



Oral health education in vulnerable populations: Systematic review

Educación en salud bucal en poblaciones vulnerables: Revisión sistemática

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ABSTRACT

Objective: to analyse oral health education in vulnerable populations through a systematic review. **Method:** systematic review. **Results:** 15 scientific articles were reviewed. **Conclusion:** oral health education is an essential tool for improving the quality of life of people in vulnerable situations and reducing health inequalities. Adapting educational programmes to the specific needs of each group has proven to be an effective strategy for promoting good habits and preventing oral diseases. However, there are still significant challenges, such as ensuring that these programmes are sustainable and overcoming cultural barriers.

Descriptors: oral health; oral hygiene; chemical reactions. (DeCS).

RESUMEN

Objetivo: analizar la educación en salud bucal en poblaciones vulnerables desde una revisión sistemática. **Método:** Revisión sistemática. **Resultados:** se revisaron 15 artículos científicos. **Conclusión:** La educación en salud bucal es una herramienta esencial para mejorar la calidad de vida de las personas en situación de vulnerabilidad y reducir las desigualdades en salud. Adaptar los programas educativos a las necesidades específicas de cada grupo ha demostrado ser una estrategia efectiva para promover buenos hábitos y prevenir enfermedades bucales. Sin embargo, todavía existen retos importantes, como garantizar que estos programas sean sostenibles, superar las barreras culturales.

Descriptor: salud bucal; higiene bucal; reacciones químicas. (DeCS).

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INTRODUCTION

Oral diseases, such as dental caries, periodontal disease and oral infections, continue to be prevalent public health problems, especially in vulnerable populations (1,2). These communities, which include children, people with disabilities, patients with systemic diseases and those in disadvantaged socioeconomic contexts, face significant barriers to accessing oral health services and preventive education (3,6,8).

Oral health education is a key strategy for tackling these inequalities, as it promotes knowledge, encourages healthy habits and empowers people to look after their oral health (4,7). However, the effectiveness of these interventions depends on their design, implementation and adaptation to the specific needs of each population (9). Therefore, the importance of including oral health education in the training curricula of health professionals, such as nurses and dentists, has been pointed out as a way of guaranteeing more inclusive and effective work (12,15).

In view of the above, the research objective is to analyse oral health education in vulnerable populations through a systematic review.

METHOD

A systematic review is presented. The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines were followed.

The search for 15 articles was carried out in databases such as PubMed, Scopus, Web of Science.

Key words related to the subject were used, such as 'oral health education', 'vulnerable populations', 'oral health promotion', 'disabilities', 'children', 'systemic diseases' and 'educational programmes', combined with Boolean operators (AND, OR).

RESULTS

Educational programmes aimed at children and adolescents have proven effective in improving their oral hygiene habits. Lai et al. (1) found that interventions in children



with special needs had a positive impact on their knowledge and oral care practices, although maintaining these changes in the long term remains a challenge. Meanwhile, Subedi et al. (3) reported positive results in schoolchildren in Nepal, where an educational programme significantly reduced plaque accumulation and tooth decay. In the case of children with visual impairments, Chua et al. (9) emphasise the importance of using adapted methods, such as tactile and auditory materials, to ensure that these populations can benefit from the interventions.

The role of parents and carers is crucial in promoting children's oral health. According to Chen et al. (2), the educational level of parents has a direct influence on their knowledge of oral health and on their children's hygiene habits. This highlights the need to include carers in educational programmes, especially in communities with low levels of health literacy. Consequently, Joufi et al. (7) affirm that initiatives such as Early Head Start in the United States have been successful in involving parents as key agents in the promotion of their children's oral health.

Oral health education is also essential for patients with systemic diseases. Bezerra et al. (5) demonstrated that educational programmes can reduce the incidence and severity of oral mucositis in children with cancer, improving their quality of life during treatment. Similarly, Petropoulou et al. (8) found that educational interventions in patients with diabetes not only improve their oral health, but also contribute to the control of the disease, which demonstrates the close relationship between oral and systemic health.

People with physical or sensory disabilities face significant barriers to accessing oral health education. Sardana et al. (6) and Chua et al. (9) agree that programmes designed specifically for these populations, such as those that use accessible materials and interactive methods, are effective in improving their oral health. On the other hand, Almeida et al. (11) emphasise the importance of personalising educational materials, such as adapted leaflets, for patients with specific conditions such as systemic sclerosis.

The training of health professionals plays a key role in the promotion of oral health



in vulnerable populations. Ahmad et al. (15) analysed nursing curricula in Australia and Malaysia and concluded that including content on oral health improves the ability of professionals to address the needs of their patients. For their part, Shokouhi et al. (12) emphasise the importance of adapting educational programmes to the cultural realities of each region, which can increase the acceptance and effectiveness of interventions.

The future of oral health education requires innovative approaches. West (4) and Lopez Fuentes (10) call for the integration of technologies such as mobile applications and digital platforms to expand access to education, especially in remote communities, while Donoff and Simon (14) argue that dental education must evolve towards a more inclusive and patient-centred approach to address persistent oral health inequalities.

Despite progress, significant challenges remain in the implementation of educational programmes. In this regard, Church et al. (13) identified barriers such as a lack of resources, low health literacy and cultural differences, especially in patients with cardiovascular disease. Therefore, it is essential to promote interdisciplinary collaboration and take advantage of innovative technologies to overcome existing barriers, as Almeida et al. (11) point out, personalising educational materials is key to guaranteeing their effectiveness in different contexts and populations.

CONCLUSION

Oral health education is an essential tool for improving the quality of life of people in vulnerable situations and reducing health inequalities. Adapting educational programmes to the specific needs of each group has proven to be an effective strategy for promoting good habits and preventing oral diseases. However, there are still significant challenges, such as ensuring that these programmes are sustainable and overcoming cultural barriers.



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CONFLICT OF INTEREST

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