

Review Article

Population and oral health-A systematic review

¹Awad Mohammad Alanazi, ²Hussain Ali Alanazi, ³Aminah Mahdi Aldhafeeri, ⁴Adel Alshaqawi Alshammari

¹⁻⁴Saudi Arabia – Eastern Province – Hafar Albatin, Work in Ministry Of Health

ABSTRACT:

Aim: The purpose of the present review is to study the association between population and society at large and oral health in general. **Methodology:** MEDLINE articles published between 1980 and June, 2022. Original research articles on parents' oral health behavior were reviewed. A total of 218 citations were retrieved, and 13 articles were included in the analysis. The studies were eligible for review if they matched the following inclusion criteria: (1) they evaluated a possible association between oral diseases and individuals' oral health related behavior, and (2) the study methodology included oral clinical examination. Furthermore, original articles, reviews, and chapters in textbooks were also considered. The main search terms were "oral health", "society", "health knowledge", and "dental caries". 13 experimental studies contributed data to the synthesis. Original articles, reviews, and chapters in textbooks were also considered. **Results:** Studies suggested self-care practice, described epidemiological studies related to health promotion in a particular population group. **Conclusion:** Oral health education programs aimed at preventive actions are needed to provide individuals not only with adequate oral health, but better quality of life. Special attention should be given to the entire family, concerning their lifestyle and oral health habits.

Keywords: oral health, epidemiology, dental caries, prevention.

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Corresponding author: Awad Mohammad Alanazi, Saudi Arabia – Eastern Province – Hafar Albatin, Work in Ministry Of Health

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INTRODUCTION

Individual's habits and knowledge about oral health have been found to influence their society and population's oral health status.¹⁻³ Children with poor oral health habits are more likely to develop dental caries when compared with those who have favorable habits.⁴⁻⁶ Moreover, low socioeconomic status of the family⁷⁻⁹ and parents' poor oral health habits^{1,10} have also been found to contribute to the development of dental caries. In addition, other factors such as gender¹¹ and multiple levels of influence, including time or developmental dimensions,¹² have been observed. Since oral hygiene is essential to oral health, it is wise to provide the population with adequate guidelines on children's oral health behavior and its relationship with dental caries. It is helpful to address the factors that influence children's oral health in order to develop and implement complementary public health actions focused on children and parental behaviors, in an endeavor to provide them with good oral health and better quality of life. Clearly, family environments encourage

healthy choices and lifestyles. Ideally, dental professionals should inform individuals of the influence that their dental health behaviors and attitudes might have on their society's oral health, including the benefits of oral care, oral health educational programs, and other dental-health-related issues.¹³ The idea behind motivating both the individual and community must be understood. Individuals at the highest risk of caries with the lowest motivation are the most difficult patients to work with during the practice of oral health education. The key concept of the health promotion approach is the empowerment of individuals. This strategy should be implemented in order to improve the individual's control of his/her life. Nevertheless, changing people's behavior and getting them to maintain it is a great challenge to health professionals. Poor parental oral health behaviors are likely to be caries predictors for their children. Therefore, all aspects associated with the family's process of acquiring and maintaining good oral health behaviors are aspects with an impact on pediatric dental health care. Shared decision-

making functions as a favourable communication tool between professionals and patients in health care. Efforts to listen, family dialogue, and evaluation of family resources are important factors, and contribute enormously to this interaction. Furthermore, the dental staff should listen carefully to family members in order to provide them with adequate guidelines on dental care and oral health-related habits.¹⁴

AIM OF THE PRESENT STUDY

The purpose of the present review is to study the association between population and society at large and oral health in general.

METHODOLOGY

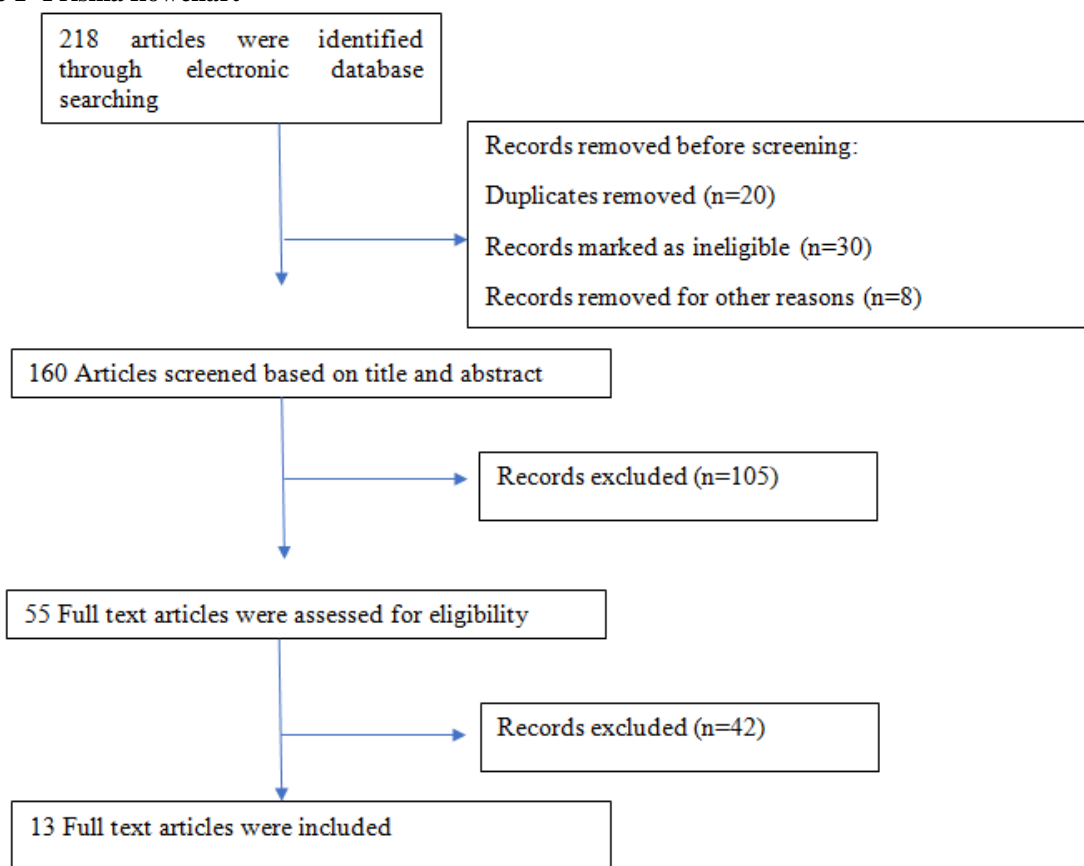
The authors searched the MEDLINE database for articles published from 1980 to the end of June 2022, supplemented by manual searching of the references from each relevant article identified. The studies were eligible for review if they matched the following inclusion criteria: (1) they evaluated a possible association between oral diseases and individuals' oral health related behavior, and (2) the study

methodology included oral clinical examination. Furthermore, original articles, reviews, and chapters in textbooks were also considered. The main search terms were "oral health", "society", "health knowledge", and "dental caries". A total of 218 records were originally retrieved. Two reviewers selected and reviewed the articles. First, each reviewer independently selected the articles based on their abstracts and checked their contents. Then, they looked for articles without abstracts. An agreement of 100% was obtained between the two reviewers. A consensus was reached regarding the studies that fulfilled the inclusion criteria (13 articles), and which were included in this review.

RESULTS

Of the 13 studies that met eligibility criteria (Table 1), eight related to individuals' self-care practice, five described epidemiological studies related to health promotion in a particular population two described the influence of individuals' socioeconomic status on society's oral health; and two associated with dental caries.

Table 1- Prisma flowchart



DISCUSSION

Successful preventive actions against oral diseases involve environmental modifications and development of strategies that enable people to choose a healthier lifestyle by creating resources that guide them to a more active and productive life, resulting in good health status,

and consequently, a satisfactory quality of life.¹⁴ Reducing inequalities in oral health continues to be the greatest dental public health challenge. Individuals at the top of the social hierarchy experience better health conditions than those in the lower social hierarchy. This social gradient is constantly associated with minor illnesses and causes of death, affecting all

age groups, genders, races, and countries.¹⁵ When considering these oral health inequalities, an effective approach is necessary in order to identify and understand the fundamental causes of dental caries. According to public health studies, biological, psychosocial, behavioral, environmental, and political factors are observed to be the cause of dental diseases. Social determinants of oral health inequalities undoubtedly have some influence on oral health; however, the broader background that determines patterns of behavior must be deeply analyzed in order to create a social environment that supports good oral health habits. The development and implementation of satisfactory public health actions at different levels (local, national, and international) are essential for health promotion. A longitudinal component is needed to measure the influence of time and the elements related to oral health at a variety of levels — individual, family, and community.¹⁷ Complementary public health approaches, such as strategy development, organizational change, community action, and legislation, focusing on both individuals and communities, not only on high risk individuals, would help to prevent oral diseases and to promote good oral health.

CONCLUSION

Oral health education programs aimed at preventive actions are needed to provide individuals not only with adequate oral health, but better quality of life. Special attention should be given to the entire family, concerning their lifestyle and oral health habits. Therefore, a more soundly based health educational program involving all family members is needed to provide society as a whole with adequate guidance on how to maintain the oral health.

AUTHORS CONTRIBUTION

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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