



**UNIVERSITY OF LEEDS**

This is a repository copy of *Why does Patient Mental Health Matter? Part 2: Orofacial Obsessions as a Consequence of Psychiatric Conditions*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/190319/>

Version: Accepted Version

---

**Article:**

Elliott, E, Sanger, E, Shiers, D et al. (1 more author) (2022) *Why does Patient Mental Health Matter? Part 2: Orofacial Obsessions as a Consequence of Psychiatric Conditions*. *Dental Update*, 49 (10). pp. 789-793. ISSN 0305-5000

<https://doi.org/10.12968/denu.2022.49.10.789>

---

© George Warman Publications (UK) Limited. This is an author produced version of an published in *Dental Update*. Uploaded in accordance with the publisher's self-archiving policy.

**Reuse**

This article is distributed under the terms of the Creative Commons Attribution (CC BY) licence. This licence allows you to distribute, remix, tweak, and build upon the work, even commercially, as long as you credit the authors for the original work. More information and the full terms of the licence here:

<https://creativecommons.org/licenses/>

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.



[eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk)  
<https://eprints.whiterose.ac.uk/>

**Proposed Heading:** Psychiatry within Dentistry

**Title of Article:** Why does Patient Mental Health Matter? Part 2: Orofacial Obsessions as a Consequence of Psychiatric Conditions

**Authors:**

1. Dr Emma Elliott BDS (Hons). Academic Joint Dental Foundation Core Trainee MaxFax/GDP. Leeds Teaching Hospital Trust, Leeds General Infirmary (*lead author; see attached photo*).
2. Dr Emily Sanger MBBS. Academic Clinical Fellow Psychiatry, Leeds Institute of Health Sciences, University of Leeds. Leeds and York Partnership NHS Foundation Trust.
3. Dr David Shiers MBChB, MRCP(UK), MRCGP. Honorary research consultant, Psychosis Research Unit, Greater Manchester Mental Health NHS Trust, Manchester, UK. Honorary Reader in early psychosis, Division of Psychology and Mental Health, University of Manchester. Honorary Senior Research Fellow, School of Medicine, Keele University, Staffordshire, UK.
4. Dr Vishal R. Aggarwal BDS, MFDSRCS, MPH, PhD, FCGDent. Clinical Associate Professor in Acute Dental Care and Chronic Pain. School of Dentistry, University of Leeds.

**Lead Author Picture:**



### **Manuscript title**

Why does Patient Mental Health Matter? Part 2: Orofacial Obsessions as a Consequence of Psychiatric Conditions

### **Abstract:**

This is the second paper in a series looking at psychiatric presentations in dentistry. Since publishing the first paper, the oral health of people with severe mental illness (SMI) has gained significant media attention with the Office of the Chief Dental Officer for England publishing a statement on the importance of prioritising oral health of people with SMI.<sup>1</sup> Members of our group (VA and DS) have also been involved in a consensus statement<sup>2</sup> that sets out a five-year plan to improve oral health in people with SMI. In keeping with these developments, this paper will explore the presentation of dental specific obsessions and their relationship with psychiatric conditions, identifying how the primary care dental team can play a role in early recognition of psychiatric presentations. A fictionalised case-based discussion will be used to explore clinical presentations of orofacial obsessions and their potential relationship to psychiatry.

**Clinical Relevance Statement:** This paper emphasises the role of the primary care dental team in recognition of psychiatric conditions, such as obsessive compulsive disorder, body dysmorphic disorder and early psychosis.

**Objectives Statement:** To provide the reader with a better understanding of links between psychiatry and dentistry using fictionalised case-based discussion.

## Body of Manuscript

### Introduction

It is common within general dental practice to encounter patients who have presenting complaints that link to perceived defects in appearance, especially as aesthetic dentistry gains awareness. Such presenting complaints may not be linked to any underlying pathology; however, it is important to consider how a patient's psychological wellbeing may influence negative perceptions of their dental health or orofacial appearance. In this paper we will explore the fictionalised case of a young female patient presenting with an aesthetic dental complaint and consider how this may relate to psychiatric disorders.

### Case

A 20-year-old female patient attends your practice for a new patient examination. She reports in her medical history that she is fit and well, with no medications or allergies. You ask her if she has any current dental problems and she immediately brings up her front tooth, specifically how the 'right one' is grey and discoloured. Her primary concern is how it looks, but she is convinced there must be something wrong with it. She says she has been brushing her teeth with whitening toothpaste four times a day to try and counteract this discolouration. On examination the UR1 is clinically sound and is normal in colour, with no signs of disease and there is no history of trauma.

You explain this to the patient, but she insists that the tooth is discoloured and must be diseased, so you undertake radiographic examination in the form of a periapical radiograph to exclude dental pathology. The radiograph confirms absence of pathology. As you were reviewing the radiograph the patient has brought up pictures on her phone which she says show the tooth changing over time. Visually there have been no changes in the tooth, but you note she has been taking a picture almost every day for the past few weeks.

### What are our initial thoughts?

The scenario presents a patient with two potential sources of psychiatric concern, one of altered perception and one of obsessive focus (Figure 1). From a dental perspective key complexities of the scenario include the patient's insistence on the presence of disease and the difficulty this poses in providing an explanation in the absence of pathology. Ultimately, there is real potential for undertaking unnecessary treatment.

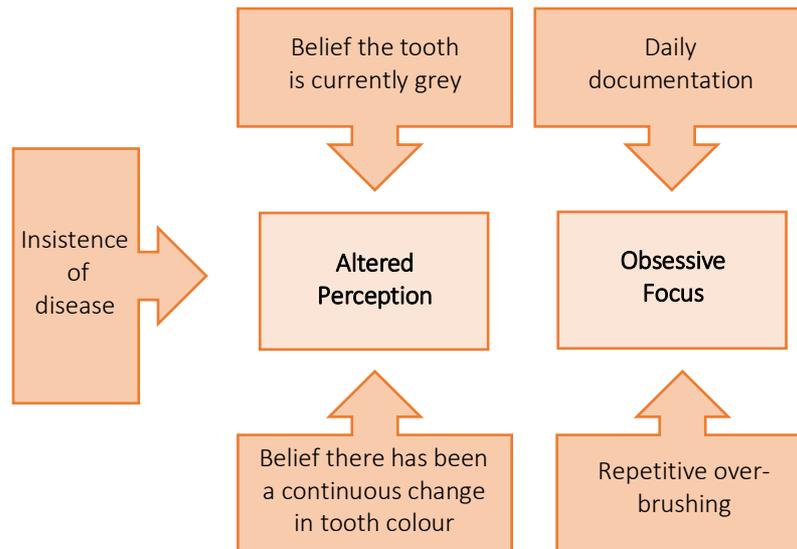


Figure 1: The features of the scenario and how they result in a presentation of altered perception and obsessive focus

The lack of significant medical history further complicates the presentation with regards to mental health as the dentist may be the only healthcare practitioner she has seen in a while. Her altered perception, obsessive focus, age and gender are suggestive of several psychiatric conditions,<sup>3-13</sup> which are outlined in Figure 2.

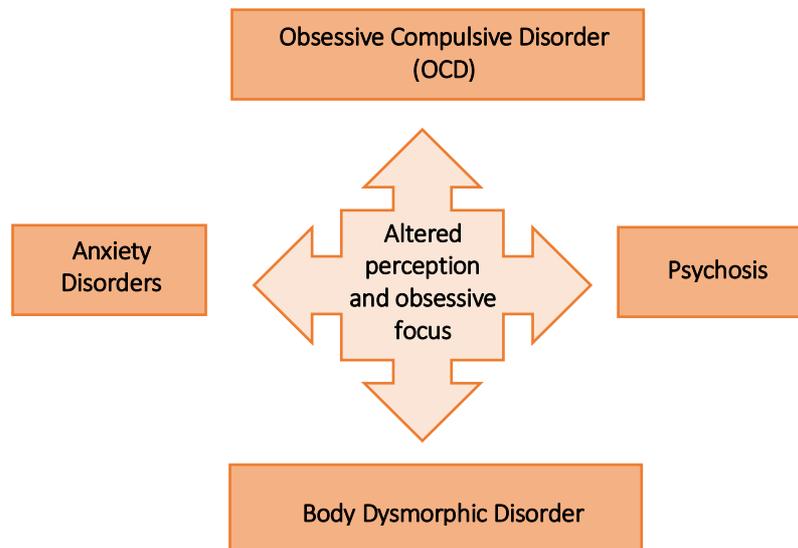


Figure 2: The psychiatric conditions that may relate to the patients' obsessive focus and altered perception<sup>3-13</sup>

Body dysmorphic disorder is part of the umbrella of somatisation disorders.<sup>14</sup> Somatoform disorders produce physical symptoms in response to psychological distress<sup>14</sup> and in this case a psychiatric condition could be somatising as a diseased tooth. Whilst we are going to touch upon somatoform disorders in this paper, we will cover them later in the series more thoroughly.

### Is the presenting complaint related to anxiety?

Anxiety disorders are the most prevalent class of psychiatric disorders that could relate to the patients presenting complaint. Anxiety disorders often present in adolescence or early adulthood and encompass a wide range of conditions including panic disorder, social anxiety and generalised anxiety.<sup>1</sup> Whilst the patient is the right demographic for an anxiety disorder, we can narrow down the presentation to social or generalised anxiety, as her behaviour does not indicate panic disorder.<sup>3</sup>

Panic disorder presents as unpredictable and intense levels of anxiety. Patients affected by panic disorder are likely to develop acute, physical symptoms such as chest pain, palpitations and shortness of breath. For the general dental practitioner, this may be confused with a cardiac medical emergency, and it is important to be aware of panic attacks and their presentation.<sup>4</sup> The lack of such features in the scenario leads us to consider generalised anxiety disorder or social anxiety, focusing on general anxiety first, as the more common of the two.

Generalised anxiety disorder (GAD) affects 5.9% of the UK population and 6.8% of women.<sup>15</sup> GAD is marked by an 'uncontrollable, anxious worry about everyday events or problems'<sup>3</sup>, and as part of this excessive generalised worry we may see concerns about dental health. Anxious, uncontrollable worries can negatively impact functioning – in our scenario the patient is spending a disproportionate amount of time on her perceived dental problem. This over-brushing and daily documentation may be restricting her daily life and could lead to toothwear if not appropriately addressed.

It is worth exploring why she is anxious about the perceived discolouration of the front tooth, despite your reassurance of the tooth being healthy. The anxiety may be rooted in fear of 'scrutiny or negative judgement by other people'<sup>3</sup> which would be more indicative of social anxiety disorder. However, this is less likely as she doesn't seem to have an avoidance of social interactions or situations, having attended the dental practice and communicated her concerns to you with no perceived difficulty.

A treatment gap exists for anxiety disorders, in which they are generally underdiagnosed and undertreated.<sup>5</sup> Among those who have a perceived need for care, only one third actually receive treatment for their anxiety disorder.<sup>5</sup> When interacting with this patient it is important to recognise that an unmanaged presentation of anxiety is highly likely. However, there is a lack of generalised anxiety in her presentation and her concerns seem specifically localised to this one tooth, making OCD an alternative consideration.

### Might OCD play a role in her presentation?

Extreme worry is an overlapping symptom of both anxiety disorders and obsessive compulsive disorder (OCD) and anxiety can often be co-morbid with a presentation of OCD.<sup>6</sup> However, in anxiety disorders patients do not engage in 'repetitive, ritualistic behaviours';<sup>3</sup> instead this is a clinical feature of OCD. OCD is especially prevalent among young adults<sup>4,7</sup> and the two most commonly reported compulsions are cleaning and checking.<sup>7</sup> These two facts make it highly likely that the patient may be experiencing OCD, acting on compulsions such as

daily documentation and over-brushing. Furthermore, 60% of first symptoms of OCD are reported before the age of 25, followed by an average of 8 years before the individual seeks psychiatric treatment.<sup>7</sup> At 20, the patient has a likelihood towards an unmanaged presentation of OCD; however, her lack of insight into her obsession complicates the presentation.

In cases of OCD, the individual recognises that their obsessions are both irrational and self-generated.<sup>7</sup> People who experience OCD are unable to suppress their obsessions, often presenting with an associated compulsion. In our case, the patient lacks insight into her own obsession and resultant compulsions, insisting there is an observable defect. We should therefore additionally explore her altered perception of her front tooth in the form of a somatisation disorder, such as body dysmorphic disorder.

Could Body Dysmorphic Disorder be driving her expressed need for treatment?

When contemplating altered perception and perceived defects in appearance we must consider the presentation of Body Dysmorphic Disorder (BDD). BDD is categorised as part of the obsessive-compulsive spectrum of disorders, however unlike in OCD, few individuals with BDD have good insight into their obsessive focus.<sup>8</sup> These preoccupations are often driven by feelings of anxiety and individuals with BDD may focus on a perceived defect for 3 to 8 hours a day, compulsively checking, picking or camouflaging.<sup>9</sup> BDD presents with specific criteria that must be met in order to make a diagnosis. Table 1 outlines these diagnostic criteria and how they relate to our clinical scenario.

The Diagnostic Criteria for BDD (ICD-11)	How does this relate to the clinical picture?
Pre-occupation with an imagined defect in appearance. If a slight anomaly is present, the concern is markedly excessive and there is profound self-consciousness.	The patient has an imagined defect, with a clinically healthy tooth that has no apparent discolouration.
The preoccupation causes clinically significant distress or impairment in social, occupational, or other important areas of functioning. There can be attempts to camouflage or disguise the defect, avoidance of social situations or repeated excessive checking.	The patient is experiencing significant distress. She is convinced of dental disease and is spending time documenting and attempting to counteract the perceived defect.
The symptoms are not as a result of another medical condition or the effects of substances or medications.	Based on our limited clinical information we cannot comment on whether the patient fits this criterion.

Table 1: The diagnostic criteria for BDD<sup>10</sup> and how they relate to the patient

In cases of unfounded or excessive aesthetic dental complaints, it is reasonable for a practitioner to consider the potential for BDD. In one study of 250 individuals experiencing BDD, 76% sought cosmetic treatment in some form, with 66% receiving non-psychiatric medical treatment e.g. dermatological or surgical intervention for their aesthetic complaint.<sup>11</sup>

Despite this, invasive treatment of the aesthetic complaint fails to improve symptoms in over 90% of patients experiencing BDD. Thus, any treatment attempted by practitioners is often unnecessary and unhelpful, instead it can be more useful to take a step back and consider some important questions (Table 2).

Probing Question	Information Gained
Are there any other psychiatric conditions in the medical history?	BDD can only be considered as a potential in the absence of a psychiatric condition that better accounts the preoccupation. If you are considering any communication with other services it is best to have an awareness of perceived risk, such as self-harm or suicidal thoughts.
Has the patient ever seen another clinician about the issue?	Often in cases of BDD patients will visit multiple practitioners in the hopes of receiving treatment. With this question you may find that the patient has already received treatment or that they have previously been turned away by another clinician.
What does the patient expect from treatment and why have they sought help?	In this case it is reasonable to explore the patients' expectations from treatment as you can gain an insight into how grounded their goals are. <sup>12</sup> Asking why they have sought help can further enlighten a practitioner to what extent the defect is affecting the patients' quality of life. Obsessions or rituals can occupy hours of a patients' day and can severely impact social functioning.

Table 2: Probing questions to ask a patient who is potentially presenting with BDD<sup>8</sup>

Could this presentation be an early sign of psychosis?

Early symptoms of psychosis can be difficult to identify, but an emerging psychosis can present as a patient appearing 'not quite right'. Broadly this can present as a breakdown in social functioning, withdrawing from social relationships, education or work.<sup>13</sup> More specifically there can be signs of early psychotic thinking that include suspicion, distrust, odd beliefs or perceptual changes.<sup>13</sup>

The patient could be experiencing a visual perceptual disturbance reinforced by delusional thinking and beliefs that are difficult to shake off. This could explain why there is apparent resistance to medical opinion in the scenario. She is also a young patient; 80% of new psychosis patients present between 16 and 30-years-of age.<sup>14</sup> Overall, psychosis carries a high risk to self, with schizophrenia having a lifetime suicide risk of 5.6%. However, the early

stages of psychosis have a '1.6 times greater mortality risk compared to later stages of the illness'.<sup>15</sup> Early identification and intervention can half the risk of suicide and potentially prevent the onset of psychosis.<sup>13</sup> Insight to the patients' mental state can be sought by asking the following questions (Table 3).<sup>13</sup>

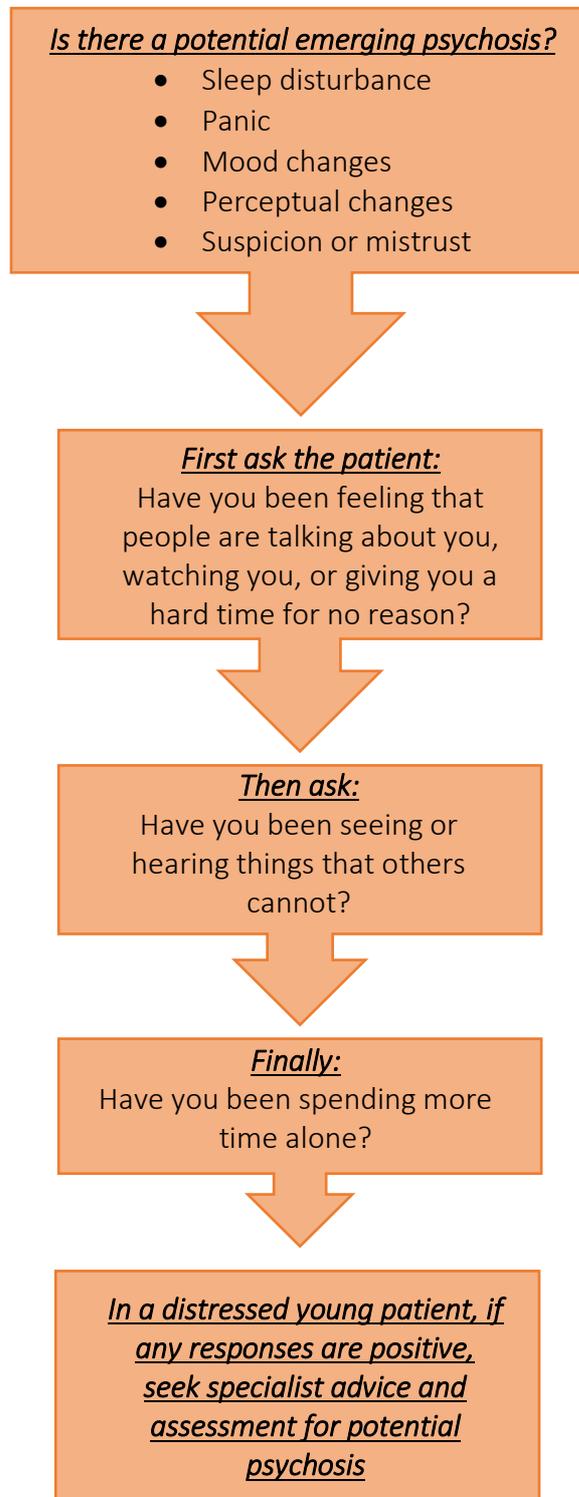


Table 3: Suggested questions to ask a patient who may be experiencing an emerging psychosis<sup>13</sup>

### What should I do now?

In this instance it is best to defer any invasive dental treatment until you can better assess the situation. It would be reasonable to suggest to the patient that you can both monitor the tooth together going forwards, perhaps supported by taking clinical photographs today. The potential for BDD in this case makes the provision of invasive dental treatment risky and unwise; people with BDD often report high levels of dissatisfaction with treatment, with over 90% of procedures producing no change in BDD symptoms. Whilst this condition remains a possibility it is wise to restrict yourself to monitoring and reassurance.

The risk of suicide is generally higher in the early stages of all mental health disorders, and this is especially true of psychosis. There is no widely accepted standard for assessing suicide risk, but there is evidence demonstrating that asking about a patients' suicide risk does not increase their suicidal ideation.<sup>18</sup> When considering communicating to another healthcare practitioner about a patients' mental wellbeing an awareness of their suicide risk can be valuable information. Questions should include whether there has been any previous suicidal behaviour, if the patient has any current thoughts or plans or if they are experiencing any feelings of hopelessness or significant stressors.<sup>18</sup>

This appointment would be best spent exploring what we have discussed above and how the patient feels about her need for treatment. Additionally, an onward referral to a mental health professional is indicated. It would be sensible to ask the patient for consent to communicate with her general medical practitioner and explore potential referral to psychiatric services via this pathway. This can be a difficult conversation to navigate and should be approached sensitively.

### Declaration

VA and DS are funded by Closing the Gap network. Closing the Gap is funded by UK Research and Innovation and their support is gratefully acknowledged (Grant reference: ES/S004459/1). DS is expert advisor to the NICE centre for guidelines. Views expressed here are those of the project co-authors and do not represent the views of the Closing the Gap network, UKRI or NICE. The authors have nothing further to declare.

### References:

1. Hurley S, Kendall T. Your NHS Dentistry and Oral Health Update. Special Focus: Dentistry and Patients with Mental Illness. 2021.
2. The Right to Smile; an Oral Health Consensus Statement for People experiencing Severe Mental Ill Health, Closing the Gap Network, 2022
3. Penninx B, Pine D, Holmes E, Reif A. Anxiety disorders. The Lancet. 2021;397(10277):914-927.
4. Friedlander A, Marder S, Sung E, Child J. Post-traumatic stress disorder: psychopathology, medical management, and dental implications. JADA. 2004;135.
5. Alonso J, Liu Z, Evans-Lacko S, Sadikova E, Sampson N, Chatterji S et al. Treatment gap for anxiety disorders is global: Results of the World Mental Health Surveys in 21 countries. Depression and Anxiety. 2018;35(3):195-208.

6. Lack C. Obsessive-compulsive disorder: Evidence-based treatments and future directions for research. *World Journal of Psychiatry*. 2012;2(6):86.
7. Friedlander A, Serafetinides E. Dental management of the patient with obsessive-compulsive disorder. *Special Care in Dentistry*. 1991;11(6):238-242.
8. Scott S, Newton J. Body dysmorphic disorder and aesthetic dentistry. *Dental Update*. 2011;38(2):112-118.
9. Bjornsson A, Didie E, Phillips K. Body Dysmorphic Disorder. *Dialogues in Clinical Neuroscience*. 2010;12(2).
10. International Classification of Diseases 11<sup>th</sup> Revision. Mortality and Morbidity Statistics: Mental, Behavioural or Neurodevelopmental Disorders. 2022.
11. Crerand C, Phillips K, Menard W, Fay C. Nonpsychiatric Medical Treatment of Body Dysmorphic Disorder. *Psychosomatics*. 2005;46(6):549-555.
12. Aggarwal V, Wu J, Fox F, Howdon D, Guthrie E, Mighell A. Implementation of biopsychosocial supported self-management for chronic primary oro-facial pain including temporomandibular disorders: A theory, person and evidence-based approach. *Journal of Oral Rehabilitation*. 2021;48(10):1118-1128.
13. French P, Shiers D, Jones P. GP Guidance: Early Detection of Emerging Psychosis – 2014 update; Royal College of General Practitioners & Royal College of Psychiatrists; 2014.
14. Kessler RC, Amminger GP, Aguilar-Gaxiola S, Alonso J, Lee S, Ustun TB. Age of onset of mental disorders: a review of recent literature. *Curr Opin Psychiatry* 2007; 20:359–64.
15. Nordentoft M, Madsen T, Fedyszyn I. Suicidal Behavior and Mortality in First-Episode Psychosis. *Journal of Nervous & Mental Disease*. 2015;203(5):387-392.
16. Oyama O, Paltoo C, Greengold J. Somatoform Disorders. *American Family Physician*. 2007;76(9).
17. Mental Health Foundation. Fundamental Facts About Mental Health 2016. 2016. Available online at <https://www.mentalhealth.org.uk/publications/fundamental-facts-about-mental-health-2016> (accessed January 2022)
18. Bolton J, Gunnell D, Turecki G. Suicide risk assessment and intervention in people with mental illness. *BMJ*. 2015;351(1):h4978-h4978.