



Do transgender patients experience more barriers in accessing oral healthcare and suffer an increased risk of poor oral health: can this lead to a lower oral health-related quality of life?



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Abstract

Objective To assess the barriers transgender (TG) patients experience in accessing oral healthcare and lead to poorer oral health (OH) resulting in an overall reduction in oral health-related quality of life (OHRQoL).

Methodology An electronic search was carried out using CINAHL, PubMed, Science Direct and Medline. Specific terms with Boolean logic and connectors were used. A total of seven papers met the search criteria, and each paper was critically appraised.

Results The literature consisted of three cross-sectionals, one qualitative study, two case-control and one literature review. They exposed common themes throughout all evidence which were then collated and discussed.

Conclusion TG patients experience an increased risk of poor OH due to a lack of awareness, frequent discrimination and harassment resulting in increased stress levels and a decline in mental health.

Introduction

The term transgender (TG) refers to people whose gender identity or gender expression is different from that of the gender assigned at birth. People who keep their birth gender are referred to as cisgender. There is no exact figure for the population of TG in the UK, as the question on gender identity was only added to the English and Welsh Census in 2021 and the Scottish Census in 2022, and neither will be published until 2023,¹ but a survey carried out by Stonewall Equality Limited, an LGBT rights charity in the UK,

estimated that 1% of the UK identify as TG.²

Gender dysphoria (GD) is described by the NHS as a 'sense of unease' that someone may feel due to their biological gender not conforming with their gender identity.³ After a psychological assessment, there are varying forms of treatment for GD. This can start with coming out to loved ones or being addressed by a preferred name or pronoun. For some, this is sufficient. Some TG people may wish to fully transition to their true identity and the process of transitioning can take from several months up to several years. The initial phase of treatment can be gender-affirming hormone therapy (GAHT), and then a form of surgery such as hysterectomy, phalloplasty, breast augmentation or orchiectomy.⁴ During the gender transitioning process, GAHT is used. There are two types: masculinising hormone therapy (MHT) and feminising hormone therapy (FHT). MHT consists of androgens and antioestrogens and FHT consists of oestrogens and antiandrogens. For transgender women undergoing FHT, it increases their risk of weight gain, hypertension, and venous thromboembolic disease. For transgender men who are put onto MHT, there are risks of acne, androgenetic alopecia, sleep apnoea, high cholesterol, and possible osteoarthritis.⁵

The World Health Organisation (WHO) defines oral health (OH) as the indicator of overall health, wellbeing, and quality of life (QoL). Caries, periodontal disease, oral cancer, trauma, and birth defects such as cleft lip are the range of diseases that can impact the oral health status of an individual.⁶ In 1996 Dr David Locker wrote about the concepts of OH and QoL, in which he stated, 'in dentistry, there has been a tendency for us to treat the oral cavity as if it were an autonomous anatomical structure which happens to be located within the body.'⁷ A comprehensive dental assessment should not only focus on the patient's oral cavity but also consider other aspects of the patient's health that may be affected. This could include the physical, social, or emotional burden that can contribute to oral disease. Combining all these factors together is known as the oral health-related quality of life (OHRQoL). The overall QoL of someone's life can only be determined by the individual and WHO defines it as their perception of their position in life in context to their goals, expectations, and standards.⁸

Assessing a patient's OHRQoL to the extent by which a disease present can impact on that quality is determined by the judgement made by the dental professional.

Methodology

Between September and November 2022, an electronic search was carried out. The abstracts of 30 papers were screened to determine whether any papers met the inclusion criteria. Duplicates were automatically removed, and authors of any

for healthcare professionals when treating TG.¹⁴ The case-control investigated salivary cortisol levels in TG and an increase in periodontal probing depths (PPD).¹⁵

Discussion

Throughout the literature gathered, the following themes were identified by the authors that the TG population experience and which can have an impact on their OHRQoL:

'Although stress is not gender specific, suffering frequent discrimination in life can cause high-stress levels in transgender people.'

'abstracts only' were contacted to request access to the full paper. Following the PEO question, this eliminated any unsuitable papers.

- Twelve full texts screened
- Three studies failed to meet the criteria
- Nine studies critically appraised.
- Two studies were excluded due to data and studies with similar data
- Seven studies were included in the literature review:
 - ◆ Cross sectionals n = 3
 - ◆ Case-controlled n = 2
 - ◆ Qualitative study n = 1
 - ◆ Literature review n = 1.

Results

A total of seven papers were chosen. One cross-sectional investigated the OH status of TG.⁹ One cross-sectional assessed the association between TG patients and self-perceived barriers in accessing oral healthcare¹⁰ and one aimed to identify the gap in health-related quality of life between TG and cisgender patients.¹¹ The qualitative study aimed to expose experiences and knowledge of OH among TG.¹² The case-control quantified health-related quality of life (HRQoL) using PedsQL 4.0 generic core scale.¹³ The literature discussed considerations

Stress

Cortisol, the stress hormone, has been shown to inhibit the production of inflammatory mediators known as T cells, in lymphatic tissues¹⁶ which can induce chronic inflammation. One of the case-controlled studies found an increased PPD and CAL in TG patients with a heightened level of cortisol in their saliva. In the case-controlled study by Sivarajani *et al.*¹⁵ there was an increased PPD and CAL in TG patients with a heightened level of cortisol in their saliva. Although stress is not gender specific, suffering frequent discrimination in life can cause high-stress levels in TG people. Stress has been recognised as a risk factor for oral disease and can also impact the oral cavity by increasing the probability of bruxism, HSV2 and TMJ pain.¹⁷

Lack of awareness of healthcare professionals

In all fields of patient care, healthcare professionals are expected to take a holistic approach and treat patients with compassion. In Spencer and Posoroski's¹⁴ literature review from 2018, they suggested dental professionals should be aware of the GAHT, of both feminising and masculinising. This will enable them to better understand what

TG people are experiencing and how this can impact their treatment, and overall life. They also found that harmful behaviours such as drinking, smoking and recreational drug use are more prevalent in the TG population, which is often associated with endured discrimination. Ensuring we give gender-affirming care can start from small things like including pronouns on medical history forms, or 'preferred name'.¹⁸ In the literature appraised, it suggested dental professionals should be aware of hormone therapy, of both feminising and masculinising treatment. An article published in the *British Dental Journal* suggested that displaying LGBT+ signs, like a rainbow pin on a lanyard or scrub top can express inclusivity.¹⁹

that their mother was unaccepting of them, and they felt abandoned, so they neglected themselves and stopped showering, brushing their teeth, and changing their underwear. In 2018, Stonewall.org carried out a report on LGBT+ access to healthcare in Britain and found that 52% had experienced depression, 13% had attempted suicide and 46% had thought about suicide.²¹ Being aware that a TG patient is more at risk of mental health issues is essential. It should be considered as well that TG patients may also be put on various forms of antidepressants such as citalopram, sertraline or amitriptyline.²² These can cause xerostomia²³ which can increase the risk of oral diseases, such as caries or oral candidiasis.²⁴

defined stigma as structural, interpersonal, or individual. Structuralism comes in the form of societal norms, laws, policies, or practices. Interpersonal is everyday interactions and individual is someone's beliefs and behaviours. It suggested removing barriers at all levels to remove the stigma and ensure inclusion is achieved.²⁶

Conclusion

The barriers exposed by conducting this review of current literature on this topic suggest that TG patients are at an increased risk of poor oral health due to dental professionals' lack of awareness of the issues faced by such patients daily, such as discrimination or harassment, a decline in mental health, increased stress levels or complex medical history, which impacts negatively on the oral cavity.

Recommendations

For dental professionals to create an inclusive dental environment, teaching could be implemented at the undergraduate level for future dental professionals. Current dental professionals could take some time to locate resources such as those provided by the British Dental Association (BDA). Creating an inclusive dental environment involves the full dental team; it requires mutual respect for all individuals, embracing diversity and adopting self-reflection.

References

1. Office for National Statistics. Transgender Population of the UK. 10 October 2022. Available at: <https://www.ons.gov.uk/aboutus/transparencyandgovernance/freedomofinformationfoi/transgenderpopulationoftheuk> (accessed 14 November 2022).
2. Stonewall Equality Ltd. Truth about Trans. 2020. Available at: <https://www.stonewall.org.uk/help-advice/information-and-resources/truth-about-trans> (accessed 12 September 2022).
3. National Health Service. Gender dysphoria. 2020. Available at: <https://www.nhs.uk/conditions/gender-dysphoria/> (accessed 12 September 2022).
4. Planned Parenthood. Transgender Identities: What do I need to know about transitioning? 2022. Available at: <https://www.plannedparenthood.org/learn/>

'Creating an inclusive dental environment involves the full dental team; it requires mutual respect for all individuals, embracing diversity and adopting self-reflection.'

Medications

Having a better understanding of the impact of GAHT can allow dental professionals to make their patients feel less of a stigma attached to them and build a more trusting environment for TG patients to undergo treatment. As GAHT is a sex hormone there is a known influence on stratified squamous epithelium and collagen production, and oestrogen receptors have been found in osteoblast-like cells and periodontal ligament fibroblasts.²⁰

Mental health

In the cross-sectional study from O'Bryan *et al.*¹¹ TG participants were assessed on their QoL and compared to cisgender counterparts of similar age, and a second group of cisgender patients with two chronic health conditions. The TG QoL was recorded as lower than both groups. According to a 2022 qualitative study by Macdonald *et al.*,¹² a transgender man responded to the question regarding their mental health status

Discrimination

In Zou *et al.* TGs scored significantly lower than their healthy peers in the cross-sectional study.¹³ TG youths who are suffering from GD are considered 'healthy' if chronic disease is absent, however, they are harassed or victimised, sometimes ostracised by family and friends. It found that many TG youth report being discriminated against, which can result in missing school and falling behind. This could also be applied to missing dental appointments. The perception of maltreatment can often be confused as 'overly insulting someone or derogatory speech', however, it can be in the form of disparaging behaviours such as incorrect pronouns or using a patient's previous name, and it is believed that there is a correlation between the fear of discrimination or maltreatment and dental anxiety.²⁵ A review carried out in 2015 found that the stigma TG face limits employment opportunities and access to healthcare. This can tirelessly influence the physical and mental needs of TG people. It

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- gender-identity/transgender/what-do-i-need-know-about-transitioning (accessed March 2023).
- Mayo Clinic. Masculinizing hormone therapy. 2023. Available at: <https://www.mayoclinic.org/tests-procedures/masculinizing-hormone-therapy/about/pac-20385099> (accessed March 2023).
 - World Health Organization. Oral health. Available at: https://www.who.int/health-topics/oral-health#tab=tab_1 (accessed 16 November 2022).
 - Locker D. Concepts of oral health, disease and the quality of life. In Slade G D (ed). *Measuring oral health and quality of life*. pp 105–112. North Carolina: Department of Dental Ecology, School of Dentistry, University of North Carolina, September 1997.
 - World Health Organization. WHOQOL: Measuring Quality of Life. 2012. Available at: <https://www.who.int/tools/whoqol> (accessed 15 November 2022).
 - Manpreet K, Ajmal M B, Raheel S A *et al*. Oral health status among transgender young adults: a cross-sectional study. *BMC Oral Health* 2021; doi: 10.1186/s12903-021-01945-x.
 - Samuel S R, Muragaboopathy V, Patil S. Transgender HIV status, self-perceived dental care barriers, and residents' stigma, willingness to treat them in a community dental outreach program: Cross-sectional study. *Spec Care Dent* 2018; **38**: 307–312.
 - O'Bryan J, Scribani M, Leon K *et al*. Health-related quality of life among transgender and gender expansive youth at a rural gender wellness clinic. *Qual Life Res* 2020; **29**: 1597–1607.
 - Macdonald D W, Grosseohme D H, Mazzola A, Pestian T, Schwartz S B. Transgender youth and oral health: a qualitative study. *J LGBT Youth* 2022; **19**: 92–106.
 - Zou Y, Szczesniak R, Teeters A, Conard L E, Grosseohme D H. Documenting an epidemic of suffering: low health-related quality of life among transgender youth. *Qual Life Res* 2018; **27**: 2107–2115.
 - Spencer M, Posorski E. Considerations in providing oral health care for the transgender patient: a literature review. *ADHA Access Mag* 2018; **32**: 9–12.
 - Sivaranjani K S, Balu P, Kumar R S, Muthu J, Devi S S, Priyadharshini V. Correlation of periodontal status with perceived stress scale score and cortisol levels among transgenders in Puducherry and Cuddalore. *SRM J Res Dent Sci* 2019; **10**: 61–64.
 - Dong T, Zhi L, Bhayana B, Wu M X. Cortisol-induced immune suppression by a blockade of lymphocyte egress in traumatic brain injury. *J Neuroinflammation* 2016; **13**: 1–13.
 - Macri D, Wolfe K. My preferred pronoun is she: Understanding transgender identity and oral health care needs. *Can J Dent Hyg* 2019; **53**: 110–117.
 - Bhatt N, Cannella J, Gentile J P. Gender-affirming care for transgender patients. *Innov Clin Neurosci* 2022; **19**: 23–32.
 - Horisk, K., Underwood, K., Petch, M., Johnson, A. Considerations in the management of trans patients. *Br Dent J* 2021; **8**: 16–17.
 - Jafri Z, Bhardwaj A, Sawai M, Sultan N. Influence of female sex hormones on the periodontium: A case series. *J Nat Sci Biol Med* 2015; **6**: 146–149.
 - Stonewall Equality Ltd. LBBT in Britain: Health Report. 2018. Available at: https://www.stonewall.org.uk/system/files/lgbt_in_britain_health.pdf (accessed 17 November 2022).
 - National Health Service. Overview – Antidepressants. 2021. Available at: <https://www.nhs.uk/mental-health/talking-therapies-medicine-treatments/medicines-and-psychiatry/antidepressants/overview/> (accessed 20 November 2022).
 - National Institute for Health and Care Excellence. Nervous System. British National Formulary, 84th edition. pp 363–365. Joint Formulary Committee, 2022.
 - Molek M, Florenly F, Lister I, Wahab T A, Lister C, Fioni F. Xerostomia and hyposalivation in association with oral candidiasis: a systematic review and meta-analysis. *Evid Based Dent* 2022; doi: 10.1038/s41432-021-0210-2.
 - Heima M, Heaton L J, Ng H H, Roccoforte E C. Dental fear among transgender individuals – cross-sectional survey. *Spec Care Dent* 2017; **37**: 212–222.
 - White-Hughto J M, Reisner S L, Pachankis J E. Transgender stigma and health: a critical review of stigma determinants, mechanisms, and interventions. *Soc Sci Med* 2015; **147**: 222–231.
- <https://doi.org/10.1038/s41407-023-1816-3>