

Don't forget the teeth

PERSPECTIVES

TORDIS SØRENSEN HØIFØDT

E-mail: tordis.sorensen.hoifodt@unn.no

Tordis Sørensen Høifødt, psychiatrist at the Clinic for Mental Health and Addiction at the University Hospital of North Norway and associate professor at the Department of Clinical Medicine at the University of Tromsø – Arctic University of Norway. Her background is in clinical work, management and research, and she is currently working on the research and quality improvement project 'Better treatment of psychosis'.

The author has completed the ICMJE form and declares no conflicts of interest.

ELISABETH LUND-STENVOLD

Elisabeth Lund-Stenvold, PhD fellow at the Department of Clinical Medicine at the University of Tromsø – Arctic University of Norway and specialty registrar in psychiatry at the University Hospital of North Norway.

The author has completed the ICMJE form and declares no conflicts of interest.

ANNE HØYE

Anne Høy, psychiatrist with a professorial fellowship at the Department of Clinical Medicine, University of Tromsø – Arctic University of Norway, and senior consultant at the Department of Psychiatry, Clinic for Mental Health and Addiction, University Hospital of North Norway. Her background is in clinical work, health administration and research, and she is a member of the editorial committee of the Journal of the Norwegian Medical Association.

The author has completed the ICMJE form and declares no conflicts of interest.

Patients with serious mental disorders have poorer dental health than the population in general. Some simple measures can help strengthen the provision of dental health services to this group.



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The dental health of the Norwegian population has improved significantly over the last 30–40 years, primarily because of fluoride intake, better daily oral hygiene and a generally increased living standard [\(1, 2\)](#). On the other hand, some groups still have a greater need for dental health services than the population in general. Such groups include children and adults with disabilities, cancer patients and patients with serious mental or addiction disorders [\(3\)](#). The most common challenges to dental health are caries and periodontitis [\(2\)](#).

Large differences

Few studies have been made of dental health in persons with serious mental disorders in Norway, but in 2006, Haugbo and collaborators started a project at Lovisenberg Diakonale Hospital in which 260 patients with combined addiction and mental disorders were examined and treated over a period of three years [\(4\)](#). At the early stages of the treatment process nearly one-half of these patients reported to have a strong fear of dental treatment, and none of them had seen a dentist regularly. There was a high prevalence of caries and tooth loss. Patients in the age group 30–39 years had an average of 7.6 teeth affected by caries. The corresponding figure for healthy persons aged 35–44 years is 0.8 [\(5\)](#). The patients at Lovisenberg had lost 3.4 teeth on average, while the corresponding figure for healthy persons has been found to be 1.2 [\(4, 5\)](#). Similar findings have been made in a number of international studies [\(6–8\)](#). A meta-analysis showed that the risk of tooth loss in patients with serious mental disorders was 2.8 times higher than in the general population, and there was a significantly higher number of people with fillings and missing teeth [\(9\)](#). A study from Denmark showed that no more than 43 % of patients with schizophrenia had seen a dentist during the preceding year, compared to 68 % of the Danish population in general [\(10\)](#).

Dental health is a key element of physical health, and poor dental health is related to an increased incidence of cardiovascular diseases, diabetes, cancer and diseases of the airways [\(11\)](#). In addition, poor dental status may affect the ability to chew and

speak and negatively affect self-image, which in turn may impair social functioning. In a qualitative study in Sweden, patients with serious mental disorders reported feelings of shame about their poor dental status, stressful experiences from dental treatment and difficulty in attending to their own dental hygiene [\(12\)](#).

Possible causes

Dental health problems may have a variety of causes, including poor diet, smoking, alcohol and substance use. In addition, a number of psychotropic drugs may have adverse effects related to the oral cavity, of which reduced saliva production is often the most manifest [\(13\)](#). Poor oral hygiene may be an important additional factor; only 75 % of patients with serious mental disorders brush their teeth on a daily basis [\(6\)](#), compared to 90–96 % of the general population [\(14\)](#). Furthermore, dental treatment is costly, and we know that low socioeconomic status is related to poor dental health, nationally as well as globally [\(14, 15\)](#). Poor economy, inability to pay and limited access to dental health services may therefore be important contributory factors [\(10, 16\)](#).

Studies from the United Kingdom show that most patients who had been in contact with mental healthcare institutions had never been asked about their dental health [\(17\)](#). Research on fear of dental treatment describes a vicious circle in which anxiety and fear cause avoidance of dental treatment with subsequent deterioration in dental health, which in turn leads to feelings of guilt, shame and loss of self-esteem [\(18\)](#). Examination of the oral cavity and teeth is included in a general medical examination, but perhaps we have arrived at a situation described in a report from the Directorate of Health [\(3\)](#): ‘Today, the mouth is physically, but not organisationally a part of the body.’ Do healthcare personnel find that inquiring about dental health is too invasive and personal?

What can be done?

Poor dental health is preventable, but requires targeted interventions vis-à-vis high-risk groups. There is much to indicate that low priority is given to dental health when there are other and more obvious symptoms that require treatment. Moreover, we have little knowledge about the effect of interventions, and more research on individually targeted and system-oriented measures is required [\(19\)](#). A meta-analysis from 2016 on the benefits of motivation and training in oral hygiene for persons with mental disorders provides no definite findings [\(20\)](#). However, in one of the included studies Almomani et al. compared two randomised groups, both of which were provided with training as well as an electric toothbrush and a reminder to follow up their oral hygiene, but where one of the groups also undertook brief sessions with motivational interviews. Both groups had reduced amounts of plaque, but the effect lasted longer in the group that underwent the motivational interview [\(21\)](#).

The guidelines for examination, treatment and follow-up of persons with psychosis-type disorders recommend facilitation of routine visits to a dentist. It is emphasised that ‘When drugs with an anticholinergic effect are used, patients should be informed about the importance of good dental hygiene’ [\(22\)](#). Examination and treatment of the teeth should also be highlighted as a part of the routine for

institutionalised patients, especially with a view to reaching those with the most serious disorders (10). Dentists have recommended the following as a simple screening procedure: Count the teeth and refer the patient to a dentist if he or she has less than 20 teeth, has front teeth missing or suffers from problems with or pain in the mouth. We recommend such a screening procedure, but this formulation is no longer found in the most recent manuals (14, 23). As a part of the package pathways for mental health and addiction, somatic health and lifestyle, some screening questions have been proposed, and we deem these to be appropriate (see Box 1) (24).

Box 1 Questions for screening of dental health in patients admitted to institutions for mental health care or addiction (24)

1. Do you suffer from pain or other problems in your mouth?
2. When did you last see a dentist/dental hygienist?
 - If more than two years ago: What is the reason why you have not seen a dentist/dental hygienist for such a long time?
 - If anxiety is the reason why the patient has not seen a dentist/dental hygienist for more than two years, information must be provided in the referral to a dentist/dental hygienist.

Inform the patient about the opportunity for financial support to cover expenses for dental treatment.

More specific rights are required

Financial support schemes for dental care are currently regulated pursuant to the Dental Health Care Act and the National Insurance Act. Accordingly, patients who are admitted to an institution for more than three months or receive home nursing services on a weekly basis for more than three months are entitled to dental health services free of charge (25). In addition, patients with periodontitis, hyposalivation or strongly reduced ability for self-care may be entitled to financial support for necessary dental treatment (26). Patients may also be entitled to financial support for dental care from the Norwegian Labour and Welfare Administration (NAV) (27). The dentist who provides the treatment is responsible for collecting the necessary documentation. The fact remains, however, that even though support for dental treatment has been granted, the patients might still have to pay a high patient charge because of the unregulated pricing of dental care services. We may therefore reasonably assume that poor economy represents a further obstacle to good dental health and treatment for patients with serious mental disorders. In addition, interpretation of the regulations may be complicated and require both knowledge and interest on the part of each therapist and dentist.

Poor dental health has a significant impact on patients who are seriously mentally ill, and its effect on self-image and quality of life should not be underestimated. As healthcare service providers we therefore need to ensure that dental health is examined and followed up in line with other aspects of somatic health. In addition, the legislation needs to be amended to specify the rights that have been formulated, and steps must be taken to make it specifically clear that dental treatment is in fact provided free of charge to patients with serious mental disorders.

LITERATURE

1. Holst D, Schuller AA. Oral health changes in an adult Norwegian population: a cohort analytical approach. *Community Dent Oral Epidemiol* 2000; 28: 102 - 11. [PubMed][CrossRef]
2. St.meld. nr. 35 (2006–2007). Tilgjengelighet, kompetanse og sosial utjevning – Framtidas tannhelsetjenester.
<https://www.regjeringen.no/no/dokumenter/Stmeld-nr-35-2006-2007-/id475114/sec1> (29.8.2018).
3. Forsøksordning med orale helsetjenesterorganisert i tverrfaglig miljø i sykehus. IS-2128. Oslo: Helsedirektoratet, 2014.
<https://helsedirektoratet.no/Lists/Publikasjoner/Attachments/99/Forsoksordning-med-orale-helsetjenester-organisert-i-tverrfagligmiljo-ved-sykehus-IS-2128.pdf> (4.10.2018).
4. Haugbo HO, Storhaug K, Willumsen T. Rusavhengighet, psykiatri og oral helse. Rapport fra et sykehusprosjekt i Oslo. *Den norske tannlegeforenings tidende* 2010; 120: 912–7.
5. Holst D, Schuller AA, Gimmestad A. Tannhelsen i dynamisk endring – fra sykdomsrisiko til helsepotensial. *Den norske tannlegeforenings tidende* 2004; 114: 866–71.
6. McCreadie RG, Stevens H, Henderson J et al. The dental health of people with schizophrenia. *Acta Psychiatr Scand* 2004; 110: 306 - 10. [PubMed][CrossRef]
7. Wey MC, Loh S, Doss JG et al. The oral health of people with chronic schizophrenia: A neglected public health burden. *Aust N Z J Psychiatry* 2016; 50: 685 - 94. [PubMed][CrossRef]
8. Matevosyan NR. Oral health of adults with serious mental illnesses: a review. *Community Ment Health J* 2010; 46: 553 - 62. [PubMed][CrossRef]
9. Kisely S, Baghaie H, Lalloo R et al. A systematic review and meta-analysis of the association between poor oral health and severe mental illness. *Psychosom Med* 2015; 77: 83 - 92. [PubMed][CrossRef]
10. Nielsen J, Munk-Jørgensen P, Skadhede S et al. Determinants of poor dental care in patients with schizophrenia: a historical, prospective database study. *J Clin Psychiatry* 2011; 72: 140 - 3. [PubMed][CrossRef]
11. Chapple IL. The impact of oral disease upon systemic health-Symposium overview. *J Dent* 2009; 37: S568 - 71. [PubMed][CrossRef]
12. Persson K, Olin E, Ostman M. Oral health problems and support as experienced by people with severe mental illness living in community-based subsidised housing—a qualitative study. *Health Soc Care Community* 2010; 18: 529 - 36. [PubMed][CrossRef]
13. Cockburn N, Pradhan A, Taing MW et al. Oral health impacts of medications used to treat mental illness. *J Affect Disord* 2017; 223: 184 - 93. [PubMed][CrossRef]

14. Tenner for livet. Helsefremmende forebyggende arbeid. IK-2659. Oslo: Statens helsetilsyn, 1999.
<https://helsedirektoratet.no/Lists/Publikasjoner/Attachments/484/Tenner-for-livet-helsefremmende-og-forebyggende-arbeid-IS-2659.pdf> (29.8.2018).
15. Petersen PE, Kwan S. Equity, social determinants and public health programmes—the case of oral health. *Community Dent Oral Epidemiol* 2011; 39: 481 - 7. [PubMed][CrossRef]
16. Kisely S. No mental health without oral health. *Can J Psychiatry* 2016; 61: 277 - 82. [PubMed][CrossRef]
17. Kisely S, Quek LH, Pais J et al. Advanced dental disease in people with severe mental illness: systematic review and meta-analysis. *Br J Psychiatry* 2011; 199: 187 - 93. [PubMed][CrossRef]
18. Berggren U, Meynert G. Dental fear and avoidance: causes, symptoms, and consequences. *J Am Dent Assoc* 1984; 109: 247 - 51. [PubMed][CrossRef]
19. Palmier-Claus JE, Shiers D, French P et al. Oral health in psychosis: An unmet need. *Schizophr Res* 2018; 197: S0920-9964(18)30561-9.
20. Khokhar MA, Khokhar WA, Clifton AV et al. Oral health education (advice and training) for people with serious mental illness. *Cochrane Database Syst Rev* 2016; 9: CD008802. [PubMed]
21. Almomani F, Williams K, Catley D et al. Effects of an oral health promotion program in people with mental illness. *J Dent Res* 2009; 88: 648 - 52. [PubMed][CrossRef]
22. Utredning, behandling og oppfølging av personer med psykoselidelser. IS-1957. Oslo: Helsedirektoratet, 2013.
<https://helsedirektoratet.no/Lists/Publikasjoner/Attachments/326/Nasjonal-faglig-retningslinje-for-utredning-behandling-ogoppfolging-av-personer-med-psykoselidelser-IS-1957.pdf> (29.8.2018).
23. God klinisk praksis i tannhelsetjenesten – en veileder i bruk av faglig skjønn ved nødvendig tannbehandling. Oslo: Helsedirektoratet, 2011.
<https://helsedirektoratet.no/Lists/Publikasjoner/Attachments/485/God-klinisk-praksis-itannhelsetjenesten-en-veileder-i-bruk-av-faglig-skjonn-ved-nodvendig-tannbehandling-IS-1589.pdf> (29.8.2018).
24. Tannhelse – pakkeforløp for psykisk helse og rus. Helsedirektoratet.
<https://helsedirektoratet.no/retningslinjer/somatisk-helseog-levevaner-pakkeforlop-for-psykisk-helse-og-rus/seksjon?Tittel=tannhelse-pakkeforlop-for-11423#oppfolging-av-tannhelsehos-pasienter-med-psykiske-lidelser-og/eller-rusmiddelproblemer> (4.10.2018).
25. LOV-1983-06-03-54. Lov om tannhelsetjenesten (tannhelsetjenesteloven).
<https://lovdata.no/dokument/NL/lov/1983-06-03-54> (29.8.2018).
26. Rundskriv I-8/2017 Regelverk og takster vedrørende stønad til dekning av utgifter til tannbehandling for 2018 – revidert 16. februar 2018.
<https://www.regjeringen.no/no/dokumenter/rundskriv-i-72017-regelverk-og->

takster-vedrorende-stonad-tildekning-av-utgifter-til-tannbehandling-for-2018/id2582852/ (29.8.2018).

27. Rundskriv Hovednr. 35 – Sosialtjenesteloven. Oslo: Arbeids- og velferdsdirektoratet, 2012.

<https://www.nav.no/rettskildene/Rundskriv/hovednr.35-lov-om-sosiale-tjenester-i-nav> (29.8.2018).

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