How to maximise dental attendance among older patients

Learning outcomes

At the conclusion of this paper, readers should be able to:

1. Describe the reasons why older adult patients who have been regular attendants may stop responding to recall appointments.
2. Discuss the social and systemic health circumstances related to the potential success of different approaches that can be used to contact missing patients and return them to regular follow-up care.
3. Develop a plan that may be useful in returning older adult patients to dental care.

Keywords: Frail elderly, aged, dental care for chronically ill.

Introduction

The populations of the Republic of Ireland (ROI) and Northern Ireland (NI) are getting older, and this trend is expected to continue in the coming decades. This change in demographics has many implications for oral healthcare. There are significant differences in health and disability by age, gender, and socioeconomic condition, and it is important to consider these social determinants of health in order to improve oral health outcomes.[1]

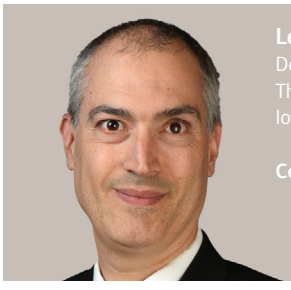
There is a significant disparity between the oral health requirements of communities and the accessibility, location, and nature of dental services offered. It is essential for oral healthcare systems to become more inclusive, accessible, and considerate, especially for socially disadvantaged and vulnerable groups.[2] Factors that influence dental care utilisation include age, race, gender, socioeconomic status, monetary resources, dental insurance, health literacy, transportation, dental anxiety (fear), and access to care.[3-5] Data from the Economic and Social Research Institute (ESRI) of Ireland on utilisation of dental services in 2018 showed that it peaks between the ages of 35 and 45, and declines after that. There was a higher utilisation rate of Government-funded dental services by females than males in the younger age categories, up to approximately 70 years of age. However, thereafter male utilisation was equal to or slightly higher than that of females.[6]

For younger populations, financial issues have been documented as the primary barrier to dental care. Other problems may be getting time off from work, especially for hourly workers in the lower socioeconomic group, and organising childcare.[7] Psychosocial factors are also important and might include cognitive overload and psychiatric barriers. Low health literacy may lead to neglect and deterioration of oral health, because that population does not value or understand the importance of oral healthcare and its relationship to general health and well-being.[7]

Broken medical appointments are different to broken dental appointments, because oral health deteriorates slowly, so postponing dental care does not usually bring noticeable consequences. Therefore, the severity of oral health problems is often perceived less critically when compared to an acute medical problem that prompts the patient to seek medical care. The consequences are that patients are less likely to use oral healthcare. In addition, in the current healthcare system, oral healthcare is much more difficult to access than medical care, especially for older adults.[8]

Notwithstanding all the above-mentioned barriers, many adults become regular dental patients and enjoy a period of relative oral health stability. However, when these patients get older, many new barriers arise, which influence regular dental attendance. These barriers include but are not limited to: financial issues; lack of dental insurance; lack of transportation; declining systemic health; mobility issues; and, the fact that older adults often perceive dental treatment as unnecessary.[9] Patients who are edentulous and wearing complete dentures are much less likely to return for follow-up care, as they believe that once one receives a complete denture no further dental treatment is necessary.[10]

There is also a group of older adults who do not return for their regular dental appointments due to a sudden health event, such as a stroke, a broken hip, or memory loss. As these events are also important risk factors for rapid oral health deterioration, this article will focus on the reasons why older adult patients who have been regular attendants may stop responding to recall appointments. This article will also examine the social and systemic health circumstances related to the success of different approaches that can be used to contact missing patients, such as those who have failed recall appointments, and return them to regular follow-up care. In addition, the authors will discuss a plan that may be useful in returning these patients to regular dental care, as prevention and maintenance throughout the lifespan is considered an important component of oral care for all ageing populations.



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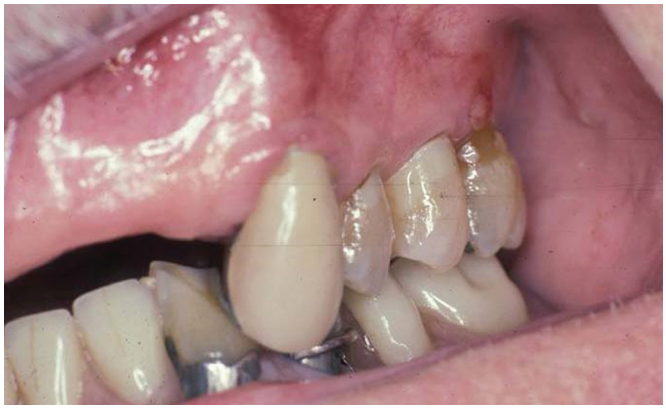

FIGURE 1: This 70-year-old man returned after two years with significant changes in his dentition, having failed to attend several recall appointments. An oral examination found changes in his oral hygiene, including recurrent caries, and he was in pain from an abscess on an abutment tooth (#26), so that he was unable to wear his removable partial denture (RPD), which included anterior teeth. The inability to wear his RPD with anterior teeth was a factor that motivated him to return for care.

Reasons why older adult patients who have been regular attendants may stop responding to recall appointments

Socioeconomic factors

Ireland has a mixed public/private healthcare system. People with medical cards or general practitioner (GP) cards get subsidised or free healthcare. People without these cards have to pay out of pocket for healthcare. The Irish population uses fewer primary care health services and relies more heavily on acute in-patient care than other countries, which contributes to its high per-capita healthcare spending.[11]

The cost of oral healthcare in Ireland is mainly out of pocket. Among the public services, the Dental Treatment Services Scheme (DTSS) is the most comprehensive dental care programme in Ireland for adults with a medical card. Eligibility for a medical card, which is required to participate in the DTSS, is determined primarily by income, with higher income thresholds for those over 70 years old. It covers one free dental check-up, two fillings, denture repairs, and one root canal treatment per year, as well as extractions. For most other treatments, prior approval is required from the Health Service Executive (HSE).[12,13] Workers who pay social insurance are entitled to one free dental check-up per year at private dental practices that have contracts with the Department of Social Protection, but must pay for any additional treatments. Private dental practices must follow a code of conduct set by the Dental Council, and patients can claim tax relief on certain specialist dental treatments.[12,13] However, "the number of public contracted dentists in the HSE has declined by almost a quarter (23%) in the past 15 years".[14] In general, older adults need to pay out of pocket for many dental services, including denture fabrication. Considering the high rate of denture utilisation, this might become a significant barrier for many older adults, especially as they age.[15] Previous studies have reported that financial reasons for postponing dental visits were associated with low income, persons without insurance, and increasing age.[16]

Systemic health and caregivers

One-third of the ROI population aged 65 or older is reported to have a long-standing health-related disability, and this increases to 50% for older adults in Northern Ireland.[1] Most common disabilities among older adults are related to: sensory losses; mobility related to systemic diseases such as arthritis, stroke, or other cardiovascular diseases; and, cognitive impairment. Persons with such disabilities need help with transportation and accessing dental offices, and are dependent on their caregivers. Changes in their health so that they feel too unwell to keep their dental appointment, or in the health of their caregivers, may become a significant barrier to returning for any dental appointments. Possible barriers for caregivers to bring the patient to the dental office may include having trouble getting off work, not being able to find someone to help with childcare, or lacking transportation.[7]

Older adults are also caregivers for their significant others, and this caregiving activity might preclude them from getting enough rest, having time to exercise, and seeking regular healthcare. Caregivers frequently do not have enough time to recuperate from illness, forget to take their prescription medications, and can also miss healthcare appointments.[17] For instance, a patient who had been a regular attender for 15 years did not respond to recall messages. The patient returned two years later with significant changes in his dentition, which included abundant plaque and calculus, recurrent caries, and pain from an abscess on an abutment tooth supporting a removable partial denture (**Figure 1**). While discussing his dental problems, the patient reported that he had been caring for his wife, who was terminally ill and was currently in the intensive care unit (ICU) on life support. He was in conflict with his daughter who did not want him to remove the life support for his wife, although his wife no longer had any brain function. He asked us for advice. After some discussion and a root canal treatment of tooth #26 (FDI notation), we referred him to a palliative care physician.

Communication and health literacy

Health literacy is the ability to comprehend and use health information effectively to make informed decisions about one's well-being. It involves understanding medical instructions, navigating the healthcare system, and actively participating in one's own healthcare.

According to the National Assessment of Adult Literacy (NAAL), 68% of older adults had problems interpreting numerical figures, 71% had problems reading and 80% were challenged when filling in forms or charts.[18] Additionally, it has been found that lower health literacy is associated with poorer health, stroke, poorer self-care, poorer medication adherence, reduced use of preventive services, increased hospitalisation, and greater healthcare costs. In fact, persons with limited health literacy incur medical expenses that are up to four times greater than persons with adequate literacy skills. Persons with poor oral health literacy are more likely to miss dental appointments and also have an inability to understand scheduling systems.[19]

Different approaches for contacting patients in order to return them to regular care

Intervention programmes to improve oral health literacy have shown that attendance at the dental office can be improved and failures to attend scheduled appointments can be reduced.[5] Although the majority of older adults have some natural teeth, those persons who have been edentulous for many years still believe that dentures should last a lifetime. Many of these persons who wear complete dentures do not perceive a need for dental care, unless they have acute pain or their dentures have become very ill-fitting, broken, or are missing front teeth.[10] However, denture wearers should have an annual check-up with their

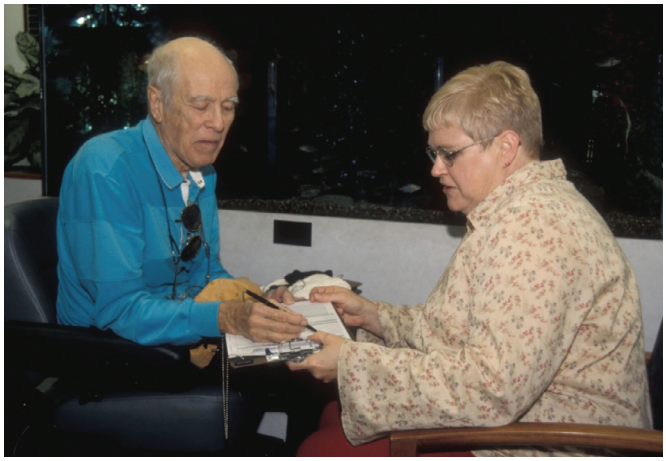

FIGURE 2: This 71-year-old man who is a wheelchair user due to childhood polio, is seen here working with a case manager to develop a plan for accommodating his transport needs, as he lives in a rural area. His plan includes co-ordinating his dental appointments on days and at times when his transportation service is available to bring him to the clinic and take him back

FIGURE 3: The same patient described in Figure 2 is now photographed showing how a building that only has stairs without ramps or lifts can be a potent barrier for patients using wheelchairs.

dentist to ensure the optimal fit and functionality of their dentures. These appointments should also allow the clinician to assess the presence of any oral lesions and/or the amount of bone loss. This assessment would permit the patient to receive early diagnosis and appropriate care.

The employment of case managers (**Figure 2**) has also shown evidence of reducing the number of broken or missed appointments by providing customised interventions for each patient, considering their individual reasons for failing appointments. Another way to improve attendance is to reduce perceived disrespect or discrimination, which might be related to long wait times or lack of reflective listening by the clinical and administrative staff.[20]

As patients age, their ability to drive or navigate public transportation may become compromised, which may limit their ability to attend the dental office. Discussing transportation alternatives with older patients and their families may be one way to reduce missed and broken appointments. Alternative transportation methods include helping the patient to understand the services available through public transport companies, such as the travel assistance scheme, the JAM card and app, and others. Individuals with cognitive deficits,

FIGURE 4: The same patient from the previous two figures is now photographed showing that ramps and automatic door openers make a building more accessible, and allow a patient who uses a wheelchair to be more independent.

such as autism or early dementia, which involve communication barriers, can use the JAM card or an app in their mobile devices to indicate that they may require additional time in a non-verbal way. This card/app is particularly helpful in settings such as public transport, retail, or any healthcare environment.

Another common barrier associated with systemic health problems may be difficulty in accessing a dental office due to architectural barriers (**Figure 3**), such as lack of ramps, lifts, or appropriate width of doors and hallways for wheelchairs (**Figure 4**).

How to communicate the need for regular dental care to older adults

There is a need to improve dental appointment-keeping behaviour with innovative patient-centred interventions, especially for frail older adults. For these patients, routine dental appointments will not be perceived as having priority, providing the patient is not experiencing dental pain, even though he/she may have caries or periodontal disease. Principles from behavioural economics, which combines economics and psychology to understand how and why people behave the way they do, can help to design novel solutions to decrease the number of missed and broken appointments.[7]

Dental office staff should utilise words that convey the importance of procedures when texting the patient or sending reminder cards for routine dental appointments. For example, words such as "recall appointments" or "dental cleanings" should be replaced by "oral health examinations". This wording re-emphasises the importance of the appointment, from a routine housekeeping procedure, i.e., cleaning, to a health-related need. A helpful protocol is to develop an automated text/email system to the patient/caregiver's cell phone/computer at one week before the appointment as well as 24 hours before the appointment.

The dental office communication should emphasise the benefits of constant oral health vigilance, especially for patients who have suffered a major health event that precludes them from keeping their own oral hygiene routines, such as a stroke (**Figure 5**), depression, or dementia. The consequences of not keeping these appointments include the risk of rapid oral health deterioration with rampant caries and significant bone loss, especially for frail older adults. Rapid oral health deterioration can have devastating implications for the patient's oral and systemic health.

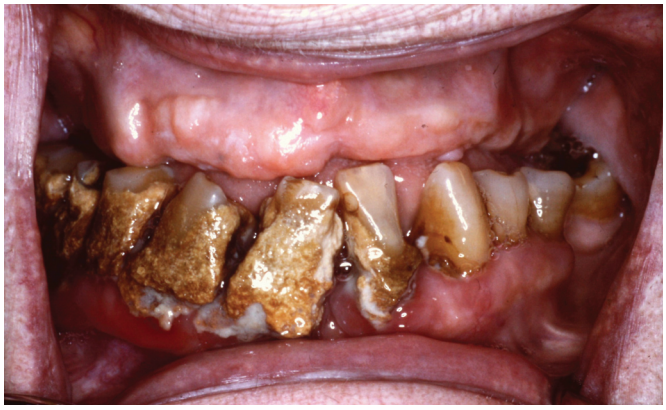

FIGURE 5: This 89-year-old widow is now living in a nursing home because of multiple health problems, including dementia, mental health issues, cardiac problems, and a stroke. She had not seen her dentist since her stroke. However, the nursing home staff noticed that she was not eating properly and was losing weight. An oral examination revealed that the right side of her mouth had not been cleaned, as she had lost the perception of her right side due to the stroke.

Teledentistry

Another methodology for communicating with the patient or their caregiver is the use of teledentistry, which became important during the Covid-19 epidemic. However, it does require prior communication and co-operation by the patient or their caregivers to schedule and accept a conference call. During the conference call, many aspects of the patient's health history and daily medication usage can be reviewed, which can prepare the dentist for a more productive use of time during their future in-office visit. For example, if a patient now needs pre-medication, this need can be identified during the teleconference, and the medication prescribed and taken prior to the in-office visit. For frail older adult patients who cannot tolerate long procedures, a teleconference can help to reduce the length of the in-office visit, which may be a significant barrier for these patients returning for regular dental care. Also, teledentistry has been shown to be useful for patients experiencing orofacial pain or for the diagnosis of oral lesions.[21]

Conclusions

The most common unmet healthcare need among older adults is oral healthcare. The greatest barrier to dental care for younger populations is the cost. For older adults, the barriers become more complex, and include lack of availability of and access to affordable care for many. There are multiple ways to improve older adults' attendance at the dental office, including the employment of case managers, reducing the patients' perception of disrespect, and using newer technologies, such as automated texts/emails with thoughtful language as reminders for dental appointments. Teledentistry can also be used, especially for frail and functionally dependent older adults, to improve the efficiency of in-person appointments.

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