had appropriate interventions at a sufficiently early age'.[20] Self-harm has a higher incidence in early adulthood/adolescence and may be linked to the lack of early psychiatric intervention these patients receive.[21]

The case below describes an adolescent presenting with deliberate oral self-harm (DOSH) where both the

Common mental disorder	Prevalence (% of population)
Generalized anxiety disorder	5.9%
Depression	3.3%
Phobias	2.4%
OCD	1.3%
Panic disorders	0.6%

Table 1. Prevalence of common mental disorders among adults in England. Data from Adult Psychiatric Morbidity Survey 2014.[6]

Psychiatric condition	Dental relevance[5, 9–14]
Anorexia nervosa and bulimia nervosa	**35–38% of all who experience eating disorders will present with dental erosion:[9]** ■ Due to acidic fruit/drink consumption and self-induced vomiting ■ Dental caries may be less or more common:[9] ■ Anorexia is associated with obsessional personality traits and so there may be impeccable oral hygiene ■ DMFT can be increased compared to controls for patients with eating disorders ■ Increased DMFT is mainly an issue with patients who self-induce vomiting **Secondary to bulimic behaviour there can be bilateral salivary gland swelling[5]**
Generalized anxiety disorder	**Higher mean DMFT scores (0.89) compared to controls:[10]** ■ Higher rates of dental decay ■ Higher rate of tooth loss ■ Potential for dental avoidance if manifesting as dental anxiety ■ Xerostomia secondary to anti-anxiolytics ■ Tooth surface loss potential[10] ■ Attrition through comorbid issue of bruxism ■ Association between anxiety and alcohol use, leading to GORD and dental erosion
Depression	**Adults with depression are 20–30% more likely to have lost all their teeth:[9]** ■ Poor oral hygiene secondary to self-neglect ■ Xerostomia secondary to anti-depressants ■ Situation may be exacerbated by heavy tobacco, alcohol and caffeine use ■ There can be direct correlation between severity of depression and severity of periodontitis.[10] **Attrition through comorbid issue of bruxism[9]**
Mania (eg as part of bipolar) Psychosis	**Patients on psychotropic medication have significantly higher DMFT scores:[11]** ■ Psychotropic medications may cause stomatitis, hypo- or hypersalivation[9,11] ■ Higher average components of missing (M) teeth in the DMFT index[11] ■ Lower routine dental attendance, combined with high M component suggests more emergency dental attendance[11] ■ Dental specific delusions or somatic delusions about pain[12] ■ Impaired motivation towards oral hygiene routines[12] ■ Increased engagement with smoking and alcohol use[11,12]
Psychoactive substance use disorders *Substances may include alcohol, opioids, cannabis, hallucinogens, cocaine and volatile solvents*	**Alcohol dependence:[13]** ■ Alcohol dependence is a major risk factor for developing oral cancer ■ In adults, alcohol is associated with 22% of all facial trauma ■ Significant tooth surface loss is found in chronic drinkers as a result of direct erosion or GORD **Generalized substance abuse:** ■ Illicit drug use is associated with cariogenic diets, poor oral hygiene, aggressive caries, periodontitis, bruxism and generalized oral neglect[14]

Table 2. A consideration of the presentation and dental relevance of different psychiatric conditions.

practitioner and patient perspectives can be explored.

Case scenario A

Peter is a 15-year-old patient who attends your dental surgery with his family. You have seen him regularly over the last few years and he typically attends with his mother. He is dentally healthy, but has noticeably short anterior teeth and a 'gummy smile'.

At your appointment he seems a bit shy and is reluctant to answer questions, responding with only a few words and generally avoiding eye contact. On examination you notice some mild gingival trauma on the UR2. The labial surface gingiva is ragged around the gingival margin and loose; a probe can be used to displace the torn gingiva.

His mother, who is also present, asks whether it could be caused by overbrushing as Peter has become a bit 'obsessive when brushing' and frequently checks his teeth in the mirror. Peter snaps at his mother to be quiet and looks upset.

Unsure about the presentation, you record it in the patient notes and advise him to brush gently in the area to help his gums heal. You organize a follow-up appointment.

'How might deliberate oral self harm present?'

Peter is in the age group described as being at risk of self-harm behaviour, and some of his behaviour could be indicative of him experiencing poor mental health. The presentation of self-harm intra-orally can be as extreme as auto-extraction,[22] but more commonly will present as scratching of the gingiva[19] or oral frictional hyperkeratosis due to chronic cheek

Dental impact of psychiatric disorders	Description
Oral signs and symptoms	An oral manifestation may be the first or only physical presentation of an underlying psychiatric disorder; this can include presentations of atypical facial pain, palatal erosion (from self-induced vomiting) or deliberate oral self-harm
Patient motivation and self-care	Psychiatric disorders are often associated with low self-esteem and lack of self-interest resulting in limited self-care and neglect. This is particularly associated with dementia and depression
Irregular dental attendance	Individuals struggling with psychiatric disorders may have poor attendance and some may rely on emergency dental treatment only. This can be due to lifestyle factors, and difficulties engaging in self-care. Others may be unable to cope with treatment despite their dental need. This behaviour may foster frustration in members of the dental team
Lifestyle factors	Increased sugar intake is often reported alongside mental illness, in addition to alcohol misuse, drug abuse and smoking. A combination of poor self-care, poor knowledge of the origin of dental diseases and feelings of shame relating to oral neglect all perpetuate the cycle
Potential psychiatric medication side effects	Drug-induced xerostomia can increase the risk of dental caries, periodontal disease, candidiasis and parotitis. This can make treatment planning difficult and can lead to difficulties with denture tolerance. Prolonged use of anti-psychotic medication can produce dyskinesia and dystonia as a side effect. The resultant tardive dyskinesia (tongue protrusion, retraction and involuntary facial muscle movements) pose a challenge to the dental team and the patient
Potential for psychiatric medication interactions	Clozapine, amitriptyline, dosulepin and haloperidol all potentiate the sedative effect of anxiolytic medication. Amitriptyline can potentiate responses to local anaesthetic. Fluoxetine will potentiate the action of warfarin. These chosen examples are not comprehensive and medication interactions should always be checked before prescribing

Table 3. The ways in which patient mental health is relevant to dental treatment. Information adapted from British Society for Disability and Oral Health.[16]

biting.[23] DOSH in the form of gingival scratching can lead to recession and bone loss, a clinical presentation referred to as gingivitis artefacta. This condition can be 'minor' in presentation and linked to a site of intra-oral irritation (eg an orthodontic bracket) or can be 'major' with multiple sites of deliberate self-harm.[24] Peter had initially presented with gingivitis artefacta minor, focusing his attention on the UR2 only. However, without support and intervention such behaviour can worsen over time.

Case scenario B

At the follow-up appointment, Peter comes alone – his mother has dropped him off and gone into a nearby shop with the intention of collecting him after the appointment. Peter seems somewhat withdrawn again. On examination you notice that the gingival trauma has spread across all four upper central anterior teeth. The surfaces are ragged and inflamed and the gingiva can be easily displaced.

More confident in the presentation being self-induced, you finish the examination and sit down to speak with Peter. You comment that oral trauma like this can sometimes occur when people pick at their gums. Peter looks upset and discloses he wants his teeth to look 'normal'. He subsequently tells you he gets bullied at school because of his teeth and when he feels very low, he uses things to try and 'push his gums back'. Aware that his age means aesthetic procedures could be a long way off in the future, you consider what to do next.

'Where should I be having this conversation?'

An early consideration should be made for the surroundings and as always, there should be respect for patient confidentiality. Any conversations around self-harm should be in a quiet, private area and if possible, another member of the dental team, such as a dental nurse, should be present. If this is not the case, then the discussion should be moved elsewhere so that Peter can be best supported.

'How do I try and involve his parents?'

Peter has disclosed this information to you in private and without a parent present. An initial effort should be made to encourage Peter to share his distress and what has been happening with his mother, or to seek his consent for you to raise the issue between all of you. His mother's involvement can have several benefits. First, she is well positioned to offer ongoing support, guidance and safeguarding for her child. Secondly, she has previously shown awareness of Peter's changing behaviour and may be able to provide further insight into his wellbeing.

'What if he doesn't wish to tell his family?'

For those under 16 years old, consent to treatment is based upon the clinician's assessment of their competency.[25] For children who do not possess the requisite maturity or understanding to make a decision and consent to their treatment, their confidentiality may be breached if this is considered to be in their best interests.[26]

In this case, Peter is considered competent and so should be consulted on whether he consents to information about his self-harm being disclosed. However, patients should be made aware of the limits of confidentiality, particularly that you may have to inform others if you are concerned that there is a risk of serious harm, even if the patient does not agree to the information being disclosed. Ultimately a decision must be made as to whether the benefits of disclosing outweigh those of maintaining confidentiality. The General Dental Council identifies that in exceptional situations where the patient might put their own safety at risk, you are at liberty to break confidentiality and act in the patient's best interests.[27]

In such an instance, case-specific advice can be sought from a local child safeguarding lead, fellow professionals or even indemnity society. This will aid your decision making on whether to break confidentiality.

'What else should I ask?'

In this context, the role of a GDP is to build rapport and provide a space for Peter to talk and, if possible, sensitively establish an initial history.[21] This will aid your assessment of current risk, including whether the behaviour could continue to escalate. Important questions could be about the longevity and extent of the behaviour, noting that Peter himself may not recognize it as 'self-harm'. Additionally, ask whether there have been any other injuries or self-harm and whether any support has already been sought with medical/mental health services.

As well as disclosing or displaying symptoms of mental ill-health, patients may also elicit concerns as to whether they are experiencing suicidal thoughts or posing a risk to their own life. This understandably may provoke anxiety in the dental practitioner as to how to respond. Evidence to date has not identified an increased risk from asking about suicide, and clinical practice supports asking sensitively about suicidal ideas, so that appropriate and timely action can be taken to facilitate the individual in accessing the necessary support.

'Who do I refer to and what do I communicate?'

If, from further consultation, concerns about Peter's mental health and/or his safety lead the dental practitioner to decide urgent action is required, arrangement for an assessment at the local emergency department should be made. In all circumstances (urgent or not), it is important that the GDP contact and update Peter's GMP. This doctor will need to consider their own assessment and management, including potential for a referral to child and adolescent mental health services. Priority referrals are considered when: 'levels of distress are rising, high or sustained, the risk of self-harm is increasing (or unresponsive to attempts to help), or if the person requests further help from specialist services'.[17]

Referrals or communications with the doctor should include: 'an explanation of the injury and a history of previous injuries, the communication that has occurred between the professionals and the patient (+/- patient family) and any discussions with other agencies such as social services'.[21] As highlighted by the British Society for Disability and Oral Health, 'Care must be taken to look for oral habits or self-inflicted trauma. The clinician has a responsibility to work closely with the GMP, psychiatrist or other relevant healthcare workers to share concerns'.[16]

'What information should I record?'

Your records should be clear and contemporaneous. The first thing to note is the 'nature, location and extent of the injury',[21] perhaps aided by drawing a diagram or taking a picture; this description will better allow you to recognize changes in the future. Your records should reflect the history of previous injuries and should record observations and any actions you take. Finally, record in the notes any communication between you and Peter, with his family or with external services.

Conclusion

The mental health of dental patients affects their wellbeing, their dental health and the way we, as dentists, practice. It is important

not to forget dental presentations of self-harm and act appropriately in order to best support patients. Psychiatric illness can be comorbid with dental disease and is a key determinant that dictates oral health. In the wider context of this series, we will further explore common mental disorders presenting in the dental clinic, including anxiety, depression, psychosis, eating disorders and somatization.

Compliance with Ethical Standards

Conflict of Interest: The authors declare that they have no conflicts of interest.

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