



(RESEARCH ARTICLE)



## Strengthening medical outreach: enhancing healthcare access in developing countries

Sanusi I Saidu <sup>1,\*</sup>, Nifemi Orimabuyaku <sup>2,3</sup>, Blessing A. Ademola <sup>4</sup>, Onyinyechi V Amadi <sup>5</sup>, David Olawade <sup>6</sup> and Bankole I Oladapo <sup>7</sup>

<sup>1</sup> School of General Studies, Federal Polytechnic, Kaltungo, Gombe State, Nigeria.

<sup>2</sup> College of Liberal Studies, Bowen University, Iwo, Osun State, Nigeria.

<sup>3</sup> Faculty of Arts, University of Ibadan Nigeria.

<sup>4</sup> Department of Industrial Engineering and Management, International Hellenic University, Greece.

<sup>5</sup> Afe Babalola University Medical laboratory science.

<sup>6</sup> Faculty of Life Sciences and Education, University of South Wales, Wales, United Kingdom.

<sup>7</sup> School of Engineering, Faculty of Technology, University of Dundee, UK.

International Journal of Science and Research Archive, 2023, 08(02), 552–558

Publication history: Received on 02 March 2023; revised on 09 April 2023; accepted on 11 April 2023

Article DOI: <https://doi.org/10.30574/ijrsra.2023.8.2.0296>

### Abstract

The establishment, definition, and adequate funding of systems supporting medical outreach are crucial in addressing current and emerging healthcare issues in developing countries. This study examines the impact of a strategically planned and comprehensive outreach program conducted by Living Stone Explorer (LSE) in Majidadi, Nigeria, to address various aspects of community development, including healthcare, education, counselling, and humanitarian assistance. The research highlights the importance of a holistic approach to fostering sustainable change in underprivileged communities. It underscores the significance of effective communication and cultural sensitivity in delivering these services. The LSE program's success is a model for future initiatives in similar settings, offering valuable insights into the outreach efforts' planning, implementation, and evaluation. By providing a better understanding of the intricacies and complexities of delivering essential services in resource-limited environments, this study contributes to the knowledge base. It has the potential to inspire and inform the development of more effective and impactful outreach programs worldwide.

**Keywords:** Outreach program; Community development; Healthcare services; Counseling; Humanitarian assistance; Sustainable change

### 1. Introduction

The United Nations World Humanitarian Summit in 2016 emphasized the interconnectedness of Sustainable Development Goals (SDGs) and humanitarian assistance. The summit highlighted the need for increased investment in national, local, and regional disaster planning and predictable response systems, as well as in data, analysis, and early warning systems to improve community resilience and women's participation [1,2]. Achieving the SDGs and providing effective humanitarian aid requires a comprehensive approach considering development initiatives and evidence-based decision-making [3,4].

This special issue focuses on the relationship between humanitarian operations and the SDGs, underlining the need for further research. Exploring the interaction between short-term humanitarian operations and long-term SDGs is crucial, as many actors in the field often work in isolation on development and relief initiatives [5,6]. While humanitarian supply networks can save lives during emergencies and improve conditions afterwards, short-term relief efforts without long-term considerations may harm communities and exacerbate future disasters [7,8].

\* Corresponding author: Bankole I Oladapo

Meeting global and regional SDGs, such as reducing inequalities (SDG10) or ensuring universal healthcare (SDG3), is critical to prevent injustices that may escalate into humanitarian crises, such as increased poverty (SDG1) or limited access to healthcare [9,10]. Although humanitarian medical work has always involved long-term staff and short-term volunteers, there has been limited opportunity for sustained follow-up. One of the most significant barriers to achieving the Millennium Goals is the lack of skilled and well-trained healthcare professionals, especially in Africa [13,14].

To address this challenge, we have focused on developing a new humanitarian model tailored to Africa’s unique needs by adopting a Western university framework. The aim is to educate trainers to increase the number of healthcare professionals and train collaborative medical teams across vast geographical areas [6,15]. While most of our work has taken place in East Africa, we believe this approach can be applied globally. As part of this effort, resident trainees from Nigeria, Uganda, Sierra Leone, Cameroon, Rwanda, and Ethiopia are required to complete a course related to humanitarian services, with residency training programs currently in development. We anticipate that a humanitarian model for obstetrical care will emerge as the medical workforce expands, allowing more people to access safe medical treatment.

In this study, we sought to explore the explanatory models of complex medical and poverty issues, how these perceptions change through interactions with healthcare providers and the importance of diagnostic constructs in this context. We report on the strategic outreach approach, where villagers engaged with various units, including medical teams, counselling services, and humanitarian/welfare support. A successful humanitarian model must understand its beneficiaries’ needs, adopt participatory and integrated approaches, recognize the interconnectedness of issues, and establish sustainable regional and global partnerships.



**Figure 1** Solving and focusing on United Nation Sustainable Goal to elevate poverty

## 2. Operational Overview

Humanitarian supply networks are crucial in minimizing casualties during disasters and improving survivors’ living conditions once stability is re-established. However, hastily implemented, short-term disaster relief efforts can inadvertently harm communities by increasing the frequency and severity of future disasters. Quick responses during a crisis are essential to save lives. However, they may not consider the long-term consequences for the affected region. The focus on cost-effective procurement for long-term development goals may also hinder sustainable initiatives [16,17]. Insufficient planning and organization can lead to the distribution of unnecessary supplies, further depleting natural resources. Moreover, humanitarian organizations may hesitate to form partnerships or compete for funding,

contradicting SDG 17's objectives. Failing to achieve regionally or globally-focused SDGs can result in humanitarian issues, such as increased poverty (SDG 1) or reduced access to universal healthcare (SDG 3) [18,19].

The outreach operation was organized into four units: a medical unit with five staff members, a counselling unit with five staff members, a humanitarian support unit with six staff members, and a welfare unit with two staff members. Before commencing the day's activities, the village head visited the site to greet the team. After exchanging pleasantries, the leader and seven team members inspected a well under construction by LSE. Additional funding was promised to complete the project. Upon returning, the team had breakfast and proceeded to their respective units to begin their tasks. The villagers faced challenges accessing clean water for drinking and daily domestic use. They relied on stagnant, untreated water and had to wait 6-9 hours for dirt and clay to settle at the bottom of the container before using it. The outreach addressed these pressing concerns and improved the community's overall wellbeing.

### 3. Results

#### 3.1. Medical Unit

The group leader in charge of the team oversaw the medical services provided. The LSE team's camp at the Majidadi clinic facilitated easy access to the health workers' offices in the clinic, enabling the team to attend to the villagers with various health challenges and needs. The villagers' height, weight, age, and sex were recorded at the first station. The patients' vital signs were taken at the second station, the nursing station. From there, patients were directed to the doctors for further consultation, as shown in Figure 2. After receiving medical services, patients were required to pass through a counselling unit before collecting their prescribed medications. The villagers expressed immense gratitude and joy for the free medical care provided, with some stating that the kindness shown to them was an example they should follow. The medical unit successfully treated over 100 villagers. Common health issues identified among the patients included typhoid fever, malaria, headaches, abdominal pain, and back pain. Figure 2 depicts a doctor consulting with a villager, a nurse and doctor taking the villager's blood pressure, and the LSE medical team dispensing medications as prescribed by the doctors.



**Figure 2** (a) the doctor giving consultation to one of the villagers (b-c)The doctor and nurse taking the blood pressure of the village(d) dispensing of drugs by medical team of LSE as prescribed by the doctors

#### 3.2. Humanitarian Efforts for Clean Water

Thanks to the strategic organization of the outreach, the humanitarian unit provided various services to the villagers, including hair cutting, hair washing, and hair styling for women and female children. Six LSE team members delivered these services, with two males attending to the male villagers and four females attending to the women. During the humanitarian assistance, the villagers expressed happiness and gratitude for the care and kindness they received. One woman said, "What you have done for us today is only God that will reward you and whatever you seek. May God bless you and give you what you hope for in life. We were happy because all my children's heads were washed clean."

Another critical aspect of the humanitarian efforts was the provision of clean water to the community. Figure 5 illustrates the completion of the well by LSE (NGO) and the assessment of the water's cleanliness for drinking by the village head and the NGO leader in Gombe state. Access to clean water is vital for the overall health and wellbeing of the



community, and the efforts by LSE to address this need have the potential to create lasting, positive change. By ensuring a sustainable source of clean water, the community can significantly reduce the risk of waterborne illnesses and improve their overall quality of life.



**Figure 3** Getting the water after finishing the well by LSE (NGO) and checking the cleanness for drinkability by the village head and the NGO leader in Gombe state

The outreach was strategically designed, ensuring villagers went through all the units, including medical, counselling, humanitarian, and welfare services. The group gathered for a collective devotion led by Bro. Saidu Sanusi Ibrahim. Following this, the Coordinator provided instructions to each member, asking them to introduce themselves and their respective units. At the Majidadi clinic, the medical team attended to patients and villagers with various health issues and medical needs. The healthcare facility provided appropriate care to over one hundred village residents. The LSE team employed a tactical strategy to share the gospel through the counselling unit. The locals, especially those who had accepted Jesus as their Lord and Savior, received prayers and guidance. Figure 2 depicts a counselling session on family planning and childbirth hygiene. Due to the villagers' generally low level of education, the counsellors were able to assist more than one hundred individuals. Communication posed a significant challenge, as many children lacked access to proper education.



**Figure 4** Humanitarian service (a) Barbing section (b) Distribution of clothing materials by LSE member

Additionally, with most family men having multiple wives and numerous children, maintaining adequate hygiene in their households proved difficult. Overall, the outreach effort by Living Stone Explorer (LSE) in Majidadi was successful, as numerous locals took advantage of the available medical, counselling, and humanitarian services. To minimize the spread of infections such as HIV and dandruff, people were given guidance on how to cut and style their hair safely and sustainably.

## **4. Discussion**

The results obtained from the medical outreach indicate a strong impact on the Majidadi community's health and well-being. By providing comprehensive medical care to over 100 villagers, the LSE team was able to identify and address common health issues that may have otherwise gone untreated. This section discusses the implications of these findings, the challenges faced by the community, and the potential benefits of continued medical support.

### **4.1. Prevalence of Health Issues**

The villagers' most frequently diagnosed health issues included typhoid fever, malaria, headaches, abdominal pain, and back pain. The high prevalence of these conditions highlights the need for improved healthcare access and preventive measures in the community. Addressing these health challenges requires medical treatment and education on hygiene, sanitation, and disease prevention.

### **4.2. Importance of Health Education**

The medical outreach revealed the importance of health education in the Majidadi community. By incorporating a counseling unit into the medical process, the LSE team ensured that villagers received vital information on maintaining their health, preventing the spread of diseases, and understanding the importance of proper hygiene and sanitation practices. This holistic approach to healthcare has the potential to create long-lasting positive change in the community.

### **4.3. Access to Quality Healthcare**

The enthusiastic response from the villagers and the sheer number of patients attended to during the outreach underscore the need for accessible, quality healthcare in the Majidadi community. The fact that many villagers received free medical care highlights the potential financial barriers that may prevent individuals from seeking necessary medical attention. Expanding access to affordable healthcare services can help alleviate this burden and improve overall community health.

### **4.4. Sustainability and Long-term Impact**

While the medical outreach had an immediate positive impact on the Majidadi community, it is essential to consider the long-term sustainability of such efforts. Ensuring the availability of local healthcare services, training healthcare professionals, and promoting community-led health initiatives can help build a foundation for sustainable health improvements. Collaborations between humanitarian organizations, local governments, and community leaders are crucial for creating lasting change and empowering communities to maintain and improve their health. In conclusion, the results from the medical outreach in Majidadi demonstrate the effectiveness of a comprehensive, integrated approach to healthcare that addresses both immediate medical needs and long-term community health challenges. The experience highlights the importance of continued investment in accessible, quality healthcare, health education, and sustainable health initiatives in underserved communities

---

## **5. Conclusion**

In conclusion, this research has significantly contributed to understanding the value and impact of strategically planned and well-organized outreach initiatives in underprivileged communities. By examining the Living Stone Explorer (LSE) outreach program in Majidadi, Nigeria, the study highlighted the importance of addressing various aspects of community development, such as healthcare, education, counselling, and humanitarian assistance, to foster sustainable change. The research demonstrated that a comprehensive approach, which encompasses medical care, counselling on family planning and hygiene, and addressing humanitarian needs like clean water and proper hair care, can improve the quality of life for individuals in these communities. Furthermore, the study underscored the importance of effective communication and cultural sensitivity in successfully delivering these services.

This research adds to the knowledge base by illustrating the potential of holistic outreach programs in developing countries, emphasizing the interconnected nature of various challenges these communities face. The success of the LSE program in Majidadi serves as a model for future outreach initiatives in similar settings, offering valuable insights into the planning, implementation, and evaluation of such efforts. By providing a better understanding of the intricacies and complexities of delivering essential services in resource-limited environments, this research has the potential to inspire and inform the development of more effective and impactful outreach programs worldwide.

---

## Compliance with ethical standards

### *Disclosure of conflict of interest*

No conflict of interest.

---

## References

- [1] Mom T, Gardini B, Rial-Sebbag E, Fraysse B. The humanitarian and outreach ethics charter in ENT. Ethics at the heart of missions. *Eur Ann Otorhinolaryngol Head Neck Dis* 2021;138:41–4. <https://doi.org/10.1016/J.ANORL.2020.08.002>.
- [2] The humanitarian and outreach ethics charter in ENT. Ethics at the heart of missions - ScienceDirect n.d. <https://www.sciencedirect.com/science/article/pii/S1879729620301836> (accessed March 9, 2023).
- [3] O'Neill JA. A model for humanitarian outreach in today's world. *J Pediatr Surg* 2018;53:21–4. <https://doi.org/10.1016/J.JPESURG.2017.10.013>.
- [4] Mulwafu W, Fagan JJ, Mukara KB, Ibekwe TS. ENT Outreach in Africa: Rules of Engagement. *OTO Open* 2018;2. <https://doi.org/10.1177/2473974X18777220>.
- [5] Chattu VK, Jean-Louis G, Zeller JL, Pandi-Perumal SR. Aiding Universal Health Coverage through Humanitarian Outreach Services and Global Health Diplomacy in Resource-Poor Settings. *J Natl Med Assoc* 2021;113:102–4. <https://doi.org/10.1016/J.JNMA.2020.07.015>.
- [6] Aiding Universal Health Coverage through Humanitarian Outreach Services and Global Health Diplomacy in Resource-Poor Settings - ScienceDirect n.d. <https://www.sciencedirect.com/science/article/abs/pii/S0027968420301607> (accessed March 9, 2023).
- [7] Boston M, Horlbeck D. Humanitarian Surgical Missions: Planning for Success. *Otolaryngology - Head and Neck Surgery (United States)* 2015;153:320–5. <https://doi.org/10.1177/0194599815587889>.
- [8] Horlbeck D, Boston M, Balough B, Sierra B, Saenz G, Heinichen J, et al. Humanitarian otologic missions: Long-term surgical results. *Otolaryngology - Head and Neck Surgery* 2009;140:559–65. <https://doi.org/10.1016/j.otohns.2008.12.033>.
- [9] Jensen S, Tadlock MD, Douglas T, Provencher M, Ignacio RC. Integration of surgical residency training with US military humanitarian missions. *J Surg Educ* 2015;72:898–903. <https://doi.org/10.1016/j.jsurg.2014.12.004>.
- [10] Trudeau MON, Baron E, Hérard P, Labar AS, Lassalle X, Teicher CL, et al. Surgical care of pediatric patients in the humanitarian setting: The médecins sans frontières experience, 2012-2013. *JAMA Surg* 2015;150:1080–5. <https://doi.org/10.1001/JAMASURG.2015.1928>.
- [11] Jafari A, Tringale KR, Campbell BH, Husseman JW, Cordes SR. Impact of Humanitarian Experiences on Otolaryngology Trainees: A Follow-up Study of Travel Grant Recipients. *Otolaryngology - Head and Neck Surgery (United States)* 2017;156:1084–7. <https://doi.org/10.1177/0194599817691274>.
- [12] Ragnier P. The emerging concept of humanitarian diplomacy: Identification of a community of practice and prospects for international recognition. *International Review of the Red Cross* 2011;93:1211–37. <https://doi.org/10.1017/S1816383112000574>.
- [13] Cardarelli M, Vaikunth S, Mills K, DiSessa T, Molloy F, Sauter E, et al. Cost-effectiveness of Humanitarian Pediatric Cardiac Surgery Programs in Low- and Middle-Income Countries. *JAMA Netw Open* 2018;1:e184707. <https://doi.org/10.1001/JAMANETWORKOPEN.2018.4707>.
- [14] Brooks SK, Dunn R, Sage CAM, Amlôt R, Greenberg N, Rubin GJ. Risk and resilience factors affecting the psychological wellbeing of individuals deployed in humanitarian relief roles after a disaster. *Journal of Mental Health* 2015;24:385–413. <https://doi.org/10.3109/09638237.2015.1057334>.
- [15] Erlich T, Shina A, Segal D, Marom T, Dagan D, Glassberg E. Preparation of medical personnel for an early response humanitarian mission – lessons learned from the Israeli defense forces field hospital in the Philippines. *Disaster Mil Med* 2015;1. <https://doi.org/10.1186/2054-314X-1-5>.
- [16] Besiou M, Pedraza-Martinez AJ, Van Wassenhove LN. Humanitarian Operations and the UN Sustainable Development Goals. *Prod Oper Manag* 2021;30:4343–55. <https://doi.org/10.1111/POMS.13579>.

- [17] Corbett CJ, Pedraza-Martinez AJ, Van Wassenhove LN. Sustainable humanitarian operations: An integrated perspective. *Prod Oper Manag* 2022;31:4393–406. <https://doi.org/10.1111/POMS.13848>.
- [18] Kovács G, Falagara Sigala I. Lessons learned from humanitarian logistics to manage supply chain disruptions. *Journal of Supply Chain Management* 2021;57:41–9. <https://doi.org/10.1111/JSCM.12253>.
- [19] Humanitarian Operations and the UN Sustainable Development Goals - Besiou - 2021 - *Production and Operations Management* - Wiley Online Library n.d. <https://onlinelibrary.wiley.com/doi/10.1111/poms.13579> (accessed March 9, 2023).