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# Narrative Review

# Trends in oral health care for vulnerable and underserved population: A narrative review

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#### **ABSTRACT**

**Background:** Vulnerable and underserved populations are known to have higher levels of untreated oral diseases and are faced with a disproportionate burden of oral health care despite the progress made in advancing oral health care globally. The purpose of this review is to appraise the oral healthcare for the vulnerable and underserved population and present information on the trends in oral health care for these groups.

**Methodology:** A literature search was done using available databases and electronic sources using terms such as 'trends in oral health care', 'oral health care for vulnerable population', and 'oral health care for underserved population'. The reference lists and bibliographies of the articles

found through database searches were also examined and reviewed for additional articles.

**Results:** From the search, 93 articles were found and only 23 constituted the final sample. It can be said that most studies focused on improving access to oral health care for vulnerable and underserved population.

**Conclusion:** Despite the fact that various efforts have been made to improve the oral health care for vulnerable and underserved population, a lot still needs to be done in the face of numerous challenges especially in developing countries.

**Keywords:** Oral health, Oral healthcare, Trends, Underserved population, Vulnerable population

## INTRODUCTION

# **Background**

Oral health has been considered an integral part of general health and even though there has been a substantial improvement in the oral health of populations, a huge difference exists in the oral health of vulnerable and underserved populations compared to the general population. Vulnerable populations are persons who are at a higher risk of disparity in health care due to their general condition or state such as being a member of ethnic, religious or linguistic minorities, children, elderly, socioeconomically disadvantaged, underinsured or those with certain medical conditions.<sup>2</sup> Underserved populations are persons that receive less than adequate healthcare services due to social, economic, cultural, and/or linguistic barriers to accessing healthcare services, lack of familiarity with the healthcare delivery system, and living in locations where providers are not readily available or physically accessible<sup>3</sup>. The term vulnerable is often used interchangeably with underserved. While underserved populations have limited access to health care services, the vulnerable tend to experience additional barriers to getting care.<sup>3</sup>

The oral health care system is an arrangement that combines the patients with the service provider. It includes a combination of the organization's flows of finance, workforce training and structure, laws, regulations and accepted practice which are aimed at improving the oral health of individuals and the community. The vulnerable and underserved population have been shown to carry a disproportionate burden of oral health problems. Among the leading causes of this oral health disparity is the issue of access to dental care services and several barriers to dental care access have been identified. These barriers include lack of coverage including limited scope of benefits and

gaps in financial protection, high health care costs, inconsistent sources of care, low health literacy, lack of reliable transportation or other difficulties physically accessing provider's offices, and lack of available providers<sup>3,7</sup>

The purpose of this review is to appraise the oral healthcare for the vulnerable and underserved population and present information on the trends in oral health care for these groups.

#### **MATERIALS AND METHODS**

The original search was done through electronic database PubMed, Google scholar and World Health Organization (WHO) sites using search terms such as 'oral health care for vulnerable population', 'oral health care for underserved population', 'trends in oral health care'. The reference lists and bibliographies of the articles found through database searches were also examined and reviewed for additional articles.

#### RESULTS

A total of 93 articles were found and only 23 constituted the final sample. It can be said that most studies focused on improving access to oral health care for vulnerable and underserved population.

# **DISCUSSION**

Generally, oral healthcare has shown several trends aimed at improving oral health and this includes moving from curative to preventative care, technological advancement, integration of oral health in to general health and universal health coverage.<sup>8</sup> But disparities still exist among the

vulnerable and underserved population which led to development of some oral health care interventions directed at this populations discussed below.

#### Oral health care interventions

Several policies and models have been put forward to address the issues affecting vulnerable and underserved population and access to the oral health care system.

One of the resolutions by the United Nations general assembly in 2015 on sustainable development goals urged countries to achieve universal health coverage and access to quality health care for all including the vulnerable. Primary health care has been considered the most efficient and cost-effective way to achieve universal health coverage and access to essential health care around the world and it has been identified as a suitable path for reaching the most vulnerable groups. 10

The World Dental Federation (FDI) in a policy statement, presents a vision for access to adequate oral healthcare for underserved and vulnerable populations throughout the human life cycle. This policy statement encourages oral health advocates and dental professionals to act on behalf of underserved and vulnerable populations and to take the necessary steps to improve access to oral healthcare, reduce oral health inequity, address oral health illiteracy, promote the concept of Universal Health Coverage and improve oral health.<sup>11</sup>

Improving access to oral health care has been considered as a critical and necessary first step to improving oral health outcomes and reducing disparity among these populations.<sup>12</sup> To accomplish this, the problems surrounding access to oral health care must be identified and correctly framed before progress can be made in delivering

more widespread, easier access to quality dental care. Other important aspects are integration of oral health into general health, financing of oral health care for the vulnerable and underserved and a better workforce in an array of settings. 12

The traditional office and clinic-based oral health delivery system is failing to reach a large and increasing segment of the population including the vulnerable and underserved. 13 Recent systems aim to deliver oral health care through innovations in the workforce and in the delivery of care in nontraditional settings. These new methods include delivering oral health services in nontraditional settings, using non-dental professionals, expanded roles for existing dental professionals and new types of dental professionals, incorporating telehealth technologies, 13,14 and more recently the use of artificial intelligence.15 Dental safety-net clinics have been developed that incorporates some of these new methods of oral health care delivery across countries in Europe and America <sup>16</sup> The need for strengthening health promotion programs with emphasis on prevention in order to improve oral health conditions has also been suggested.

#### **Outcomes of interventions**

Primary health care which has been regarded widely as the most inclusive, equitable and cost-effective way to achieve universal health coverage. However, integration of oral healthcare into primary health care is still suboptimal globally.<sup>17</sup> Dental safety-net clinics have also been identified as a viable model for helping low-income and other underserved patients get the care they need,<sup>16</sup> but they continue to face workforce challenges. Providing greater access to affordable care is imperative to improving oral health, especially among poor populations.<sup>6</sup>

# CONCLUSION/ RECOMMENDATIONS

Despite the fact that various efforts have been made to improve the oral health care for vulnerable and underserved population, a lot still needs to be done in the face of numerous challenges especially in developing countries. The place of improving access to oral healthcare for these population cannot be over emphasized as it forms the bed rock for oral healthcare.

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