BARRIERS PERCEIVED BY THE DENTISTS IN PROVIDING ORAL HEALTH CARE TO THE ELDERLY: A NARRATIVE REVIEW

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KEYWORDS

ABSTRACT

Oral health care, Geriatric dentistry, Elderly Introduction: Demographic population changes towards the aging population can impact dentists to provide oral health care. Oral health care needs and problems among the elderly differ from those in the general population. They require consideration and optimal treatment planning. In providing oral health care to the elderly, dentists may encounter various barriers, and it may become challenging for dentists to meet elderly needs and overcome their oral health problems. Review: Dentists perceive several factors as barriers and challenges in providing oral health care to the elderly, such as knowledge in geriatric dentistry, experience providing the treatment, complexity of treatment, practical barriers, and financial aspect, thus making dentists not sufficiently prepared to provide oral health care for the elderly. Conclusion: Barriers perceived by dentists in providing oral health care to the elderly need to be addressed to increase the readiness of dentists and overcome the barriers so they can provide oral health care optimally, meet the elderly needs, and overcome their oral health problems.

INTRODUCTION

Population aging is a global phenomenon felt by several countries in the form of an increase in life expectancy and the increasing proportion of the elderly population. Globally, in 2020 the population aged 65 years and over is around 727 million people and is expected to increase to more than 1.5 billion in 2050. This demographic change will significantly impact the provision of general health care and oral health care for the elderly. As they age, the elderly's need

for health conditions increases, affecting their quality of life.² The elderly can optimally achieve their quality of life by paying attention to general and oral health conditions.^{3,4}

Oral health problems that are often faced by the elderly are dental caries, periodontal disease, tooth loss, dry mouth (xerostomia), and oral cancer.⁵ If not treated properly, these problems will impact chewing function disorders, inadequate nutritional intake, influencing an individual socially, and influencing their quality of life.⁶ These oral

health problems can be prevented by daily maintaining oral hygiene, a healthy lifestyle, such as a healthy diet, quitting smoking, regular check-ups, and treatment with a dentist.⁷ The World Health Organization (WHO) has recommended that countries adopt a specific strategy to improve the oral health of the elderly through oral health policy, education and training for service and care for the elderly, and research for oral health. WHO also targeted that at the age of 65, there should be a 25% reduction in edentulous status.8 Globally, there has been a decrease in the rate of tooth loss in the elderly. That shows an improvement in the prevention and promotion of oral health for the elderly, but in some countries, the prevalence of tooth loss and oral disease in the elderly remains high.⁹ Therefore, various efforts are still needed to improve oral health and prevent oral diseases in the elderly, including the role of dentists in geriatric dentistry, to improve the oral health of the elderly.

Providing oral health care for the elderly is challenging for dental professionals because it needs special considerations related to physiological changes due to age, chronic conditions/therapy complications, increased incidence of physical/mental disabilities, and social aspects. Dentists need to plan care by considering several factors in diagnosing, planning treatment, and collaborating with other professionals to provide optimal and holistic care; therefore, it requires special

knowledge, attitudes, and skills.^{6,7,10} Several studies have shown that many dentists feel they are not adequately prepared and experience several barriers to providing oral health care for the elderly.¹¹ Therefore, this review discusses the challenges and barriers for dentists in providing oral health care to the elderly based on the previous studies reported.

REVIEW

Factors Perceived as Barriers by The Dentists in Providing Oral Health Care to The Elderly

In providing oral health care for the elderly, dentists may encounter several factors that act as barriers and challenges that make them not sufficiently prepared to provide oral health care for the elderly. Several factors perceived by the dentist were knowledge of geriatric dentistry, experience providing the treatment, the complexity of the treatment, practical barriers, and financial aspects.

Knowledge of geriatric dentistry

One of the most felt by dentists that hindered them from providing oral health care for the elderly was that they thought they had limited knowledge of geriatric dentistry. 12–16 Geriatric dentistry can be defined as 'part of the dental curriculum that deals with the specific knowledge, attitudes and technical skills required in the provision of oral health care for older adults.' 17 Dentists obtain this knowledge through education and training during their undergraduate dental education

additional courses they may any participate in. 13,18 Through this education and training, dentists can learn about characteristics and environment of elderly, 19 the complexity of the health and oral conditions of the elderly, the side effects of drugs consumed by the elderly, and the selection of appropriate oral health care for the elderly. 18 So, with this knowledge, dentists can develop their skills to perform oral health care for the elderly. 19 Therefore, it is necessary for every dental school to provide geriatric dentistry education and consider running a gerodontology department or division.

Experience in providing oral health care for the elderly

The experience of providing oral health care for the elderly, which dentists obtain during their education and when carrying out their professional role, affects dentists' readiness and confidence to deliver oral health care for the elderly. 12,13,15 Dentists who have more opportunities to treat the elderly during their education and professional roles tend to be more willing to provide oral health care for the elderly than dentists who do not have this experience. It can be seen from the frequency with which they meet and care for elderly patients on the proportion of the number of elderly patients treated out of their total patients. 12,18 In addition, dentists who have experience with special needs older people or often provide care outside of their practice will be more willing to provide oral health

care for the elderly because they have more specific knowledge and skill.^{20,21}

The complexity of oral health care for the elderly

Oral health care for the elderly is more complex than for the general population. The elderly often have complex medical and cognitive conditions and take drugs that impact their oral health and make oral health care for the elderly more complex. 13,19,21 The complexity of this treatment is the biggest obstacle for dentists because the treatment will require more time and high skills. 12-15,18,19,21 Dentists are also often confused about getting approval for treating the elderly with physical and mental disabilities.21 According to dentists, older people with physical and mental disabilities challenging to comply with treatment and follow recommendations, so dentists cannot optimally provide oral health care. 19,21,22

The behavior of the elderly can affect the complexity of treatment and cause dentists to face difficulties in motivating the elderly to maintain their oral health and follow the dentist's recommendations.²³ Self-ageism is typical behavior that occurs in the elderly, which causes the elderly to be reluctant and often refuse to receive oral health care from a dentist. The elderly also tend to accept their oral health conditions and problems and think they can do nothing to overcome them.²²

Practical barriers to providing oral health care for the elderly

The most common barriers for dentists when providing oral health care to the elderly are practical barriers. These practical barriers are related to factors that can cause unfavorable working conditions for dentists. 12,18,24 The limited equipment and area to perform the treatment are some of the practical barriers that make less than optimal working conditions, limit the treatment that dentists can provide, affect the results and quality of treatment, and sometimes the treatment cannot be provided.^{21,25} Nursing homes or specialized health facilities often do not have a designated dental treatment room, which dentists to compromise these conditions and work non-ergonomically due to poor posture and lighting. 13,15,20 In addition, the availability of trained staff who can support or assist during treatment is a practical obstacle for dentists, especially dentists who do not provide treatment in their practice. The availability of trained staff is very much needed, especially if there is a complication or emergency condition.¹³

Dentists' concerns about polypharmacy, overtreatment, or harming the elderly have become practical obstacles for dentists in providing care.²⁶ Another factor that dentists are concerned about is the risk of complications, medical emergency conditions, and professional litigation, thus making dentists afraid and more careful in treating the elderly.^{13,14} This concern

encourages dentists to refer the elderly to colleagues or specialists. However, some dentists still have limitations in referring the elderly because of the availability of special oral health care facilities provided for the elderly. 12,18,21

Time and workload are other factors that can affect a dentist's working conditions. The complexity of oral health care for the elderly requires more time, so dentists must devote extra time to this, disrupting their working hours, losing their personal time, and adding new workloads. Many government dentists feel these concerns because they already have a high workload and limited time. 13,15,20 Communication with the elderly is one of the barriers practical that dentists encounter while delivering treatment. 13,19 The physiological impact of normal conditions and processes of aging, such as decreased sensory abilities (sight and hearing), causes the elderly to often ask for repetition or understand pretend to to avoid communicating. Psychological changes in the elderly also affect how they communicate with dentists. The elderly tend to be more passive and avoid open communication.²⁷ The difficulty of communicating with the elderly requires dentists to learn more about communicating with the elderly effectively, do more routine communication, and become familiar with the elderly.¹⁹

Remuneration or financial benefits are factors that can affect the working conditions of dentists. The remuneration of oral health

care for the elderly is still considered too low compared to the time required for treatment. This concern is felt especially for dentists who perform oral health care in nursing homes and specialized health facilities. Dentists sometimes think of providing oral health care for the elderly as charity work, and the only reason they want to provide care is that the number of requests they receive is low, so they can still bear the financial losses. 14,16

Financial aspect

According to dentists, the cost of dental and oral care for the elderly is still considered by the elderly to be too expensive, and the elderly still have problems regarding financing. It will affect the dentists in determining treatment, causing treatment to be unable to be given optimally or provided.^{22,28} Reimbursement for oral health care in the elderly by third-party payers such as insurance or government programs is still relatively low. It is still limited to a few covered treatments based on the diagnosis given, even though the care needed is included in the standard of care for diagnosis.^{18,19,25}

The elderly tend to hand over the authority to approve and decide on their treatment and the expenses for treatment to their families, especially the elderly, who are highly dependent on their families. Dentists often find elderly families withhold treatment or do not agree to pay for the treatment of the elderly, so this causes dentists to be unable to

provide proper care for the elderly. Some nursing homes or institutions where the elderly live have provided funds for the elderly for their care, but if the expense for treatment exceeds the funds provided, the elderly still need to pay personally for their dental care.²²

Smith and Thomson (2016) suggested that government subsidies, the implementation of a fee-for-service-based system, or the provision of the least essential oral health care should be considered for funding issues in oral health care for the elderly.²²

CONCLUSION

Providing oral health care for the elderly is challenging for dental professionals. Sometimes, they encounter barriers that make them not sufficiently prepared to provide oral health care for the elderly. Knowledge of geriatric dentistry, experience providing the treatment, the complexity of the treatment, practical barriers, and financial aspects are known to be the barriers for the dentist while providing oral health care for the elderly. These barriers need to be addressed to understand dentists' behavior and actions and increase dentists' readiness so they can optimally provide oral health care, meet the elderly's needs, and overcome their oral health problems.

REFERENCES

 United Nations Department of Economic and Social Affairs. World Population Ageing 2020: Highlights. United Nations;

- 2021
- 2. Razak PA, Richard KJ, Thankachan R, Hafiz K, Kumar K, Samer K. Geriatric Oral Health: A Review Article. *J Int Oral Heal*. 2014;6:110-116.
- 3. Kusdhany LS, Sundjaja Y, Fardaniah S, Ismail RI. Oral health related quality of life in Indonesian middle-aged and elderly women. *Med J Indones*. 2011;20(1):62-65.
- 4. Berniyanti T, Palupi R, Setijanto D, Bramantoro T, Nur I, Ramadhani A. Overview of dentures' demand to support the improvement of life quality of the elderly at high-level life expectancy in Indonesia. *J Int Oral Heal*. 2019;11(3):112-117
- 5. Thomsonn WM, Ma S. An ageing population poses dental challenges. *Singapore Dent J.* 2014;35(C):3-8.
- 6. Oktaria I, Shen R. The Prosthodontics Care For Geriatric Patients Nowadays. *J Indones Dent Assoc*. 2019;2(1):43.
- 7. Tonetti MS, Bottenberg P, Conrads G, et al. Dental caries and periodontal diseases in the ageing population: call to action to protect and enhance oral health and well-being as an essential component of healthy ageing Consensus report of group 4 of the joint EFP/ORCA workshop on the boundaries be. *J Clin Periodontol*. 2017;44:S135-S144.
- 8. Petersen PE, Yamamoto T. Improving the oral health of older people: The approach of the WHO Global Oral Health Programme. *Community Dent Oral Epidemiol*. 2005;33(2):81-92.
- 9. Hyde S, Dupuis V, Mariri BP, Dartevelle S. Prevention of tooth loss and dental pain for reducing the global burden of oral diseases. *Int Dent J.* 2017;67:19-25.
- 10. Rai S, Goel S, Kaur M, Bhatnagar P. Moral and professional responsibility of oral physician toward geriatric patient with interdisciplinary management The time to act is now! *J Midlife Health*. 2011;2(1):18.
- 11. Bots-Vantspijker PC, Vanobbergen JNO, Schols JMGA, Schaub RMH, Bots CP, De Baat C. Barriers of delivering oral health care to older people experienced by dentists: A systematic literature review. *Community Dent Oral Epidemiol*. 2014;42(2):113-121.
- Bots-VantSpijker PC, Bruers JJM, Bots CP, et al. Opinions of dentists on the barriers in providing oral health care to communitydwelling frail older people a questionnaire survey. *Gerodontology*. 2014;33(2):268-274.
- 13. Othman AA, Yusof Z, Saub R. Malaysian government dentists' experience,

- willingness and barriers in providing domiciliary care for elderly people. *Gerodontology*. 2014;31(2):136-144.
- Kerr E, Watson S, McMullan J, Srinivasan M, McKenna GJ. General dentists' attitudes and perceived barriers in providing domiciliary dental care to older adults in long-term care facilities or their homes in Northern Ireland: A descriptive qualitative study. Gerodontology. 2022;39(3):257-265.
- 15. Nunez B, Chalmers J, Warren J, Ettinger RL, Qian F. Opinions on the provision of dental care in Iowa nursing homes. *Spec Care Dent*. 2011;31(1):33-40.
- Niesten D, Gerritsen AE, Leve V. Barriers and facilitators to integrate oral health care for older adults in general (basic) care in East Netherlands. Part 1: Normative integration. *Gerodontology*. 2021;38(2):154-165.
- 17. Levy N, Goldblatt RS, Reisine S. Geriatrics Education in U.S. Dental Schools: Where Do We Stand, and What Improvements Should Be Made? *J Dent Educ*. 2013;77(10):1270-1285.
- 18. Madunic D, Gavic L, Kovacic I, Vidovic N, Vladislavic J, Tadin A. Dentists' opinions in providing oral healthcare to elderly people: A questionnaire-based online cross-sectional survey. *Int J Environ Res Public Health*. 2021;18(6):1-12.
- Bots-VantSpijker PC, van der Maarel-Wierink CD, Schols JMGA, Bruers JJM.
 Provision of Oral Health Care by Dentists to Community-Dwelling Older Patients. *Int Dent J.* 2021;0:1-10.
- Tang S, Finlayson G, Dahl P, Bertone MF, Schroth RJ. Dentists' Views on Providing Care for Residents of Long-Term Care Facilities. J Can Dent Assoc. 2019;85:j8.
- 21. Tham R, Hardy S. Oral healthcare issues in rural residential aged care services in Victoria, Australia. *Gerodontology*. 2012;30(2):126-132.
- 22. Smith MB, Thomson WM. 'Not on the radar': dentists' perspectives on the oral health care of dependent older people. *Gerodontology*. 2017;34(1):90-100.
- Niesten D, Gerritsen AE, Leve V. Barriers and Facilitators to integrate Oral Health care for Older Adults in General (Basic) Care in East Netherlands. Part 2 Functional Integration. Gerodontology. 2021;38(3):289-299..
- 24. Bots-VantSpijker PC, Bruers JJM, Bots CP, De Visschere LMJ, Schols JMGA. Dentists' opinions on knowledge, attitudes and barriers in providing oral health care to older

- people living independently in the Netherlands and Flanders (Belgium). *BDJ Open*. 2017;3(1):1-8.
- 25. Britton KF, Durey A, O'Grady MJ, Slack-Smith LM. Does residential aged care need dental professionals? A qualitative study on dental professionals' perceptions in Australia. *Gerodontology*. 2016;33(4):554-561.
- 26. Hearn L, Slack-Smith L. Oral health care in residential aged care services: Barriers to

- engaging health-care providers. *Aust J Prim Health*. 2015;21(2):148-156.
- 27. Stein PS, Aalboe JA, Savage MW, Scott AM. Communication: Strategies for communicating with older dental patients. *J Am Dent Assoc*. 2014;145(2):159-164.
- 28. Borg-Bartolo R, Amberg H, Bieri O, Schirrmann E, Essig S. The provision of mobile dental services to dependent elderly people in Switzerland. *Gerodontology*. 2020;37(4):395-410.