

Dental Volunteerism: Is the Current Model Working?

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Oral health has been recognized as a basic human right by numerous dental and public health organizations internationally. Yet more than 70% of the world's population, mostly in low- and middle-income countries, are in need of appropriate and affordable oral health care.¹ Some factors that contribute to poor oral health include a lack of resources, oral hygiene habits, oral health education and accessible oral health care.² Driven by compassion and a desire to help, many dentists and students work with dental non-governmental organizations (NGOs) to provide care in these countries. However, while volunteerism is admirable, the traditional aid model often involves short-term missions that focus on a curative approach, which is not always appropriate, holding little or no long-term benefits.³ Since its adoption by the World Health Organization (WHO) in 1978, many aid programs in low- and middle-income countries have begun to follow the principles of the primary health care (PHC)

model, which are: equity, prevention, appropriate technology, community participation and intersectoral collaboration.¹ PHC aims to promote simple curative and preventive care that is efficient and sustainable and that complements the host country's health system.¹ Unfortunately, this model of care has not been actively adopted by dental NGOs.¹ In light of the growth of dental volunteerism, it is important to revive the discussion on the limitations and potentially harmful effects of the current aid model.

This article highlights the problematic aspects of the current model of dental volunteerism as identified in key papers, and reviews the WHO's basic package of oral care (BPOC) which can be used by dental NGOs to provide care within the PHC framework.¹

Quality assurance and performance control

Despite having good intentions, dental volunteers may do more harm than good when there are no effective systems for quality assurance and performance control.⁴ Analysis of data on dental NGOs shows that quality assurance is not a major area of focus among many groups and that even when there is some kind of protocol for quality control, it is generally limited and incomplete.⁴ In one study, 4 out of the 32 organizations surveyed had no measures for quality control.⁴ This is alarming since dental volunteers can include students with no or inadequate dental training, and dentists who may be practising beyond their abilities.



Enforceable standards may be necessary to monitor clinical procedures and educational programs so that the standard of care is high in host countries. The study also revealed a significant lack of research awareness.⁴ The majority of dental NGOs have never received scientific advice, and two-thirds of these groups felt it was unnecessary to seek out scientific support.⁴

Lack of sustainability

A major limitation of the traditional volunteering approach is that host countries do not benefit in the long term, as there is often no strategic plan for transition to self-reliance.¹ Currently, most dental NGOs visit for a few weeks and emphasize curative treatments such as restorations.⁵ This model, centered on the dentist, is an unrealistic option for many developing countries.⁶ Many do not have enough dental professionals to continue treating patients after the volunteers leave and the curative approach is generally too expensive to be adopted by local health care systems.⁵ For instance, there is on average 1 dentist per 1 100 people in Norway, whereas in Ethiopia there is 1 per 1 200 000 people.⁷ Because of a lack of dentists, many developing countries depend on non-dentist professionals (e.g., dental workers or therapists) to deliver basic treatment and services.⁶ In addition, an assessment of the cost of treating caries in children in developing countries with amalgam restorations (\$US 1 618–3 513 per 1 000 children) shows that the current curative model is too costly for many of these nations, where even basic health services like educational programs and immunizations are luxuries available to few.⁵ Supporters of the traditional approach argue that people of low-income countries have the

right to high quality dentistry.⁵ This argument, however, fails to address the root problem of resource limitations,⁸ and encourages forcing an unsuitable, short-term approach to a developing world context. It also raises the question of whether it is ethical to continue to follow a model of care that provides little to no tangible long-term benefits.

Disregarding local health systems and creating NGO dependence

Another disadvantage of the traditional dental NGO strategy is the lack of integration into the existing local health system.¹ Most of the current volunteer missions are short term and focus on volunteers' efficiency and productivity, instead of trying to understand the host community's capacities and limitations, in order to complement the local health care structure.⁶ This can undermine the host community's own oral health strategies.¹ For instance, in Mozambique, dentists have noted a decrease in patients after the departure of international volunteers, as the entertaining educational seminars and modern treatments are discontinued.⁶ Patients also request that practitioners use similar equipment and materials that volunteers provide, such as topical anesthetics and modern scalers.⁶ When local dentists cannot meet these expectations, patients may view these professionals as being inferior in quality and decide to wait for volunteers from other nations.⁶ Further, when dentists in developing countries become unhappy with their situation, they may leave their home countries.⁶ This 'brain drain' has been seen in nursing and medicine and has been a major problem in sub-Saharan Africa.⁶ While treatment provided

by NGOs is a high priority in areas where there is no existing system of oral health care, the end goal should be to empower the host community's health care structure and contribute toward training local health care providers.⁹

A guide for change: WHO basic package of oral care

Dr. Sam Thorpe, former WHO regional advisor for oral health, has stated that traditional approaches to advancing oral health have not been successful in developing countries because they are modeled on that of wealthy countries and fail to address the needs of resource-poor countries in their context.⁷ In order to address such limitations, NGOs need to reorient their aid programs to more affordable and sustainable solutions that can be integrated into the host community's health care system. The BPOC is one possible way to guide NGOs toward more appropriate interventions.¹ It is designed to provide simple and effective preventative care and oral treatments that are less technique-dependent and involve the local community.¹ The BPOC is comprised of oral urgent treatment (OUT), affordable fluoride toothpaste (AFT) and atraumatic restorative treatment (ART).¹ OUT includes basic emergency treatments such as extractions, first aid for infections and trauma and referral of complicated cases.⁷ AFT aims to develop fluoride toothpaste that is affordable and promotes oral hygiene education.⁷ ART involves removing caries and restoring teeth using hand instruments only, without water or electricity.⁷ The principal restoration material used is fluoride-releasing glass ionomer.¹ Only a few instruments are used—saving on costs—and without the requirement of water and electricity, dental services

can be more mobile.¹ The most significant advantage of the BPOC is that it involves training local dental auxiliaries and other primary health care workers to become ‘BPOC-proficient’¹⁰ and continue to provide care after a NGO’s departure.⁷ Volunteer missions aimed at promoting BPOC are seeing success in many developing countries.¹⁰ Studies have noted increases in preventive mobile dental systems, oral health education incorporation into science and health education curriculums, and most importantly, cavity-free children.¹⁰ With the United Nations recognition of oral diseases as a major public health problem in 2011, and with the committing of governments to address the increasing burden of oral diseases,¹¹ it is important that dental NGOs understand the implications of the current aid model and start evolving toward one that takes into perspective the host countries’ realities. ♦

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