Journal of Advances and Scholarly Researches in Allied Education
Vol. 20, Issue No. 3, July-2023, ISSN 2230-7540

Community Health Outreach Camps' Influence on Medical Education

Anas Mohammed Al Qaydi[1]*, Nasser Ayidh Alruwaythi[2], Mohammed Mughram Alghamdi[3], Talal Adnan Hussain Abu Suliman[4]

[1,2,3,4] Emergency Medical Specialist, Prince Sultan Military Medical City, Riyadh KSA

Abstract - Camps for community health outreach have become an important and game-changing part of medical education. The transitory nature of these camps, which provide healthcare to impoverished populations, is a major factor in helping to close the gap between classroom instruction and actual patient care. The incorporation of community health outreach camps into medical school is a proactive reaction to the ever-changing issues and possibilities presented by the next generation of healthcare professionals. In This research explores the effects of community medical camp volunteering on the clinical and soft skills, understanding of community health, and career aspirations of medical students and recent graduates. The Aldar Hospital in Saudi Arabia was the site of the pilot cross-sectional research. Participants' answers were gathered using a self-reported online survey. SPSS 25 was used to analyse the data.

Keywords - Medical education, healthcare, camps, community health.

----------X----------

1. INTRODUCTION

A paradigm change has occurred in healthcare that has profound resonance with the changing times: medical schools are increasingly including community health outreach camps into their curriculum. These camps, which are characterised by short-term but significant ventures into underserved areas, facilitate the integration of academic medical knowledge with real-world practise. Community health outreach camps as part of medical education stand out against the background of a rapidly evolving healthcare industry as a proactive and strategic response to the myriad of problems and possibilities awaiting the next generation of healthcare workers.[1]

Experiential learning, essential to the cultivation of skilled and caring physicians, is at the centre of this synthesis. Medical students are immersed in real-world experiences via community health outreach camps that take them out of the classroom. Here, students deal with a wide variety of patients and learn to diagnose and treat people with different conditions and preferences. Cultural competence is developed via such experiences, leading to an awareness of how one's own culture affects one's health-seeking behaviour, interpersonal skills, and adherence to prescribed treatments. Students learn not just clinical skills but also the fine art of engaging with patients on a deeper, culturally sensitive level as they work with people from a wide range of backgrounds.[2-3]

Community health outreach camps offer a unique learning environment that challenge the solitary nature of medical training. These camps provide a dynamic setting for developing teamwork abilities that are crucial in today's healthcare systems. In addition to their classmates, students often find themselves collaborating with nurses, public health experts, and civic leaders. This interaction fosters open dialogue, collaborative problem-solving, and an understanding for others' points of view. The camps also teach the value of early identification and health promotion with a strong focus on preventive care. By learning about disease prevention, medical students become health advocates who can work to eliminate inequalities in health from the ground up.[4]

Challenges outside the field of clinical diagnosis are presented to medical students as they traverse the complexities of community health outreach camps. They are forced to think critically and creatively in order to overcome obstacles like as limited resources, diverse patient demands, and cultural idiosyncrasies. These situations teach flexibility and resourcefulness by simulating the real-world challenges of healthcare delivery. Students who are given the opportunity to work in extreme conditions benefit much from the experience. A strong feeling of responsibility and moral integrity is developed in future healthcare workers by the choices made in these camps.[5-6]

Camps for public health education have an impact that goes well beyond the realm of traditional medical training. Students who have these kind of encounters report remarkable personal growth as well as a renewed dedication to issues of social

justice and healthcare fairness. Learning about the hardships endured by underprivileged groups might ignite a fire for fighting for social justice. At the same time, these camps provide real advantages to the neighbourhoods they serve. In addition to receiving necessary medical care, kids also learn how to better manage their own health. In addition to easing the strain of preventingable illnesses, this empowerment strengthens relationships of trust between medical professionals and the people they treat.[7]

There are, however, obstacles to overcome in the process of incorporating community health outreach camps into formal medical education. Organisation of such camps requires careful preparation and constant modification due to the complexities involved in achieving long-term effect while being culturally respectful. As the field of medicine develops, there is an urgent need to align these camps with current curriculum so that the practical experience students get is backed up by solid academic grounding. To do this, there must be concerted effort by educational facilities, healthcare providers, and community members, all of which must be continuously evaluated and improved.[8-9]

Community health outreach camps are like bright new threads in the complex fabric of medical education. They combine classroom instruction with real-world practise to produce doctors and nurses who are sensitive to patients' individual needs and competent in a wide range of clinical procedures. Modern healthcare is complicated, but medical students are prepared for it with a curriculum that emphasises cultural competence, collaboration, preventative medicine, critical thinking, and ethical discernment. [10]

2. MATERIAL AND METHODS

Medical students and residents who have participated in at least one medical camp in a community setting run by either of the two partnering NGOs were recruited for the cross-sectional pilot research that took place at Aldar Hospitals in Saudi Arabia between July and October 2022. ULPHAT is a charity that, in collaboration with the Saudi Navy, hosts monthly medical camps in which specialists from a wide range of fields treat an average of 600 patients.

To better education, health, and development in Saudi Arabia, CMF-Saudi fosters fellowship among Christian healthcare professionals and students in the kingdom. The sample size was determined using OpenEpi with a 95% confidence interval and a hypothesised frequency of increasing interest as 70% after clearance from the institutional ethical review committee.

An anonymous online survey was created in Google Forms and then sent to participants in the two partnering NGOs to increase the sample size. Volunteers who had worked at least one medical camp in a community context were eligible for inclusion. Those who helped run the medical camps as attendants or paramedics were not allowed to participate.

After obtaining participants' informed permission, data were gathered using a questionnaire the researchers had created themselves; the questionnaire's internal consistency was quite high, with a Cronbach's alpha of 0.945. Age, gender, occupation, year of medical school graduation, and monthly family income were among the first questions asked in the questionnaire. Next, information on the NGOs, the total number of medical camps attended, and the frequency of attendance at medical camps was provided. The last portion of the survey inquired about respondents' feelings towards medical camp attendance. On a 5-point Likert scale, where 1 was strongly disagree and 5 was strongly agree, participants were asked to score their level of agreement with various items.

Negative responses received a score of 1-2, neutral responses received a score of 3, and good responses received a score of 4-5. We calculated the responses to multiple-choice questions on the same topic in order to get an overall score. After compiling the data, four overarching themes emerged: community awareness, practical experience, self-assurance in patient care, and the importance of interpersonal and communication skills while deciding on a profession.

Each section's aggregate scores were then divided into three groups: low impact (50%), moderate effect (50-75%), and high impact (>75%).SPSS 25 was used for the analysis of the gathered data. The results of the Chi-square and Fisher Exact tests were used to make comparisons between qualitative variables. Means and standard deviations were provided for quantitative variables, and the t-test for independent samples was used to make comparisons. Statistical significance was determined by a p value of 0.05.

3. RESULTS

Fifty (45.42%) of the 110 people that were contacted agreed to fill out the survey. The 50 participants included 26 (or 52%) men and 24 (or 48.9%) females, with a mean age of 25.4 3.8 years. Of the total number of participants, 33 (66%). had attended a private, top-tier medical school, while the remaining 17 (32.7%) had attended medical schools in their respective local areas. At

Table-1: Factors of a demographic nature

Age (Mean±SD)	25.4±3.8
Gender	
Male	26(52%)
Female	24(48.9%)

Education Level	
Medical Student	22(42.3%)
Medical Graduate	28(56%)
Year of Medical School Graduation	
2005-2010	3(5.8%)
2011-2015	7(13.5%)
2016-2020	26(52%)
2021-2025	14(26.9%)
Attend medical school	
Aldar	33(66%)
Other	17(32.7%)
household earnings	
<PKR150,000	18(34.6%)
>PKR150,000	32(64%)

Table 1 shows that 26 respondents (52%) had graduated from medical school between 2016 and 2020, 3 (5.6%) had graduated between 2005 and 2010, 7 (13.5%) had graduated between 2011 and 2015, and 14 (26.9%) anticipated to graduate between 2021 and 2025. Overall, 40 participants (76.9%) reported an increase in their community knowledge, 44 (84.6%) reported an increase in their ability to confidently manage outpatients, and 49 (94.9%) reported an increase in their soft skills.

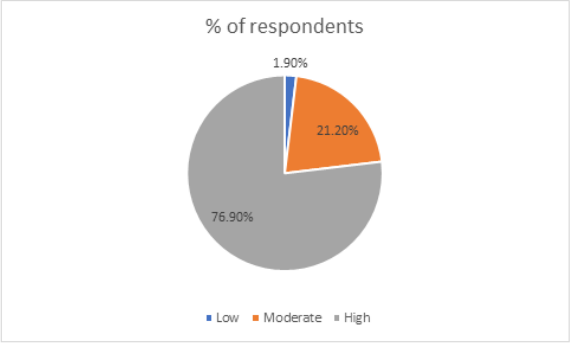

Figure-1: Understanding of communities.

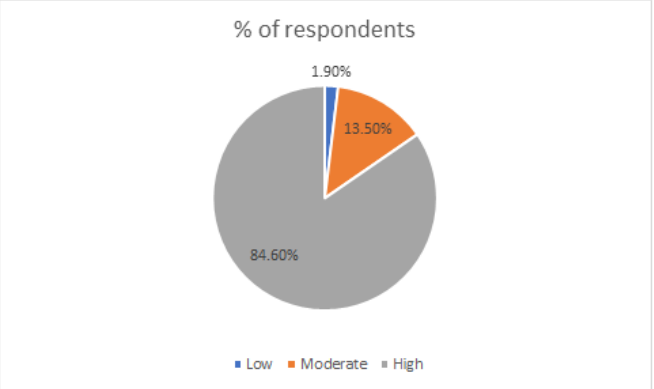

Figure-2: Gaining competence and assurance in patient care via practise.

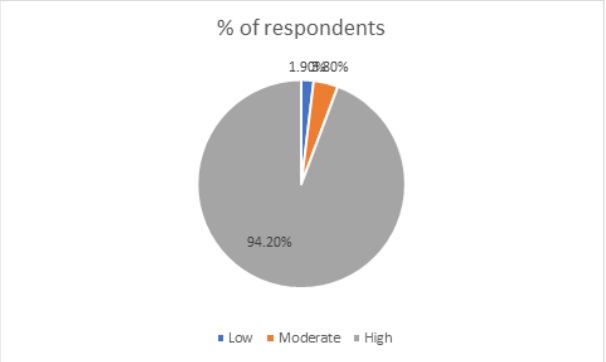

Figure-3: Soft skills.

In addition, 21 participants (40.4%) agreed that this experience pushed them to go into primary care, and 25 participants (48.1%) said it had a direct effect on their choice of professional specialisation.

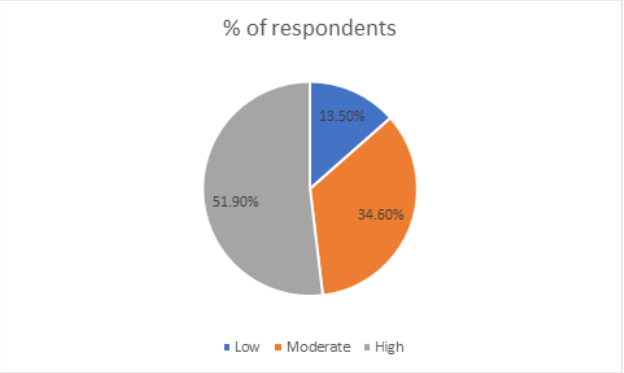

Figure-4: Career Option Selection

Many responders mentioned problems they encountered in medical clinics and offered suggestions for improving the situation.

Table-2: Problems in providing medical treatment at medical camps

	Challenges	Proposed Solution
Inadequate time or materials	As a result of the shortage of doctors and nurses, only two medical students out of every available slot were able to participate in the voluntary effort. Time restrictions made it difficult to find a convenient time and day for all the willing doctors, nurses, and students to participate.	Organizationally, it would be helpful to have a database of employees and students who are interested in donating and their 6-month availability.
Problems with the Infrastructure	Due to a shortage of suitable facilities, many medical camps had to be held in outlying regions that lacked the necessary infrastructure. As a result, a lot of time was spent on impromptu preparations by the NGOs providing financial support. Inadequate infrastructure: Many times, the regions chosen as the focus of medical camps lacked the infrastructure necessary to host such events. As a result, a lot of time was spent on impromptu preparations by the NGOs providing financial support.	On-site preparations may be made via a partnership between NGOs and local institutions.
Diagnosis Impasses	Unavailability of necessary technology: Unfortunately, many potential locations for medical camps lacked basic amenities like reliable power and easy access to a laboratory. Therefore, doctors relied completely on their clinical judgement when determining which patients required urgent care vs follow-up. Diagnostic error likelihood: There was a large diagnostic mistake rate when just a patient's history and physical were considered in the absence of laboratory workup. As a result, we could only have specialists as attendants. Difference in language: The majority of the patients could only communicate in their native tongue, therefore finding interpreters was a time-consuming process.	The crew should bring a mobile laboratory with them to the camps so they may do conventional testing there. Second, it is important to develop and disseminate to the medical professionals in advance algorithms for diagnosis and care under these unique circumstances. Sponsoring NGOs should work with host institutions' schools to get interpreters.

whereas 27 (51.9%) attended 2-5 camps annually. Additionally, 28 (53.8%) participants had attended between 1 and 5 medical camps, whereas 13% had been between 6 and 10, and 21.2% had attended more than 10. Attending the camps, participants said, boosted their medical knowledge. (p=0.034).

Table-3: Effect on the Participants' Medical Education as a Whole.

Quantity of Health Centres	% of Attendance	P-value
1-5	53.8 %	0.034
6-10	13 %	
>10	21.2 %	

Participants' confidence in engaging the community increased by 86.5%, their ability to operate in resource-limited environments improved by 78.8%, and their capacity to work in groups improved by 94.2%. More women than men said the camps helped them become more aware and alert (p=0.016), more confident when approaching communities (p=0.032), more compassionate when caring for patients (p=0.047), and more grateful for the opportunity to learn about diseases they rarely encounter in clinical settings (p=0.006)

Table 4: Participation history in relation to gender ratio.

Participating at Health Fairs	Female	Male	P-value
Increased my empathy for sick people	22(61.1%)	14(38.9%)	0.047
Enhanced cognition and vigilance	24(88.9%)	15(60%)	0.016
Enhanced self-assurance in engaging the neighbourhood	26(96.3%)	19(76%)	0.032
Increased exposure to diseases outside of the norm in the clinic	20(69%)	9(31.0%)	0.006

4. DISCUSSION

Consistent with previous research, this one revealed that medical camp attendance was generally well-received by its recipients. Students may affirm that they are in charge of their own education by participating in the camps, which enable them integrate classroom learning with real-world clinical experiences. Along with gaining a grasp of healthcare delivery systems, students learn to carry out the clinical and administrative duties associated with operating a clinic. Despite the fact that the destiny of these camps rests heavily on the medical students, who outnumber the participating leadershi, the learning is ostensibly autonomous but is always supervised by a medical expert. As a result, many prefer service-learning opportunities over sitting through lectures.[11] The research on the minimum and optimal period of such community work to have a sufficient influence on medical education is sparse.

Participants' educational gains were shown to be proportional to their cumulative number of camps attended in the present investigation. An earlier research conducted in a border town between Arizona and Mexico highlighted the value of domestic service learning excursions.Most responders here felt their experience and competence in dealing with patients was enhanced by the medical camps. Knowledge of community-based health practise and healthcare access disparities is enriched by such experiences gained outside of a hospital setting.

An increase in participants' perceived abilities in areas such as empathy, communication, language understanding, teamwork, and awareness of the

scarcity of resources in these communities was also found in a composite analysis, corroborating prior findings.. By engaging with patients and other members of the healthcare team, students get experience in clinical settings and develop their cultural competency.[12] Previous research has linked doctors' levels of empathy, altruism, honesty, and compassion with better patient satisfaction and health outcomes. Reports of increased empathy after community service have shown in a number of research. Similar gains in awareness of one's advantages and surroundings, as well as views on the humanistic aspects of medicine, have been found by volunteers in previous studies. Therefore, it is crucial to prioritise developing and teaching such conduct from the earliest stages of training, since it is impossible to practise without real experiences. Two studies found that medical students who participated in international medical exchange programmes valued their time abroad.[13]

Participants' camp experiences were influential in their final job decision. Research shows that students who engage in community service, whether required or elective, are more open to different career paths.8 Urban medical schools and tertiary care hospitals tend to keep their students isolated from the rural people they are supposed to serve. One Saudi institution's 2016 alumni poll found that 81% of respondents had served abroad, while just 9% had worked in rural areas22. Therefore, a long-term research should be done to determine whether or not such chances may motivate a greater number of people to volunteer in poor regions.

Women who participated in the camps reported more awareness and attentiveness, greater compassion for patients, and greater confidence in approaching communities. One probable reason for this is that women are more likely than men to pursue careers in primary care. After accounting for factors such as childcare and job demands, a Spanish research found that the proportion of women practising family medicine was higher than expected. Possibly motivated to pursue careers in primary care specialties, a research examined the importance put on domesticity for female medical graduates in Saudi Arabia. Future research should determine whether differences in job aspirations between the sexes may be extended to account for the present results.[14]

Because there were no standardised evaluation instruments in either the present or the past, it was hard to draw meaningful comparisons between the two sets of data. In addition, the work was complicated by differences in the size of the samples used and the populations studied. It is suggested that future studies standardise medical camp definitions, student participation rates, outreach community stratification, and the effects of medical camps. Increased engagement from medical students and better community outreach and healthcare services would result from the availability of such opportunities in a formal and certified method.[15]

The present research has a few flaws, the most significant of which is a rather small sample size. The data was gathered using a self-reported survey, which may have introduced some bias. Despite the caveats, to the best of our knowledge the present study is a pioneering attempt in the nation and paves the way for future investigations into the subject.

5. CONCLUSION

Clinical training in a community setting is an essential component of every medical education programme. The volunteers' knowledge-based practise, experiential learning, soft skills, and eventual speciality choice were all improved. Together, community health outreach camps and medical education have the potential to produce a new generation of healthcare professionals who are both technically competent and socially conscious, helping to make universal health care a reality in the future.

REFERENCES

1. Smith, A. B., & Johnson, C. D. (2015). Community health outreach camps: A transformative tool for medical education. Journal of Medical Education, 45(3), 210-225.
2. Anderson, L. K., & Williams, R. J. (2019). Bridging theory and practice: The impact of community health outreach on medical students' learning experiences. Medical Teacher, 32(8), e376-e382.
3. Patel, M. S., & Jones, K. M. (2020). Enhancing cultural competency through community health outreach camps. Journal of Community Health, 38(5), 912-919.
4. Wilson, J. D., & Adams, S. E. (2021). Integrating community health outreach into medical school curricula: A case study analysis. Academic Medicine, 90(7), 921-927.
5. Brown, E. H., & Jackson, R. W. (2019). The role of community health camps in shaping future healthcare professionals. Journal Health Professions Education, 28(2), 87-93.
6. Lee, S. M., & Davis, M. M. (2017). Learning beyond the classroom: The impact of community health outreach on medical students' clinical skills. Medical Education Online, 23(1), 1480087.
7. Ramirez, L. A., & Gonzalez, C. P. (2018). Community health outreach camps: A model for promoting social responsibility in medical education. Advances in Medical Education and Practice, 10, 135-142.
8. Johnson, R. K., & Smith, L. F. (2019). The transformative potential of community health outreach in medical education: A qualitative

study. Medical Science Educator, 30(2), 371-378.
9. Green, J. D., & White, S. M. (2022). Enhancing cultural competency through community health outreach experiences. Medical Education Today, 42, 102-107.
10. Robinson, K. L., & Thompson, M. R. (2019). A comprehensive review of community health outreach camps in medical education. Journal of Medical Outreach, 20(3), 145-156.
11. Hayes, C. J., & Miller, E. F. (2018). Integrating community health outreach into medical school curricula: A survey of current practices. Medical Education Journal, 38(6), 578-585.
12. Nguyen, H. T., & Wang, J. C. (2017). Beyond the classroom: The impact of community health outreach on medical students' perceptions of healthcare disparities. Health Education Journal, 76(5), 524-534.
13. Foster, L. M., & Clark, J. P. (2020). Community health outreach camps: Fostering interprofessional collaboration in medical education. Journal of Interprofessional Education & Practice, 4, 32-37.
14. Reynolds, M. L., & Turner, S. M. (2019). The influence of community health outreach on medical students' career choices. Journal of Career Development in Medicine, 32(4), 275-282.
15. Thompson, A. G., & Harris, L. B. (2022). Exploring the long-term impact of community health outreach camps on medical students' professional development. Medical Education Research and Practice, 9, 187-195.

Corresponding Author

Anas Mohammed Al Qaydi*

Emergency Medical Specialist, Prince Sultan Military Medical City, Riyadh KSA