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#### **Short Communication**

# Geriatric oral health: Challenges and strategies for improvement

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#### **Abstract**

Oral health is a crucial aspect of well-being in older adults, yet it remains neglected in geriatric healthcare. Aging is associated with an increased prevalence of dental caries, periodontal disease, tooth loss, xerostomia, and oral cancer. These conditions impact oral function and contribute to systemic diseases such as cardiovascular disease, diabetes, and respiratory infections. Despite its importance, barriers such as financial constraints, mobility limitations, and lack of awareness prevent many elderly individuals from receiving adequate oral healthcare. This short communication explores the challenges, systemic implications, and strategies for improving geriatric oral health. A multidisciplinary approach involving better healthcare integration and policy reforms is needed to enhance oral healthcare accessibility and education.

Keywords: Geriatric oral health, Periodontal disease, Systemic diseases, Elderly, Oral hygiene, Dental care.

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## 1. Introduction

As the global population ages, the burden of age-related health conditions, including oral health, continues to rise. According to the World Health Organization (WHO), oral diseases are among the most prevalent chronic conditions affecting older adults, yet they are often overlooked in public health policies. Common geriatric oral health issues include periodontal disease, dental caries, edentulism, xerostomia, and oral cancer, all of which significantly impact quality of life.

Beyond oral complications, poor oral health is linked to systemic conditions such as cardiovascular disease, diabetes, and pneumonia. Studies show that bacteria from periodontal infections contribute to systemic inflammation, increasing the risk of atherosclerosis and endocarditis.<sup>3</sup> Additionally, older adults with diabetes are more prone to periodontal disease, which can further disrupt glycemic control.<sup>4</sup> Despite these associations, oral healthcare remains a neglected component of geriatric medicine.<sup>5</sup>

Many elderly individuals also face barriers to dental care, including financial constraints, mobility issues, and cognitive impairments, making it difficult to maintain oral hygiene and seek professional treatment.<sup>6</sup> Moreover, a shortage of geriatric dental specialists further limits available care options.<sup>7</sup> This communication explores key oral health concerns in the elderly, their systemic implications, and strategies for improvement.

#### 2. Discussion

Periodontal disease is a leading cause of tooth loss among older adults and is associated with gum inflammation, bone loss, and tooth mobility.<sup>8</sup> Research also indicates a strong association between periodontitis and cardiovascular disease, as chronic gum infections contribute to systemic inflammation.<sup>9</sup> Contrary to common belief, dental caries is highly prevalent in older adults, particularly root caries, which occurs due to gingival recession and exposed root surfaces.<sup>10</sup> Reduced salivary flow (xerostomia) further exacerbates caries risk, as saliva plays a vital role in

\*Corresponding author: Sourya Kumar Email: sourya787025@gmail.com neutralizing acids and remineralizing enamel.<sup>11</sup> Tooth loss remains widespread among older adults. The WHO reports that nearly 30% of adults aged 65–74 years are completely edentulous.<sup>12</sup> Many elderly individuals rely on removable dentures, but poorly fitting prosthetics can cause oral sores, discomfort, and Xerostomia affects about 30% of individuals over 65 years old, commonly due to medications such as antihypertensives, antidepressants, and diuretics.<sup>13</sup> A lack of sufficient saliva increases the risk of oral infections, difficulty swallowing, and dental decay.<sup>14</sup> Older adults, especially those with a history of smoking, alcohol consumption, or HPV infection, are at higher risk of oral cancer. Unfortunately, delayed diagnosis due to infrequent dental visits leads to poorer treatment outcomes.<sup>15</sup>

- 1. The Impact of Oral Health on Systemic Diseases Several systemic diseases are linked to poor oral health: Cardiovascular Diseases: Periodontal bacteria contribute to systemic inflammation and an increased risk of atherosclerosis. Diabetes: Periodontal disease worsens insulin resistance and glycemic control in diabetic patients. Pneumonia: Inhalation of oral bacteria is a leading cause of aspiration pneumonia in nursing home residents. 16
- 2. Barriers to Oral Healthcare for the Elderly -Major challenges in accessing geriatric dental care include:
  - a. Financial limitations: Many elderly individuals lack dental insurance after retirement, making care unaffordable.<sup>17</sup>
  - Mobility challenges: Conditions like arthritis and Parkinson's disease make oral hygiene maintenance difficult.
  - Lack of dental-medical integration: Healthcare systems fail to incorporate oral health into routine medical checkups.<sup>18</sup>
- 3. Strategies for Improving Geriatric Oral Health Potential interventions for better oral health among the elderly include:
  - a. Integrating oral health screenings into routine primary care visits. Expanding public dental insurance programs for the elderly. Establishing mobile dental clinics for homebound seniors.

## 3. Conclusion

Oral health is a neglected yet critical aspect of geriatric healthcare. Periodontal disease, dental caries, edentulism, xerostomia, and oral cancer significantly affect older adults, leading to functional impairments, pain, and nutritional deficiencies. Furthermore, poor oral health contributes to systemic diseases such as cardiovascular disease, diabetes complications, and pneumonia.

To address these issues, healthcare policies must prioritize oral health, integrate dental care into primary care settings, and expand accessibility through mobile clinics and insurance programs. Implementing these strategies will lead to better health outcomes and improved quality of life for the aging population.

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#### 5. Conflict of Interest

None.

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