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Applying the Brocher Declaration to short-term experiences in global health in dental education

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Participating in Short-Term Experiences in Global Health (STEGHs) has become an increasingly popular way for dental students to learn about the global burden of disease and health inequalities by traveling to a low-income community. However, there is little information available in the dental education literature providing guidelines on best practices for STEGHs. Often little is known about the local dental practice laws and ethics guidelines. One useful resource is the Brocher Declaration. The Brocher Declaration, created by the Advocacy for Global Health Partnerships (AGHP), is a comprehensive document outlining best practices for developing ethical and sustainable global health partnerships. The six guiding principles are: (1) mutual partnership with bidirectional input and learning, (2) empowered host country and community-defined needs and activities, (3) sustainable programs and capacity building, (4) compliance with applicable laws, ethical standards, and code of conduct, (5) humility, cultural sensitivity, and respect for all involved, and (6) accountability for actions. The principles of the Brocher declaration can serve as a foundation for ethics and sustainability and can be easily applied to STEGHs in dental education. The authors present a set of recommendations specific to each principle to guide dental schools in offering STEGHs to their students. Participating in STEGHs represents a unique opportunity for students to learn about the global burden of oral disease, its risk factors, and the population and public health strategies to reduce oral disease in diverse populations. When done ethically, they may serve as a spark for students to become future leaders in global health.

KEYWORDS

public health, oral health, dental education, STEGHs, ethics

Introduction

It is estimated that 3.5 billion people are affected by oral health diseases globally, making it the most prevalent non-communicable disease (Watt et al., 2019). Reducing the prevalence of such a widespread disease requires innovative solutions in public health workforce development. This may be accomplished by designing formative programs that take place during dental education to improve students' public health skillset. Experiences for dental students that focus on the burden of oral disease, population health and oral health promotion are common among dental schools and include both didactic and experiential learning programs carried out both locally and abroad (Ballweg et al., 2011; Woodmansey et al., 2017; Lambert et al., 2020; Shick

et al., 2021). Participating in global health activities is popular among dental students and fosters critical thinking when tackling global health problems. Known as Short-Term Experiences in Global Health (STEGHs), they usually involve short-term dental student and faculty travel for less than 3 weeks to a Low-or Middle-Income Country (LMICs) or any community outside of the dental school. One study conducted in 2016, showed that approximately 65% of US Dental Schools offer STEGHs to their students (Woodmansey et al., 2017).

Developing a fit-for-purpose STEGH program involves several components that must come together harmoniously to ensure these programs are effective for both the participating students and the host community (Lasker, 2016). Another complicating factor is that there is little to no monitoring and standard setting for these programs, as no one professional entity holds legal jurisdiction over STEGHs (Rowthorn et al., 2019). There is a paucity of information available to inform dental schools about global health best practices. The American Dental Association's Code of Ethics is an open access resource outlining best ethical practices in dentistry and these may be applied to STEGHs for dental students (Shick and Woodmansey, 2020; ADA, 2023). Many professional groups and individuals have developed proposed guidelines, although there is no enforcement of these recommendations. Importantly, the host country's Code of Ethics and dental practice laws, if available, must be observed.

Another recently developed resource is the Brocher Declaration (Prasad et al., 2022). In 2017, a network of leaders from academic, faith-based, NGO and corporate backgrounds, including oral health representatives, was created to address the need for a unified response to deficiencies in the programs for volunteers and students in global health. This network came to be known as Advocacy for Global Health Partnerships (AGHP), and it has been working to raise awareness about ethical and sustainable practices. In 2020, AGHP, in consultation with a wide diversity of global health practitioners, developed the Brocher Declaration, a statement of six principles that has been endorsed by over fifty organizations worldwide.

The practice of dentistry in global environments coupled with student participants presents a myriad of unique challenges not always encountered by other health professions and requires careful consideration. The aim of this publication is to present the original Brocher Declaration principles and provide recommendations for how they may be applied to STEGHs in dental education by faculty and students as well as by host partners.

Principle 1: Mutual partnership with bidirectional input and learning

Health care varies greatly in terms of diseases, cultural and social determinants of health, languages spoken, clinical protocols, as well as political and economic conditions. This often leads to misalignment of short-term global health activities with the host country workforce and health priorities. Global health engagement should emphasize mutual partnership and bidirectionality, recognizing the expertise and experience of host country health professionals.

- a. Before initiating any global health work, a strong relationship with a local partner must be established based on mutual respect for everyone's ideas related to the oral health program. It often takes time to develop a trusting relationship where both partners have an equal voice and opinion defining program

goals, objectives, design, implementation, monitoring, and evaluation.

- b. Discussions should include bi-directional input between the dental school and the host partner. If cultural or language barriers exist, these must be addressed to ensure everyone involved has equal participation and understanding.
- c. Discuss each partner's strengths, weaknesses, overall program goals, and what each partner can contribute to the program. This will include both financial and human resources.
- d. A needs assessment should be included in a pre-program site visit and incorporated into the designing of program implementation.
- e. Ensure all participants go through pre-departure training, addressing what it means to be a visiting volunteer working within a foreign healthcare system.
- f. Together with all partners, draft a program report and include any data collected. Ensure each involved partner agrees to the language used, the data reported, and the next steps for continued care.

Principle 2: Empowered host country and community define needs and activities

When short-term global health engagements are based on perceived needs or available skills, they can undermine the local voice while diverting much needed funds and efforts away from real needs, along with placing added burden of accommodation and safety on host communities. This can be exacerbated by power differentials between people in high-and low-income countries. The host country should drive the agenda for healthcare work. This begins with empowered host communities who understand specific needs for health care and indicate the activities that would lead to sustained health improvement. Special emphasis should be placed on the social determinants of health and the relevant Sustainable Development Goals (SDG).

- a. STEGH programs should be developed because a host partner wants the dental school's partnership and collaboration, not because the dental school wants to travel to a certain location for educational, humanitarian (and possibly tourist) activities. Host partners should communicate what type of program will be most helpful to them and their community. For example, direct dental care, prevention, education/training, research support, or make it clear if a proposed program is not a priority.
- b. Ensure that any help with travel, logistics, transportation and accommodation for the dental school team is not an imposition, burden or drain of host partner resources.
- c. STEGHs should use the social and commercial determinants of health, the United Nations Sustainable Development Goals, and the World Health Organization's Global Oral Health Action Plan as a backdrop to improve population and individual health (Peres et al., 2019; Global Oral Health Action Plan, 2023; United Nations Sustainable Development, 2023).
- d. Ensure final programming decisions are made by the host community.
- e. If the host partner is not a local dental school or oral health organization, consider asking the host partner if it is appropriate to include any local oral health professionals or dental schools in the region/country.

Principle 3: Sustainable programs and capacity building

Global health programs should aim at capacity building within local communities such that important health needs are met and strengthened. This is possible when programs have sufficient input from the local communities and are committed to long-term healthcare development and sustainability. The overarching goal should be one of strengthening health systems rather than providing unsustainable alternatives.

- a. A full understanding of the host community's health and oral health care system, systems of oral health education, and Universal Health Coverage is the first step in program development.
- b. Identify long-term sustainability goals with the host partner. If there are no local oral health providers in the area, discussions may be held with doctors, other health care professionals, or community leaders.
- c. Identify oral health promotion activities that can be carried out by host professionals and community members rather than the visiting dental school team to improve long-term sustainability.
- d. Programs aimed at improving oral health systems, for example partnering with local Non-profit Organizations, Non-governmental Organizations or dental schools, should be encouraged.
- e. If offering direct dental care, consider The Basic Package of Oral Care document as a useful guide (Frencken et al., 2002; Helderman and Benzian, 2006). Minimally invasive preventive and dental treatments may be included as a cost-effective way to address population health (Slayton et al., 2018).
- f. Community interventions such as the global Water, Sanitation and Hygiene program (WASH) program or School-Based Oral Health programs may be easier to implement and continue by the host partner (Benzian, 2010; Jürgensen and Petersen, 2013; Duijster et al., 2017).

Principle 4: Compliance with applicable laws, ethical standards, and code of conduct

Quite often, short-term engagements do not consider the existing legal framework in the host country. Clinical care has been framed within the context of the classic bioethical principles of autonomy, justice, beneficence, and non-maleficence. Engaging in global health activities requires entities to consider other ethical principles including social justice, social contract, and utilitarian principles. Short-term global health partnerships must establish and abide by common quality principles and legal requirements.

- a. Perform due diligence researching and abiding by the host country's code of ethics, dental practice laws, licensure requirements, and scope of practice for licensed dentists and dental students from other countries. Be aware that some restrictions of scope of practice for dental students may exist.
- b. If no host country code of ethics or dental practice laws are available, consider using those of the visiting dental school's country.

- c. Other ethical and legal considerations include: gold standard processes of disinfection and high-pressure steam sterilization, having radiographic (X-ray) capability to properly diagnose and treatment plan, using materials and supplies that are not expired, and transparent importation of materials, supplies, instruments, and medications in and out of the host country.
- d. Informed consent for treatment including various treatment options should always be obtained using the appropriate language and education level of the patient to ensure understanding.
- e. While HIPAA is applicable in the U.S., it may not be in other countries. However, respect for a patient's confidentiality is still important. This includes obtaining consent and permission to take and use photos. Be mindful of this particularly when hoping to use photos on dental school websites, materials, or personal and professional social media.
- f. Consider drafting a Memorandum of Understanding (MOU) between all parties involved in the partnership prior to starting any work.

Principle 5: Humility, cultural sensitivity, and respect for all involved

International health volunteers and the organizations that coordinate their work often have motivations other than contributing to the health of people in host communities. These experiences can be seen as privileged volunteers gaining social capital at the expense of disadvantaged host communities. To alleviate this dynamic, those participating in short-term engagements must respect the culture, history, strengths, and limitations of the communities they are visiting, while simultaneously recognizing the limitations of their cursory understanding as non-members of the community.

- a. Dental school STEGH teams should be prepared by receiving robust pre-departure training about the host country's history, local culture, customs, traditions, economy, political system, health care system, geography, environment, religions, socioeconomic status of the population, predominant social determinants of health, and languages spoken. The role of student as guest and learner should be emphasized over any depiction as a helper.
- b. Every effort must be made by the STEGH team to work seamlessly within the local health care system with the understanding that provision of dental care varies greatly between countries and even within communities.
- c. Dental schools may choose a selection process to ensure that students participating in STEGHs are motivated to serve in a self-less and humble capacity rather than for self-serving reasons.

Principle 6: Accountability for actions

The overall emphasis of global health engagements should be on long-term health improvement of host communities. Global health engagements should be evaluated appropriately so that outcomes, unintended consequences, and spillover effects are reduced. If these standards are not upheld by short-term global health engagements, or if

they cause negative impacts, they should be altered or ended. There should be special emphasis placed on the concerns of environmental impact due to the travel and activities involved.

- a. Utilize continuous program monitoring and evaluation processes of all STEGH programs, making changes and improvements over time as needed.
- b. If providing clinical care, be cognizant of the local dental community who rely on this population for professional sustenance.
- c. If providing clinical care, arrangements should be available for patient follow-up in the case of dental treatment failures or emergencies.
- d. Be aware of the resource intensity of STEGHs and consider virtual and telehealth options as a viable way to reduce international travel cost and environmental footprint.
- e. Environmental concerns such as the use and disposal of amalgam, disposal of biohazardous materials, sharps, and X-ray chemicals should be addressed. There is a global movement away from the use of mercury containing materials in dentistry ([Countries meet to accelerate implementation of the Minamata Convention on Mercury, 2018](#)).

Conclusion

The Brocher Declaration offers six principles for ethical and sustainable global health engagement that are relevant for all health professions, including dentistry. These principles emphasize the importance of establishing mutual partnerships, empowering host communities, building sustainable programs and capacity, complying with applicable laws and ethical standards, practicing humility and cultural sensitivity, and being accountable for actions.

These recommendations provide guidance for dental educators, administrators, and students to develop effective and sustainable STEGH programs. Prioritizing the application of the Brocher Declaration's principles to STEGH programs in dental education will increase the likelihood that these initiatives benefit all parties involved. STEGHs represent both a valuable opportunity for dental students to

References

- ADA (2023). Principles of ethics and code of conduct. The American dental association. Available at: <https://www.ada.org/about/principles/code-of-ethics> (Accessed April 10, 2023).
- Ballweg, R., Berg, J., and DeRouen, T. (2011). Expanding dental education partnerships beyond the four walls. *J. Dent. Educ.* 75, 300–309. doi: 10.1002/j.0022-0337.2011.75.3.tb05043.x
- Benzian, H. (2010). Revitalizing school health programs worldwide. *Compend. Contin. Educ. Dent.* 31, 580–582.
- Countries meet to accelerate implementation of the Minamata Convention on Mercury. (2018). FDI world dental federation. Available at: <https://www.fdiworlddental.org> (Accessed April 10, 2023).
- Duijster, D., Monse, B., Dimaisip-Nabuab, J., Djuharnoko, P., Heinrich-Weltzien, R., Hobdell, M., et al. (2017). 'Fit for school' - a school-based water, sanitation and hygiene programme to improve child health: results from a longitudinal study in Cambodia, Indonesia and Lao PDR. *BMC Public Health* 17:302. doi: 10.1186/s12889-017-4203-1
- Frencken, Joannes Elisabert, Maria, Fredericus, Holmgren, Christopher J., and Helderman, Willem Herman Palenstein. *Basic package of oral care. WHO collaborating Centre for Oral Health Care Planning and Future Scenarios*, College of Dental Science, University of Nijmegen, The Netherlands, (2002).
- Global Oral Health Action Plan. (2023). World Health Organization. Available at: [https://www.who.int/publications/m/item/draft-global-oral-health-action-plan-\(2023-2030\)](https://www.who.int/publications/m/item/draft-global-oral-health-action-plan-(2023-2030)) (Accessed April 10, 2023).
- Helderman, W. V. P., and Benzian, H. (2006). Implementation of a basic package of Oral care: towards a reorientation of dental Ngos and their volunteers. *Int. Dent. J.* 56, 44–48. doi: 10.1111/j.1875-595X.2006.tb00073.x
- Jürgensen, N., and Petersen, P. E. (2013). Promoting oral health of children through schools—results from a WHO global survey 2012. *Community Dent. Health* 30, 204–218.
- Lambert, R. F., Yu, A., Simon, L., Cho, J. G., Barrow, J., Seymour, B. (2020). Developing an Open Access, Competency-Based Global Oral Health Curriculum: A Global Health Starter Kit. *J. Dent. Educ.* 84, 176–185. doi: 10.21815/JDE.019.176
- Lasker, JN. *Hoping to help: The promises and pitfalls of global health volunteering*. 1st Ithaca and London: IRL Cornell University Press; (2016)
- Peres, M. A., Macpherson, L. M. D., Weyant, R. J., Daly, B., Venturelli, R., Mathur, M. R., et al. (2019). Oral diseases: a global public health challenge. *Lancet* 394, 249–260. doi: 10.1016/S0140-6736(19)31146-8
- Prasad, S., Aldrink, M., Compton, B., Lasker, J., Donkor, P., Weakliam, D., et al. (2022). Global Health partnerships and the Brocher declaration: principles for ethical short-term engagements in Global Health. *Ann. Glob. Health* 88:31. doi: 10.5334/aogh.3577

learn about the oral health challenges faced by diverse populations in diverse locations and a potential to contribute to oral health promotion and disease prevention when done ethically and responsibly. They may also serve as a catalyst for dental students to become future leaders in global health and development.

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Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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- Rowthorn, V., Loh, L., Evert, J., Chung, E., and Lasker, J. (2019). Not above the law: a legal and ethical analysis of short-term experiences in global health. *Ann. Glob. Health* 85, 1–12. doi: 10.5334/aogh.2451
- Shick, E. A., Gross, L., McNair, B., and Woodmansey, K. (2021). Exploring Global Health in U.S. *Dental Schools*. *JDE* 85, 1388–1395. doi: 10.1002/jdd.12605
- Shick, E. A., and Woodmansey, K. (2020). Ethical moment: ethical considerations when participating in global mission trips before dental school. *JADA* 151, 464–466. doi: 10.1016/j.adaj.2020.02.018
- Slayton, R. L., Urquhart, O., Araujo, M. W. B., Fontana, M., Guzmán-Armstrong, S., Nascimento, M. M., et al. (2018). Evidence-based clinical practice guideline on nonrestorative treatments for carious lesions: a report from the American dental association. *J. Am. Dent. Assoc.* 149, 837–849.e19. doi: 10.1016/j.adaj.2018.07.002
- United Nations Sustainable Development. (2023). United Nations. Available at: <https://sdgs.un.org/goals>
- Watt, R. G., Daly, B., Allison, P., Macpherson, L. M. D., Venturelli, R., Listl, S., et al. (2019). Ending the neglect of global oral health: time for radical action. *Lancet* 394, 261–272. doi: 10.1016/S0140-6736(19)31133-X
- Woodmansey, K. F., Rowland, B., Horne, S., and Serio, F. G. (2017). International volunteer programs for dental students: results of 2009 and 2016 surveys of U.S. dental schools. *J. Dent. Educ.* 81, 135–139. doi: 10.1002/j.0022-0337.2017.81.2.tb06258.x