

Can We Achieve Integration of Oral Health Care and Medical Health Care?

Leonard B Goldstein*, Georgia Lymberopoulos and James F Keane

A.T. Still University, Mesa, AZ, USA

***Corresponding Author:** Leonard B Goldstein, Assistant Vice President for Clinical Education Development, ATSU Academic Affairs, A.T. Still University, Mesa, AZ, USA.

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Introduction

While both oral health and medical (systemic) health seek to enhance health and well-being, dentistry and medicine in the United States are isolated and separated from each other; both in education and services [1]. Both professions provide health promotion, disease prevention, routine services, as well as emergency care when necessary. Dentists generally focus on the oral cavity, and most primary care physicians (e.g., Family physicians, Pediatricians, Internists) are the initial point of contact, and will coordinate continuing care for the rest of the body.

In 2001, the Institute of Medicine published the landmark report titled “Crossing the Quality Chasm” regarding the fragmentation in care delivery as one of the major shortcomings of the health-care system in the United States [2].

Studies have shown that poor oral health is linked to chronic diseases such as diabetes, cardiovascular disease, obesity, and some cancers [3-6].

Poor oral health includes tooth decay (dental caries), periodontal (gum) disease and oral cancer; all of which can affect the quality of life for millions of Americans. Approximately one in four American children aged two (2) to five (5) years, 52% of children aged six (6) to eight (8) years, and 90% of adults aged twenty (20) to sixty-four (64) years, and 96% of adults aged sixty-five (65) or older experience dental caries [7].

While oral health is integral to general systemic health, segments of the U.S. population, including many adults with chronic conditions lack access to oral health care [8,9]. Poor oral health can diminish the quality of life by means of limiting the ability to eat healthy foods and impeding social interaction. Preventing dental disease among people with chronic conditions could improve health outcomes and save money. For instance, there is a lack of awareness of the link between periodontal health and pregnancy. There is evidence regarding a two-way relationship between gestational diabetes mellitus (GDM) and periodontitis where GDM adversely affects periodontal health, and periodontitis may have an adverse effect on GDM and maternal outcomes [10].

Primary care providers could play an important role in helping their adult patients with chronic conditions maintain oral health by educating them regarding the higher risk of dental disease, as well as the importance of prevention. Better medical-dental integration for whole person care can increase access to oral healthcare and improve health outcomes [11].

Patient care delivered in isolated silos has been the traditional model of care. However, interprofessional learning for health care professionals is an approach to education that is transitioning from education to practice. Past research has confirmed that overall health can be directly related to controlling both infection and inflammation within the oral cavity. Establishing a healthy oral environment is conducive to the overall health and well being of the patient [12-14].

Participation of both primary care physicians and dentists in continuing education programs can help address the issue of providing overall oral health and systemic health care by learning “with and from” each other, to work together to care for patients with oral health issues that influence overall health [15,16].

Dentists with the knowledge of how systemic health is affected by oral conditions can help create healthier patients. Having the awareness of how dental caries, periodontal disease, oral/periapical infections, sleep apnea, and oral biofilm may affect systemic inflammation will certainly be helpful in providing healthier patients [17,18].

Discussion

Evidence shows a strong link between the effects of chronic inflammation and general health. Periodontal disease has been linked to systemic disease; likewise, systemic disease can have an impact on oral health. This is especially pronounced in the institutionalized elderly due to the higher prevalence and incidence of oral disease. Oral health problems can have an adverse effect on the quality of life, and while more prevalent in older adults, they are not caused by aging.

Dental and medical providers value the role of oral healthcare in achieving optimal health and quality of life, and recognize that primary prevention is key to managing systemic diseases and requires collaboration and communication between medicine and dentistry [19]. With the fragmented health system, it is difficult to achieve efficient, high-quality ethical treatment for shared patients.

Strategies to integrate medical and dental care are diverse, and evaluations are primarily case studies and pilot level assessments. Integrated organizational changes between medical and dental services have not received system-level assessments comparable with those conducted in primary care and behavioral health [20].

Successful medical-dental integration (MDI) entails more than co-located clinics and enhanced referral programs. It requires organizational changes to engage a diverse workforce as well as changes to administrative and clinical practices. The presence of supportive policies, adequate resource allocation, and local strategic leaders who can enhance implementation and an integration strategy. Conversely, the lack of political will and interdisciplinary education, combined with implementation challenges can hinder MDI [21,22].

These significant barriers to effective medical-dental integration, including the lack of infrastructure to support physician referrals for early dental care, low comfort levels on the part of general dentists in delivering care to children under two (2) years of age, and low rates of Medicaid acceptance among dentists [23]. One strategy for reducing integration barriers involves co-locating medical and dental providers in primary care settings [24,25]. However, co-location does not guarantee an inter-professional approach to the delivery of oral health services in primary care settings, and effective service integration that is patient centered and reduces disparities [26,27]. Extraordinary achievements in science have created health solutions that could not have been imagined a few decades ago, and yet we remain challenged in our attempts to make these solutions available to everyone. In oral health, as in any area of health, realizing the full potential of scientific and technological innovation requires addressing inequities in the experience of health and disease, and pursuing the means to prevent, as well as treat illness. To do so, necessitates understanding of biological catalysts of disease as well as other factors operating at individual, family, and societal levels to mediate our experiences and our responses to oral disease.

Successful MDI require gathering support from medical and dental teams, along with leadership advocacy for systematic changes. This necessitates a concentrated effort to identify gaps, facilitate care coordination, advocate for health information exchange, and integrate payment systems [28].

Conclusion

As all health education programs begin to integrate dental education, and dental schools integrate more medical education, the future is bright for the continued integration of oral health care and medical health care.

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