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THE INTERNATIONAL 'BIG SOCIETY' - EXPERIENCES AND IMPACT OF INTERNATIONAL MEDICAL VOLUNTEERING: A MULTI-COUNTRY MIXED METHODS STUDY

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THE INTERNATIONAL 'BIG SOCIETY' - EXPERIENCES AND IMPACT OF INTERNATIONAL MEDICAL VOLUNTEERING: A MULTI-COUNTRY MIXED METHODS STUDY

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Abstract

Objective

To assess the experience and impact of international and national medical volunteers who facilitated training workshops for healthcare providers in maternal and newborn emergency care in 13 countries.

Settings

Bangladesh, Ghana, Kenya, India, Malawi, Namibia, Nigeria, Pakistan, Sierra Leone, South Africa, Tanzania, United Kingdom, Zimbabwe.

Participants

International (n=162) and national (n=138) medical volunteers.

Outcome measures

Expectations, experience, views, personal and professional impact of the experience of volunteering on international and national medical volunteers.

Results

Medical volunteers from the UK were interviewed using focus group discussions (n=12) and key informant interviews (n=26). 262 volunteers (international n=124, and national n=138) responded to the online structured questionnaire (62% response rate), covering 506 volunteering episodes. Healthcare providers were motivated by altruism, and perceived volunteering as a valuable opportunity to develop their skills in leadership, teaching and communication, skills reported to be transferable to their home workplace. Volunteering was reported to have increased confidence (98%); improved teamwork (95%); and strengthened leadership skills (90%). Volunteers reported that volunteering had a positive impact for the host country (96%) and healthcare providers trained (99%); formed sustainable partnerships (97%); and promoted multidisciplinary team working (98%); and was a good use of resources (98%). Volunteers from LMIC reported higher satisfaction scores than those from the UK with regards to impact on personal and professional development.

Conclusion

Volunteers from the UK and LMIC are highly motivated to work in lower resource settings to help strengthen capacity. Further research is necessary to understand the experiences of local partners and international organizations, regarding how the impact of medical volunteering can be improved. There is need for more comprehensive, systematic, and robust feedback processes and monitoring and evaluation to assess the outcomes of healthcare provider volunteering placements as well as a strong support system.

Keywords: experiences, health, medical, volunteers, international perspectives, volunteering.

Article summary

Strengths and limitations of this study

- This is the first multi-country study to assess the experience and impact of international medical volunteers, along with national medical volunteers, in thirteen different countries who facilitated training workshops in maternal and newborn emergency care.
- We used mixed methods, qualitative interviews (n=38) and online survey (n=262) to assess volunteers (n=300) from both high income and low- and middle-income countries regarding their views and experiences of international medical volunteering.
- The response rate was 62% (262/422) for the online survey and this may represent selection bias, in that respondents who either really enjoyed or did not enjoy the volunteering experience may have been more likely to have completed the survey.
- Qualitative data was collected from healthcare providers based in the UK and there is a need to explore the views of healthcare providers from low- and middle-income countries in more depth.
- This study assessed the views of medical volunteers regarding a short-term training placement only and the views and experiences of longer-term volunteer clinical placements may differ.

INTRODUCTION

International volunteers are skilled individuals who are motivated to offer their services willingly, without consideration for financial gain, to contribute to another community such as in a low or middle-income country (LMIC) (1). Sustainable Development Goal number three (SDG 3) is to ensure healthy lives and promote well-being for all at all ages (2). Limited numbers of adequately trained healthcare providers and poor quality of care are barriers to achieving SDG 3 in many LMIC, especially targets concerning healthcare for women (SDG 3.1) and children (SDG 3.2) (3,4). Sub-Saharan Africa has 11% of the world's population and 24% of the global burden of disease yet only 3% of the world's healthcare providers, equating to fewer than 2.5 healthcare providers per 1,000 population (5). The United Nations acknowledge that volunteer groups have a role to play to work closely with governments and public institutes to help implement programmes that will continue to contribute to the achievement of the SDGs (3).

There is general recognition and agreement that high-income countries such as the United Kingdom (UK) have a responsibility to support healthcare development in poorer countries where the burden of disease is higher (1, 6). With inequality in the availability of healthcare providers, a growing number of skilled healthcare providers from high-income countries (including nurses, midwives, and doctors) engage in voluntary work in LMIC (7-11). Similarly, there are emerging reports of healthcare providers in LMIC themselves engaging in volunteering activities in areas that are less well served (12,13). There are many types of healthcare provider volunteer placements between and within countries and these can be long- or short-term. One such short-term volunteer project is the 'Making It Happen' programme delivered by the Centre for Maternal and Newborn Health (CMNH) at the Liverpool School of Tropical Medicine (LSTM) (14). The 'Making it Happen' programme aimed to reduce maternal and newborn morbidity and mortality by improving the availability and quality of care including by delivery of a 'skills and drills' competency-based training workshop in Emergency Obstetric and Newborn Care (EmOC & NC) for healthcare providers in sub-Saharan Africa and Asia (15,16). Volunteer facilitators played an integral role in the delivery of the 'Making it Happen' programme. Between 2006 and 2016, working as a multidisciplinary team, volunteers from both the UK and LMIC delivered training workshops in nine sub-

Saharan African and three Asian countries with over 15,000 healthcare providers trained (17).

There is currently a large body of anecdotal evidence and non-peer reviewed reporting that the experience of volunteering benefits not only the community in which a volunteer works but also affects the individual volunteer, resulting in changes in world views, values and outlooks (18-22). However, there are few studies that assess the views and experiences of the individual healthcare provider who has volunteered and the impacts of volunteering on the their personal and/or professional work life (23-24). We conducted a mixed-methods study to assess the views and experiences of volunteers from both high-income countries and LMIC settings and their perceptions of the impact of volunteering.

MATERIALS AND METHODS

Participants

Healthcare providers (including obstetricians, midwives and anaesthesists) based in the UK or in a LMIC who had attended a preparatory workshop to facilitate 3-5 day training workshops in Emergency Obstetric and Newborn Care (15,16) and who had volunteered at least once to facilitate such a training workshop.

Qualitative Study

Purposive sampling was used to include obstetricians, midwives, and anaesthetists, based in the UK. Topic guides were developed for the focus group discussions (FGD) and key informant interviews. The FGDs were held face to face with a mix of obstetricians, midwives and anaesthetists. For a more in-depth exploration of experiences, key informant interviews were conducted face-to-face or by telephone. All focus group discussions and key informant interviews were recorded, transcribed verbatim and analysed using the thematic framework approach, which facilitates rigorous and transparent analysis (25). The coding framework was developed using themes emerging from the data, the topic guides and study objectives. The coding framework was applied to the transcripts, charts were developed for each theme, and these charts were then used to describe the themes.

Quantitative study

An electronic survey was developed using an online platform SoGoSurvey (26) and sent by email to all healthcare providers (from the UK or a LMIC) who volunteered at least once as a

facilitator on the 'Making it Happen' programme between 2014 and 2016. All potential respondents were sent an introductory email with the information leaflet embedded in the text explaining the aims and objectives of the study. Two weeks later the survey was sent embedded by a link in an email. Two reminder emails were sent out at two-week intervals. For this survey, we developed a forty-point questionnaire based on themes obtained from the qualitative interviews. There were six sections with questions regarding: (1) socio-demographics; (2) expectations and challenges; (3) personal impact; (4) professional impact; (5) views on impact of volunteering on the local healthcare setting in which the workshops were conducted; (6) and whether the respondent would recommend volunteering to a colleague. Responses used a Likert scale of strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree. Half of the questions were written in a negative way to prevent leading the participant to answer positively. At the time of analysis, the answers to the negative questions were reversed to standardise the presentation of data. The questionnaire was piloted among ten volunteers (five from high-income countries and five from LMIC settings) and several questions were re-phrased slightly as a result. At the end of data collection, data from the SoGoSurvey online survey was exported to Excel version 2018 and descriptive analysis performed.

Patient and public involvement

No patient nor members of the public were involved in this study.

Ethics

Ethical approval was given from the Research Ethics Committee at LSTM (10.80 and 16.020). A rigorous informed consent process was followed. All volunteers were given verbal and detailed written information about the nature and purpose of the research before taking part. For the qualitative component, all participants provided written consent. For the online survey, electronic informed consent was embedded on the first page of the online survey as a mandatory question. Respondents are not able to proceed to the questions if informed consent was not given electronically.

RESULTS

Qualitative study

Characteristics of 38 volunteers interviewed (12 during three focus group discussions, and 26 key informant interviews) are provided in **Table 1.** The main themes which emerged during analysis included: reasons for volunteering; expectations and experiences of volunteering; impact on personal and professional development; and, the importance of and requirement for a supportive environment. These are described in more detail below and in **Table 2**.

Reasons for volunteering

Common reasons for volunteering were to help people, to improve maternal and newborn care in low resource settings and to gain work and teaching experience. Obstetricians and midwives said that they wished to be '*involved with something rewarding*', where they '*could make a difference'* and for '*personal satisfaction'*. Volunteering gave meaning and fulfilment during retirement; and was generally perceived as a good opportunity to develop teaching skills, for continuing professional development, and, it offered an opportunity to learn about and discuss clinical scenarios not common in the UK. For a minority, wanting to experience different cultures, and meeting new people who share an interest in improving maternal and newborn health in low resource settings were the main reasons for volunteering.

> *'It's a good opportunity to listen to other people talking about obstetrics in a different setting… and, the opportunity to talk about advanced pathology that we don't necessarily see here in the UK. So, it's good from that perspective, and it does give you a lot of teaching skills.... it provides you with an opportunity to see how things work in a different health setting where there isn't much money around, which for us currently is quite topical. So, it gives you a real handle on what's necessary and what's not necessary.'* (Female Obstetrician, key informant interview).

Expectations and experiences of volunteering

Volunteers had a wide range of expectations. The most common response among Obstetricians was however that they '*tried not to have any expectations*'. Some midwives and obstetricians reflected and accepted that '*nothing happens as planned*'. Others said they expected that they would be able to contribute to improving knowledge and practice in LMICs, but they would have rewarding as well as frustrating experiences. Volunteers expected their teaching would '*filter down'* to other healthcare providers and that they themselves

would learn about a different culture and health system. Some had low expectations of the effectiveness of the training workshops on health outcomes or thought course participants in host LMIC might be '*resentful*' of them coming from a high-income country. Several volunteers said they had anticipated the volunteering to be easier than it had been.

> '*I thought it was going to be easier than it was. I felt exhausted when I got back. I wasn't expecting that.'* (Anaesthetist, focus group discussion).

Volunteers reported a wide range of experiences and reflected particularly on their facilitation and teaching experiences, teamwork, and the challenges faced. Delivering a training workshop in a different environment, teaching different cadres of staff, and discovering what motivated participants to learn was generally considered enjoyable. Learning how to be sensitive to the local situation, culture and context was mentioned as sometimes being more difficult. Role play clinical scenarios were enjoyable. Volunteers reported that the participants in the training workshops were very positive and engaged well with the training. Many volunteers described being '*very satisfied*' when they could see and experience that a healthcare provider had learnt a new skill or gained new understanding of how to improve their management of obstetric and newborn emergencies. Most volunteers enjoyed meeting other volunteer facilitators as they learnt from each other, and they also specifically appreciated the inter-disciplinary teamwork.

> *'It was when you were demonstrating skills ... on models... because I'm more a hands-on person than talking. So, those sessions stood out to me because there were midwives who had never done a ventouse delivery before, and having been taught how to do it, and you could see, you could see the glow on their faces when they realised that this is not, it's not such a huge thing... and that with the right training.... you can save lives'* (Male Obstetrician, key informant interview).

There were several challenges which included: needing more time than expected for practical sessions, language barriers and having to work with a translator, training a variety of cadres of staff with a wide range of levels of knowledge and skills in one group. A minority reported working with some participants who were not interested in the training and had to deal with situations where local doctors did not want to participate in multidisciplinary workshops and

train together with e.g. midwives. Some volunteers reported feeling challenged by the different approaches to managing seriously ill women and reported that local healthcare providers had different attitudes regarding the level of urgency when responding to obstetric emergencies

Volunteers who had been to a LMIC setting before were generally not surprised by the basic facilities, power cuts, traffic jams, limited running water, lack of medication and blood transfusion services, and the working environment including lack of privacy for women attending for care. Volunteers who had no prior experience of working in a LMIC reported being '*shocked*' at witnessing poverty and poor quality of healthcare services for the first time.

Impact on personal and professional development

Many volunteers reported that they now had '*increased cultural sensitivity*'. Many respondents also talked about a sense of '*contributing to improving standards of care for mothers and babies'* through volunteering and experienced a sense of personal satisfaction regarding this. Some volunteers reported they now had gained a moral responsibility to raise more awareness regarding the high maternal mortality and morbidity in LMIC settings. Others reported feeling humbled by the experience of working with healthcare providers from resource poor settings and learning about their work and the challenges they face.

> *'I think working in a resource-poor environment does, and in different places in the world, it makes you a more rounded person.'* (Male Obstetrician focus group discussion).

The majority reported having gained new motivation, confidence, and ability to provide training and were more able to identify what characteristics and skills are required to be a good trainer.

> *'It's been a massively beneficial experience as far as making me think about different ways of training and what's involved in being a good trainer.'* (Anaesthetist, key informant interview).

Additional skills developed included strengthened leadership skills; improved multidisciplinary and multi-cultural teamwork; and programme management experience.

The reported effects of volunteering from UK volunteers on their work when back in the UK were mostly related to a greater awareness of the need for correct and rational use of resources such as drugs, investigations and materials and not wasting these resources. Many reported having a renewed appreciation of the excellent care given to women in their own settings, during and after pregnancy and childbirth.

> *'You come back really motivated, and although it's hard work while you're out there, it feels as though you've done something completely different.'* (Female Obstetrician, key informant interview).

Importance of and requirements for a supportive environment

Many volunteers viewed their volunteering experience as being successful and would volunteer again. They felt that they had accomplished what they set out do to and were keen for further opportunities to volunteer. A few volunteers said that they hoped to retire early so that they could spend more time volunteering.

There were a number of challenges volunteers had to overcome to be able to volunteer which included requirements for '*work release*' and in a minority of cases the arrangements for accommodation and travel in the host country had not worked out or been of an '*inadequate*' standard which had been difficult for the relevant volunteers (including lost luggage, failure of flights to connect, poor quality accommodation, security concerns).

The majority of volunteers felt that it was very useful to visit a local healthcare facility at the time of their volunteering placement, so they could learn about the differences between the health system capacity in a poor versus a well-resourced setting and gain an understanding of the working environment of the participants of the training workshops.

Many reported that it was important and valuable as a volunteer to be part of a larger programme which was centrally organised and with approval for implementation of the

programme already in place in the host country from the relevant government authorities and other partners in-country. Some volunteers had noted and expressed concern regarding a lack of coordination and communication between governmental and non-governmental organisations, both in high-income countries and LMIC settings for some other or previous programmes. Respondents felt that contributing as part of a larger programme was more likely to have an impact on maternal and newborn health in the long term, compared to volunteering as an individual clinician working at a healthcare facility for a period.

> *'This has demonstrated to me that you can go for a short (time), within the context of a properly structured programme like this and make a significant impact. Though individually we're only one little tiny part of it, but because you are part of a bigger programme, it works well,'* (Female Obstetrician, key informant interview).

The majority of volunteers reported they would have liked to know more about the feedback processes and monitoring and evaluation component of the programme, and reported an understanding that the impact of the training workshops on maternal and newborn mortality and morbidity would take time and may be difficult to measure.

Quantitative survey

262 volunteers responded to the online survey, a response rate of 62%. Due to incompletion of the questionnaire, 18 volunteers were excluded from analysis, giving a total of 244 completed responses, 120 from the UK, and 124 from a LMIC setting relating to 506 volunteering episodes across 13 countries. There were some differences between the socio-demographics of volunteers from the UK and volunteers from LMIC settings **(Table 3)**. More respondents from LMIC were younger, worked full time in clinical practice, the range of disciplines was wider, and they had volunteered on more occasions, compared to volunteers from the UK. Overall, there was representation from a range of cadre of healthcare providers with similar proportions of obstetricians or midwives. The volunteering episodes occurred in Kenya (18%), Zimbabwe (13%), UK (for participants from LMIC, 12%), Tanzania (9%), Nigeria (9%), South Africa (7%), Sierra Leone (6%), Ghana (6%) compared to Malawi, India, Bangladesh, Pakistan or Namibia (all < 5%).

Expectations

Respondents' most common expectation was that they would be able to improve the knowledge and skills of healthcare providers in LMIC, and that this would ultimately translate to improving the health outcomes of mothers and their babies **(Figure 1).** Respondents expected a personally rewarding experience and that they would have the opportunity to learn about different health systems and cultures. Volunteers expected the programme and workshops to be well organised, and that accommodation would be safe and appropriate. More than 1:4 volunteers felt that the challenges encountered were in reality greater than they expected, including (1) the wide range of baseline knowledge and skills of healthcare providers in LMIC; (2) insufficient time for planned training activities for some; and (3) an apparent healthcare provider attitude of a lack of urgency to take action in cases of a clinical emergency. These expectations and experiences were similar for volunteers from the UK and from LMIC.

Impact

Overall, volunteers reported that volunteering had impacted their personal (70%) and professional life (64%). More volunteers from LMIC (83%) reported that volunteering had impacted their personal (83%) and professional life (81%) compared to respondents from high-income countries (56% and 48% respectively). Volunteers perceived that volunteering was of benefit (98%); and increased their confidence (98%); teamwork (95%); and leadership skills (90%) **(Figure 2)**. More volunteers from LMIC reported more appreciation of respectful care (94%); strengthened leadership (93%) and teamwork skills (98%) compared to respondents from the UK (74%; 85% and 91% respectively). Volunteers from the UK reported an increased appreciation for their own working environment (91%). Many volunteers (77%) reported that volunteering had altered their perspectives, and this view was higher in volunteers from LMIC (77.0%) compared to the UK (55.8%). Overall, when asked how, many volunteers responded that they had a greater appreciation of the process of capacity building for healthcare providers (81%); a better understanding of challenges facing healthcare providers in low resource clinical settings (79%) and had become enthusiastic regarding advocacy for global maternal health (79%).

Impact of the overall programme

Volunteers agreed that the overall 'Making it Happen' programme had an impact (96%); built sustainable partnerships (97%); promoted multidisciplinary team working (98%); improved the knowledge and skills of volunteers (99%) and was a good use of resources (98%). Nearly all volunteers (96%) reported that the 'Making it Happen' impacted the country in which they were volunteering as a facilitator. All volunteers (100%) reported that they would recommend volunteering to a colleague.

DISCUSSION

Statement of principal findings

This study used a qualitative and quantitative approach to explore and report the experiences and perceptions of international and national healthcare providers who volunteered to train other healthcare providers in thirteen different countries to improve maternal and newborn emergency care. This study demonstrated that volunteers from both high-income countries and LMIC settings are motivated by altruism and believe that volunteering as part of a larger programme, does improve the knowledge and skills of healthcare providers, and that this skill exchange translates to better care for women and their babies in low resource settings. Volunteering is perceived as valuable, an opportunity to learn from other healthcare systems and cultures and to further develop skills in management, leadership, teaching and communication. Volunteers expect to be well supported before, during and after their placement. Compared to respondents from the UK, more healthcare providers based in LMIC reported that volunteering had impacted their personal and professional life; and that they were more appreciative of evidence based clinical practice and respectful care; and had developed more leadership and teamwork skills as a result of their volunteering work.

Strengths and limitations of the study

This study is the first study to use mixed methods to systematically examine the perceptions and experiences of volunteers from both high-income countries and LMICs settings regarding the views and experiences of volunteering. A strength of this study was that both qualitative and quantitative data was collected. Qualitative methods provided rich data which were used to describe and explain behaviour in relation to the social and cultural context. The subsequent survey questions were developed with a focus in the main emerging thematic

themes from the qualitative data and was used to obtain more representative data from a larger number of respondents.

There were a few limitations of this study. For logistic reasons, the qualitative data was only collected from healthcare providers based in the UK and there is a need to explore the views of healthcare providers from LMICs in more depth. Regarding the online survey, the response rate was 62% and this may represent selection bias, in that respondents who either really enjoyed or did not enjoy the volunteering experience may have been more likely to have completed the survey. We did not set out (and the sample size was therefore not large enough) to assess if there was an association between age, sex, place of work and cadre of healthcare provider on the difference in expectations, and perceived impacts of the experience of volunteering on the individual's personal and professional life as a result.

A small number of facilitators (n=12) from the UK had not been able to travel overseas and had volunteered to provide training workshops for healthcare providers working in a LMIC who attended the workshop in the UK. Many respondents had volunteered in Kenya and Zimbabwe and comparatively fewer respondents had volunteered in Asian countries. This study assessed the views of medical volunteers regarding a short-term training placement only and the views and experiences of longer-term volunteer clinical placements may differ.

Strengths and weaknesses in relation to other studies

In this study, volunteers were motivated to volunteer to help other people, to improve health outcomes in other countries, and, for work and teaching experience. Retired obstetricians in this study specifically mentioned their desire to feel useful as a key reason for volunteering. This is like other studies that describe volunteers in general having altruistic motivation, wanting to help others and to feel useful (10, 27-30). Other reasons for volunteering such as personal development, networking, personal beliefs and adventure were mentioned less frequently by study volunteers in our study. Existing literature surrounding motivation to volunteer also found that volunteers in general were not as motivated by these factors (27-30).

Meaning of the study: implications for clinicians or policymakers

Most volunteers who were interviewed reported that they could transfer new skills to their workplace, having gained more confidence to become trainers for other courses, and further develop teaching skills. An increase in leadership and management skills was also considered very useful and of benefit for the home country setting as was also described in other reports (1,23). Evidence of a positive impact of the volunteering, including regarding improved knowledge and skills of healthcare providers, quality of healthcare provision and health outcomes in the host country, was important to the volunteers in our study. This helped keep them motivated to continue to volunteer and was considered by them as important justification for the continuation of the programme. Although rigorous monitoring and evaluation of the programme was in place, and this had been explained to the volunteers, many volunteers had not appreciated the significance and perhaps importance of this before volunteering. It is important in the future to provide more information to volunteers regarding the purpose, expected outcomes and feedback processes of programmes they volunteer for. Similarly, detailed information regarding the dates and place of workshops, travel arrangements, type of venue, and composition of the group proved very important to volunteers, to ensure they were well prepared and supported. Once in-country, it is important that volunteers are able to assess the local situation in which healthcare providers work for themselves also e.g. volunteers found it helpful to have a facilitated visit to a local healthcare facility even if this was difficult and could be a '*shocking*' experience.

Unanswered questions and future research

There is a need to investigate the perceptions of stakeholders and partners within host countries regarding the use of and impact of volunteers. It would be helpful if guidelines are developed and disseminated more widely regarding the support required for providing an excellent volunteering experience and impact in low resource settings. It would be beneficial to understand the perceptions of managers of healthcare systems, regarding how they can support and facilitate their workforce to volunteer in a different setting, and the positive and negative impact that this may have including for the home setting.

CONCLUSION

Healthcare providers from both high-income countries and LMIC settings, report that volunteering has clear benefits for the individual (both personally and professionally) and the beneficiaries of the volunteering. Volunteers are motivated by the perceived value or impact of the placement; are keen to feel useful, and to learn from other healthcare systems and cultures. Organisations that use volunteers as partners would benefit from an understanding of volunteers' motivations, their need for information and their need to feel valued and safe before during and after the volunteering episode. Good organisation of the placements, practical support and an understanding of the purpose and outcomes of the programme to which volunteers contribute are key to ensuring a positive experience and impact (31-33).

DECLARATIONS

AUTHOR CONTRIBUTIONS

JR supervised the qualitative part of this study and interpreted the qualitative data analysis. MMc conceived the quantitative study idea, constructed the questionnaire, conducted data collection, data analysis, interpretation of the data and wrote the manuscript. NvdB helped design both the qualitative and quantitative studies, analysed and interpreted the data and wrote the manuscript. All authors have edited and approved the manuscript for submission.

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COMPETING INTERESTS

The authors declare no competing interests.

DISCLAIMER

The funders played no role in the writing of the manuscript or the decision to submit it for publication.

PATIENT CONSENT

Not applicable.

AVAILABILITY OF DATA AND MATERIALS

Data is available from the corresponding author on reasonable request.

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ETHICS

Ethical approval was given from the Research Ethics Committee at the Liverpool School of Tropical Medicine (10.80 and 16.020).

ABBREVIATIONS

LMIC	Low and Middle-Income Countries
CMNH	Centre for Maternal and Newborn Health
LSTM	Liverpool School of Tropical Medicine
NHS	National Health System
UK	United Kingdom

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List of figures and tables

Table 1: Description of volunteers participating in the qualitative and quantitative studies (n=282).

Type of data collected	Quantitative online survey respondents		Qualitative Interview respondents
Country of Origin	United Kingdom	Bangladesh, Ghana, Kenya, India, Malawi, Namibia, Nigeria, Pakistan, Sierra Leone, South Africa, Tanzania, Zimbabwe.	United Kingdom
Number of respondents	120	124	38
Age (years)	**%**	**%**	**%**
25 -54	47	86	Data not collected
55 -64	41	11	
>65	13	0	
Gender			
Male	31	48	10
Female	69	52	18
Employment status			
Full time clinical	60	82	31
Part time clinical	19	0	0
Retired from clinical work	16	0	7
Other	0	10	0
Cadre			
Obstetrician	50	32	29
Midwife	33	28	6
Clinical Officer	n/a	8	n/a
Other (including anaesthesists, neonatologists)	9	18	0
Number of times volunteered			
<5	57	35	Data not collected
5-10	35	41	
>10	8	23	

n/a- not applicable

Table 2: Key emerging themes from focus group discussions and key informant interviews

Reasons for volunteering	Experiences of volunteering	Impact of volunteering
• To help others • To improve maternal and newborn care and health outcomes in low resource settings • To gain teaching experience • To do something different • Commitment to being part of an effective programme	• Teaching different cadres of healthcare providers working in resource poor settings was challenging but highly rewarding • Adapting training content and approach to local context could be difficult • Interactions with training workshop participants was enjoyable • Observing poor quality of care was difficult	• Demonstrable increase in knowledge and skills of local healthcare providers • Volunteer increase in teaching, leadership, and management skills • Increased knowledge of challenges for healthcare providers working in low resource settings • A feeling of contributing to the betterment of society, and making an impact • More knowledge of and improved cultural sensitivity • Increased motivation for and renewed appreciation of quality of care and resources available in the NHS
Requirements for Supportive Environment		
At individual volunteer level	**Organisation receiving the volunteer**	**Organisation sending the volunteer**
• Ability to obtain study or professional leave from the NHS work • Volunteers should be flexible, able to work in teams, communicate effectively • Appropriate level of clinical skills and experience and previous tea1ching experience. • Previous travel to low resource settings is helpful • Knowledge of local context: including the health system, drugs and equipment used and common care pathways	• Commitment of local government and in-country partners to programme • Local colleagues to help prepare, support and where possible deliver the training workshops • Selection of the most appropriate participants to attend the training ensuring attendees are those who deliver the services they will be trained in • Provision of a suitable venue for the workshops • Facilitate volunteers to visit local healthcare facilities	• Attention to pre-course logistics including travel arrangements, accommodation is very important • Adequate notice of dates of volunteer placements required to be able to take leave from NHS • Good composition of multi-disciplinary volunteer team including with a range of expertise • Before and after briefings, both face-to-face and online • Sharing information from previous volunteers would be beneficial; and sharing results of monitoring and evaluation and other reports with volunteers • Appointed team leader (by organisation or team itself) should be encouraging, supportive and knowledgeable about the country and setting. • Ensure that volunteers always feel safe and well supported

Figure 1. **Expectations of volunteers (n=244)**

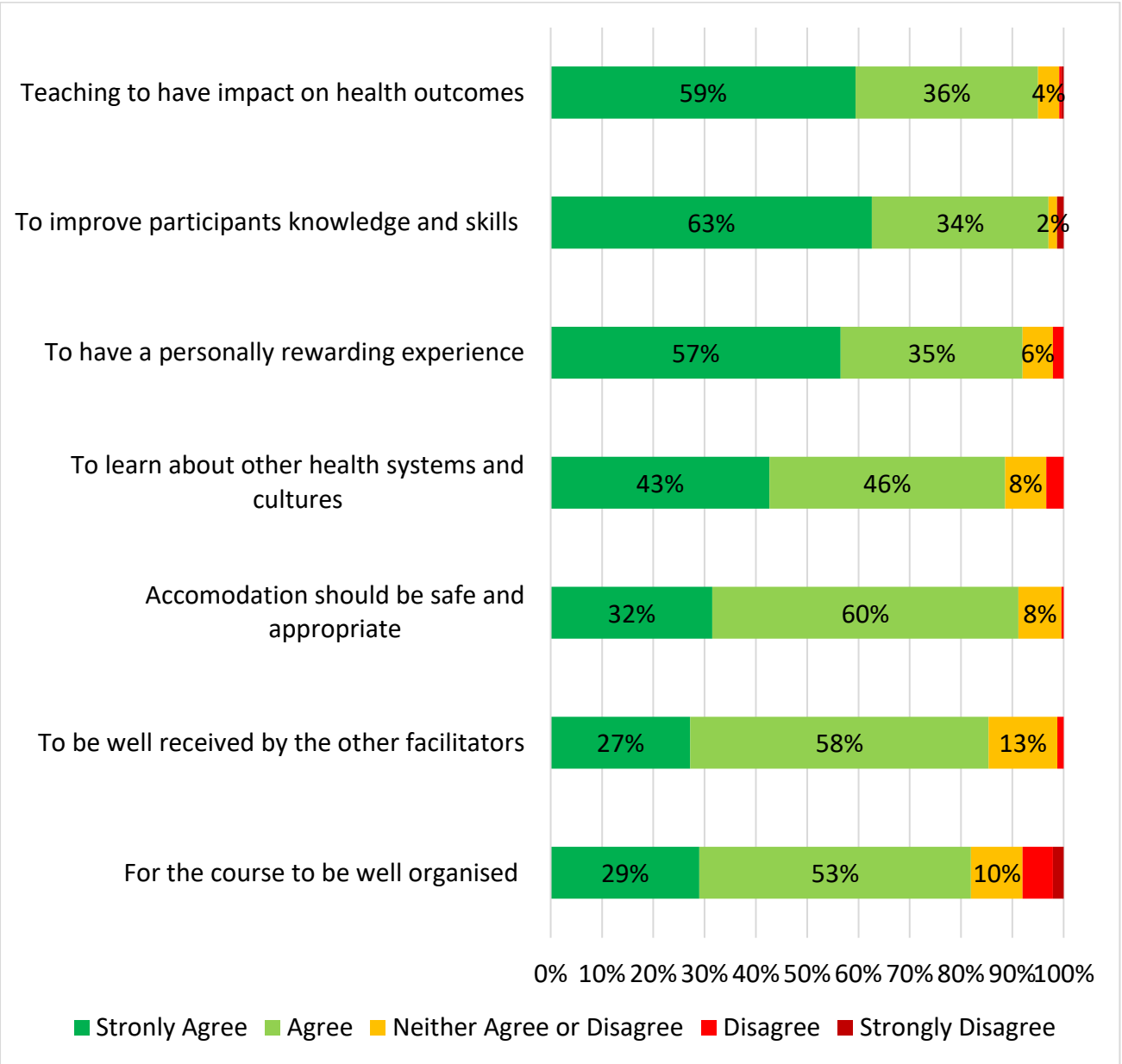
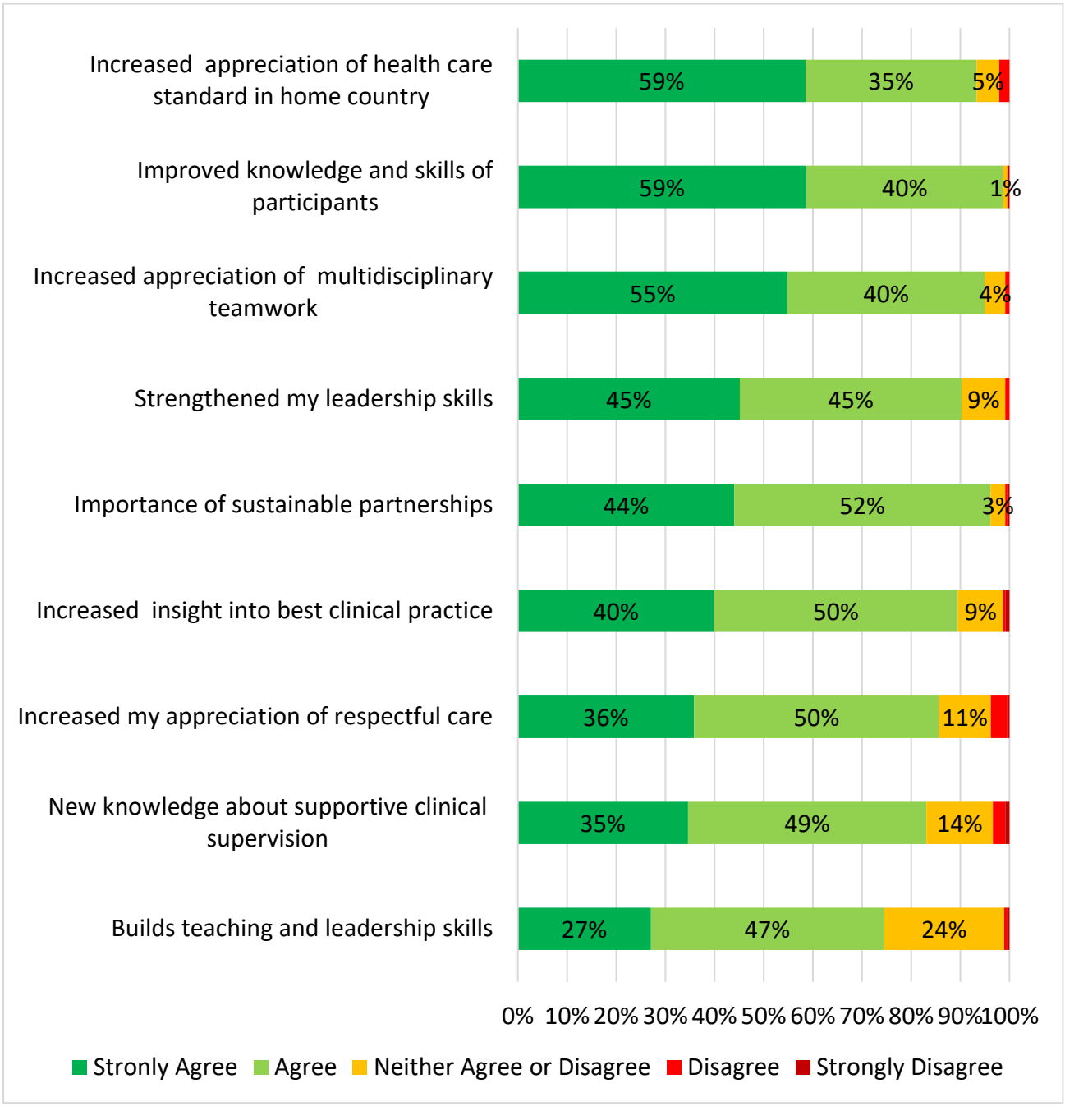


Figure 2. **Benefits and impact of volunteering (n=244)**



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EXPERIENCES AND IMPACT OF INTERNATIONAL MEDICAL VOLUNTEERING: A MULTI-COUNTRY MIXED METHODS STUDY

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EXPERIENCES AND IMPACT OF INTERNATIONAL MEDICAL VOLUNTEERING: A MULTI-COUNTRY MIXED METHODS STUDY

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Abstract

Objective

To assess the experience and impact of medical volunteers who facilitated training workshops for healthcare providers in maternal and newborn emergency care in 13 countries.

Settings

Bangladesh, Ghana, Kenya, India, Malawi, Namibia, Nigeria, Pakistan, Sierra Leone, South Africa, Tanzania, United Kingdom (UK), Zimbabwe.

Participants

Medical volunteers from the UK (n=162) and from low- and middle- income countries (LMIC) (n=138).

Outcome measures

Expectations, experience, views, personal and professional impact of the experience of volunteering on medical volunteers based in the UK and in LMIC.

Results

UK based medical volunteers (n=38) were interviewed using focus group discussions (n=12) and key informant interviews (n=26). 262 volunteers (UK based n=124 (47.3%), and LMIC based n=138 (52.7%)) responded to the online structured questionnaire (62% response rate), covering 506 volunteering episodes. UK based medical volunteers were motivated by altruism, and perceived volunteering as a valuable opportunity to develop their skills in leadership, teaching and communication, skills reported to be transferable to their home workplace. Medical volunteers based in the UK and in LMIC (n=244) reported increased confidence (98%, n=239); improved teamwork (95%, n=232); strengthened leadership skills (90%, n=220); and reported that volunteering had a positive impact for the host country (96%, n=234) and healthcare providers trained (99%, n=241); formed sustainable partnerships (97%, n=237); promoted multidisciplinary team working (98%, n=239); and was a good use of resources (98%, n=239). Medical volunteers based in LMIC reported higher satisfaction scores than those from the UK with regards to impact on personal and professional development.

Conclusion

Healthcare providers from the UK and LMIC are highly motivated to volunteer to increase local healthcare providers' knowledge and skills in low resource settings. Further research is necessary to understand the experiences of local partners and communities regarding how

the impact of medical volunteering can be mutually beneficial and sustainable with measurable outcomes.

Keywords: Experiences, training, health, medical, volunteers, healthcare providers, international volunteering, low resource settings.

Article summary

Strengths and limitations of this study

- A multi-country study to assess the experience and impact of medical volunteers based in the UK and in LMIC who facilitated training workshops in maternal and newborn emergency care across thirteen different countries.
- We used mixed methods, qualitative interviews for medical volunteers based in the UK (n=38) and an online survey (n=262) to assess healthcare providers from both the UK and LMIC (total n=300) regarding their views and experiences of international medical volunteering.
- The response rate was 62% (262/422) for the online survey and this may represent selection bias, in that respondents who either really enjoyed or did not enjoy the volunteering experience may have been more likely to have completed the survey.
- Qualitative interviews were conducted with medical volunteers based in the UK only and there is a need to explore the views of healthcare providers who volunteer and are based in LMIC in more depth.
- This study assessed the views of medical volunteers regarding a short-term teaching and training placement as part of a larger capacity building programme only and the views and experiences of longer-term volunteer service delivery clinical placements may differ.

INTRODUCTION

International volunteers are skilled individuals who are motivated to offer their services willingly, without consideration for financial gain, to contribute to another community such as in a low or middle-income country (LMIC) (1). Sustainable Development Goal number three (SDG 3) is to ensure healthy lives and promote well-being for all at all ages (2). Limited numbers of adequately trained healthcare providers and poor quality of care are barriers to achieving SDG 3 in many LMIC, especially targets concerning healthcare for women (SDG 3.1) and children (SDG 3.2) (3,4). Sub-Saharan Africa has 11% of the world's population and 24% of the global burden of disease yet only 3% of the world's healthcare providers, equating to fewer than 2.5 healthcare providers per 1,000 population (5). The United Nations acknowledge that volunteer groups have a role to play to work with governments and public institutes to help implement programmes that will continue to contribute to the achievement of the SDGs (3).

There is general recognition and agreement that high-income countries such as the United Kingdom (UK) have a responsibility to support healthcare development in poorer countries where the burden of disease is higher (1, 6). With inequality in the availability of healthcare providers, many skilled healthcare providers from high-income countries (including nurses, midwives, and doctors) engage in voluntary work in low- and middle-income countries (LMIC) (7-11). Similarly, there are emerging reports of healthcare providers in LMIC themselves engaging in volunteering activities in areas that are less well served (12,13). There are many types of healthcare provider volunteer placements between and within countries and these can be long- or short-term. One such short-term volunteer project is the Making It Happen programme delivered by the Centre for Maternal and Newborn Health at the Liverpool School of Tropical Medicine (14). The Making It Happen programme aimed to reduce maternal and newborn morbidity and mortality by improving the availability and quality of care including the delivery of 'skills and drills' competency-based training workshops in Emergency Obstetric and Newborn Care (EmOC&NC) for healthcare providers in sub-Saharan Africa and Asia (15,16). Medical volunteers played an integral role in the delivery of the Making It Happen programme and facilitated on standardised 3-5 day EmOC&NC training package including the management of shock, sepsis, hypertensive disorders of pregnancy, obstructed labour, obstetric emergencies, assisted vaginal delivery, post-partum haemorrhage, manual removal

of placenta, and newborn resuscitation, using adult learning interactive sessions comprising of short lectures, simulation training using obstetric and newborn mannequins, role play and clinical case scenarios (14). Between 2006 and 2016, working as a multidisciplinary team, volunteers from both the UK and LMIC delivered this training EmOC&NC workshop in nine sub-Saharan African and three Asian countries with over 15,000 healthcare providers trained (17).

Studies have reported that the experience of medical volunteering (undergraduate and postgraduate) affects the individual volunteer personally and professionally, resulting in positive changes in world views, values and outlooks (18-24). There is research exploring the experiences and perceived impact of healthcare providers who have volunteered in healthcare facilities providing a clinical service although much of this research is low quality and largely anecdotal. To date, there is little research regarding the experiences and impact of healthcare providers, both from the UK and LMIC settings, who undertake short term volunteer placements to teach and facilitate on maternal and newborn training workshops in low resource settings. We conducted a mixed-methods study to assess the views and experiences of medical volunteers from both the UK and LMIC settings and their perceptions of the impact of volunteering, as part of the Making It Happen implementation programme.

MATERIALS AND METHODS

Participants

Highly skilled healthcare providers (Obstetricians, Anaesthesists and midwives) based in the UK or in a LMIC who had attended a preparatory workshop to facilitate 3-5-day training workshops in EmOC&NC (15,16) and who had volunteered at least once to facilitate such a training workshop were invited to complete an online survey. A smaller sample of UK based medical volunteers were interviewed in depth as part of the qualitative study.

Qualitative Study

Purposive sampling was used to identify UK based Obstetricians, Anaesthetists, and midwives who met the inclusion criteria. Topic guides were developed for the focus group discussions (FGD) and key informant interviews (**Supplementary File 1**). FGDs were conducted face-to-face with the multidisciplinary maternity team of Obstetricians, Anaesthetists, and midwives. For a more in-depth exploration of experiences, key informant interviews were conducted

face-to-face or by telephone. All FGDs and key informant interviews were recorded, transcribed verbatim and analysed using the thematic framework approach (25). The coding framework was developed using themes emerging from the data, the topic guides and study objectives. The coding framework was applied to the transcripts, identified codes were grouped into categories and used to describe the themes after being reviewed by all researchers to ensure consistency.

Quantitative study

An electronic survey was developed using an online platform SoGoSurvey in 2018 (26) and sent by email to all healthcare providers based in the UK and in LMIC, who volunteered at least once as a facilitator on the Making it Happen programme between 2014 and 2016. All potential respondents were sent an introductory email with the information leaflet embedded in the text explaining the aims and objectives of the study. Two weeks later the survey was sent embedded by a link in an email. Two reminder emails were sent out at two-week intervals. For this survey, we developed a forty-point questionnaire based on themes obtained from the qualitative interviews (**Supplementary File 2**). There were six sections with questions regarding: (1) socio-demographics; (2) expectations and challenges; (3) personal impact; (4) professional impact; (5) views on impact of volunteering on the local healthcare setting in which the workshops were conducted; (6) and whether the respondent would recommend volunteering to a colleague. Responses used a Likert scale of strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree. Half of the questions were written in a negative way to prevent leading the participant to answer positively. At the time of analysis, the answers to the negative questions were reversed to standardise the presentation of data. The questionnaire was piloted among ten volunteers (five from the UK and five from LMIC) and several questions were re-phrased slightly as a result. At the end of data collection, data from the SoGoSurvey online survey was exported to Excel version 2018 and descriptive analysis performed.

Patient and public involvement

No patient nor members of the public were involved in this study.

Ethics

Ethical approval was given from the Research Ethics Committee at LSTM (10.80 and 16.020). All volunteers were given detailed written information about the nature and purpose of the

research before taking part. For the qualitative component, all participants provided written consent. For the online survey, electronic informed consent was embedded on the first page of the online survey as a mandatory question.

RESULTS

INTERVIEWS

Characteristics of 38 volunteers from the UK who were interviewed (12 during three focus group discussions, and 26 key informant interviews) are provided in **Table 1.** The main emerging themes included: reasons for volunteering; expectations and experiences of volunteering; impact on personal and professional development; and, the importance of and requirement for a supportive environment. These are described in more detail below and in **Table 2**.

Reasons for volunteering

Common reasons for volunteering were to help people, to improve maternal and newborn care in low resource settings and to gain teaching experience. Obstetricians and midwives said that they wished to be '*involved with something rewarding*', where they '*could make a difference*' and for '*personal satisfaction*'. Volunteering gave meaning and fulfilment during retirement; and was generally perceived as a good opportunity to develop teaching skills, for continuing professional development, and, it offered an opportunity to learn about and discuss clinical scenarios not common in the UK. For a minority, wanting to experience different healthcare systems, and meeting new people who share an interest in improving maternal and newborn health in low resource settings were the main reasons for volunteering.

> *'It's a good opportunity to listen to other people talking about obstetrics in a different setting… and, the opportunity to talk about advanced pathology that we don't necessarily see here in the UK. So, it's good from that perspective, and it does give you a lot of teaching skills.... it provides you with an opportunity to see how things work in a different health setting where there isn't much money around, which for us currently is quite topical. So, it gives you a real handle on what's necessary and what's not necessary.'* (Female Obstetrician, Key informant interview, UK).

Expectations and experiences of volunteering

Volunteers had a wide range of expectations. The most common response among Obstetricians was however that they '*tried not to have any expectations'*. Some midwives and Obstetricians reflected and accepted that '*nothing happens as planned'*. Volunteers expected their teaching would '*filter down'* to other healthcare providers and that they themselves would learn about a different healthcare system. Some had low expectations of the effectiveness of the training workshops on health outcomes or thought course participants in host LMIC might be '*resentful*' of them coming from a high-income country. Several volunteers said they had anticipated the volunteering to be easier than it had been.

> '*I thought it was going to be easier than it was. I felt exhausted when I got back. I wasn't expecting that.'* (Anaesthetist, FGD, UK).

Volunteers reported a wide range of experiences and reflected particularly on their facilitation and teaching experiences, teamwork, and the challenges faced. Delivering a training workshop in a different environment, teaching different cadres of staff (nurses, midwives, medical officers, doctors), and discovering what motivated participants to learn was generally considered enjoyable. Learning how to be sensitive to the local situation and context was mentioned as sometimes being difficult. Role play clinical scenarios were enjoyable. Volunteers reported that the participants in the training workshops were mostly positive and engaged well with the training. Many volunteers described being '*very satisfied'* when they could see and experience that a healthcare provider had learnt a new skill or gained new understanding of how to improve their management of obstetric and newborn emergencies. Most volunteers enjoyed meeting other volunteer facilitators as they learnt from each other, and they also specifically appreciated the inter-disciplinary teamwork.

> *'It was when you were demonstrating skills ... on models... because I'm more a hands-on person than talking. So, those sessions stood out to me because there were midwives who had never done a ventouse delivery before, and having been taught how to do it, and you could see, you could see the glow on their faces when they realised that this is not, it's not such a huge thing... and that with the right training.... you can save lives'* (Male Obstetrician, Key informant interview, UK).

There were several challenges which included: needing more time than expected for practical sessions, language barriers and working with a translator, training a variety of cadres of staff with a wide range of levels of knowledge and skills in one group. A minority reported working with some participants who were not interested in the training and had to deal with situations where local doctors did not want to participate in multidisciplinary workshops and train together with e.g. midwives. Some volunteers reported feeling challenged by the different approaches to managing seriously ill women and mentioned that local healthcare providers based in LMIC had different attitudes regarding the level of urgency when responding to obstetric emergencies compared to the UK setting. Volunteers who had been to a LMIC setting before were generally not surprised by the basic healthcare resources and facilities. Volunteers who had no prior experience of working in a LMIC reported being '*shocked*' at witnessing poverty and poorer quality of healthcare services for the first time.

Impact on personal and professional development

Many volunteers reported that they now had '*increased cultural sensitivity*'. Many respondents also talked about a sense of '*contributing to improving standards of care for mothers and babies*' through volunteering and experienced a sense of personal satisfaction regarding this. Some volunteers reported they had gained a moral responsibility to raise more awareness regarding the high maternal morbidity and mortality in LMIC settings. Others reported feeling humbled by the experience of working with healthcare providers from low resource settings and learning about their work and the challenges they face.

> *'I think working in a resource-poor environment does, and in different places in the world, it makes you a more rounded person.'* (Male Obstetrician, FGD, UK)

The majority reported having gained new motivation, confidence, and ability to provide training and were more able to identify what characteristics and skills are required to be a good trainer.

'It's been a massively beneficial experience as far as making me think about different ways of training and what's involved in being a good trainer.' (Anaesthetist, Key informant interview, UK).

Additional skills developed included strengthened leadership skills; improved multidisciplinary and multi-cultural teamwork; and programme management experience. The reported effects of volunteering from UK volunteers on their work when back in the UK were mostly related to a greater awareness of the need for correct and rational use of resources such as drugs, investigations and materials and not wasting these resources. Many reported having a renewed appreciation of the excellent care given to women in their own settings, during and after pregnancy and childbirth.

'You come back really motivated, and although it's hard work while you're out there, it feels as though you've done something completely different.' (Female Obstetrician, Key informant interview, UK).

Importance of and requirements for a supportive environment

Many volunteers viewed their volunteering experience as being successful and would volunteer again. They felt that they had accomplished what they set out do to and were keen for further opportunities to volunteer. A few volunteers said that they hoped to retire early so that they could spend more time volunteering. There were a number of challenges volunteers had to overcome to be able to volunteer which included requirements for '*work release'* and in a minority of cases the arrangements for accommodation and travel in the host country had not worked out or been of an '*inadequate*' standard which had been difficult for the relevant volunteers (including lost luggage, failure of flights to connect, poor quality accommodation, security concerns). The majority of volunteers felt that it was very useful to visit a local healthcare facility at the time of their volunteering placement, so they could learn about the differences between the health system capacity in a poor versus a well-resourced setting and gain an understanding of the working environment of the participants of the training workshops. Many reported that it was important and valuable as a volunteer to be part of a larger programme which was centrally organised and with approval for implementation of the programme already in place in the host country from the relevant government authorities and other partners in-country. Respondents felt that contributing as

part of a larger programme was more likely to have an impact on maternal and newborn health in the long term, compared to volunteering as an individual clinician working at a healthcare facility for a time.

> *'This has demonstrated to me that you can go for a short (time), within the context of a properly structured programme like this and make a significant impact. Though individually we're only one little tiny part of it, but because you are part of a bigger programme, it works well,'* (Female Obstetrician, Key informant interview, UK).

The majority of volunteers reported they would have liked to know more about the feedback processes and monitoring and evaluation component of the programme, and reported an understanding that the impact of the training workshops on maternal and newborn mortality and morbidity would take time and may be difficult to measure.

Online Survey

262 medical volunteers from the UK and LMIC responded to the online survey, a response rate of 62%. Due to incompletion of the questionnaire, 18 volunteers were excluded from analysis, giving a total of 244 completed responses, 120 from the UK (49.2%), and 124 from a LMIC (50.8%) relating to 506 volunteering episodes across 13 countries. There were some differences between the socio-demographics of volunteers from the UK and volunteers from LMIC settings **(Table 1)**. More respondents from LMIC were younger, worked full time in clinical practice, the range of disciplines was wider, and they had volunteered on more occasions, compared to volunteers from the UK. Overall, there was representation from a range of cadre of healthcare providers with similar proportions of obstetricians or midwives. The 506 volunteering episodes occurred in Kenya (18%, n=91), Zimbabwe (13%, n=66), UK (12%, n=61), Tanzania (9%, n=45), Nigeria (9%, n=45), South Africa (7%, n=35), Sierra Leone (6%, n=30), Ghana (6%, n=30) compared to Malawi, India, Bangladesh, Pakistan or Namibia (all < 5%, n<25).

Expectations

Respondents' most common expectation was that they would be able to improve the knowledge and skills of healthcare providers in poorer resource settings, and that this would ultimately translate to improving the health outcomes of mothers and their newborns **(Figure 1).** Respondents expected a personally rewarding experience and that they would have the

opportunity to learn about different health systems. Volunteers expected the programme and workshops to be well organised, and that accommodation would be safe and appropriate. More than 1:4 volunteers felt that the challenges encountered were in reality greater than they expected, including (1) the wide range of baseline knowledge and skills of healthcare providers in LMIC; (2) insufficient time for planned training activities for some; and (3) an apparent healthcare provider attitude of a lack of urgency to take action in cases of a clinical emergency. These expectations and experiences were similar for volunteers from the UK and from LMIC.

Impact

Overall, volunteers reported that volunteering had impacted their personal (70%, n=171) and professional life (64%, n=156). More volunteers from LMIC (83%, n=103) reported that volunteering had impacted their personal (83%) and professional life (81%) compared to respondents from high-income countries (56% and 48% respectively). Volunteers perceived that volunteering was of benefit (98%, n=239); and increased their confidence (98%, n=239); teamwork (95%, n=232); and leadership skills (90%, n=202) **(Figure 2)**. More volunteers from LMIC reported more appreciation of respectful care (94%, n=117); strengthened leadership (93%, n=115) and teamwork skills (98%, n=121) compared to respondents from the UK (74%; 85% and 91% respectively). Volunteers from the UK reported an increased appreciation for their own working environment (91%, n=109). Many volunteers (77%, n=188) reported that volunteering had altered their perspectives, and this view was higher in volunteers from LMIC (77%, n=95) compared to the UK (56%, n=67). Overall, when asked how, many volunteers responded that they had a greater appreciation of the process of capacity building for healthcare providers (81%, n=198); a better understanding of challenges facing healthcare providers in low resource clinical settings (79%, n=193) and had become enthusiastic regarding advocacy for global maternal health (79%, n=193).

Impact of the overall programme

Volunteers agreed that the overall Making It Happen programme had a positive impact (96%, n=234); built sustainable partnerships (97%, n=237); promoted multidisciplinary team working (98%, n=239); improved the knowledge and skills of volunteers (99%, n=241) and was a good use of resources (98%, n=239). Nearly all volunteers (96%, n=234) reported that the

Making It Happen impacted the country in which they were volunteering as a facilitator. All volunteers (100%, n=244) reported that they would recommend this type of volunteering to a colleague.

DISCUSSION

Statement of principal findings

This mixed method study explored and reported the experiences and perceptions of healthcare providers from the UK and from LMIC, who volunteered to train other healthcare providers in thirteen different countries to improve maternal and newborn emergency care. This study demonstrated that volunteers from the UK and LMIC settings were motivated by altruism and believed that volunteering as part of a larger programme, does improve the knowledge and skills of healthcare providers (and the volunteers themselves), and that this skill exchange translates to better care for women and their newborns in resource poor settings. Volunteering was perceived as valuable, an opportunity to learn from other healthcare systems and to further develop skills in management, leadership, teaching and communication. Volunteers expected to be well supported before, during and after their placement. Compared to respondents from the UK, more healthcare providers based in LMIC reported that volunteering had impacted their personal and professional life; and that they were more appreciative of evidence based clinical practice and respectful care; and had developed more leadership and teamwork skills as a result of their volunteering work.

Strengths and limitations of the study

This study used mixed methods to explore the perceptions and experiences of volunteers from the UK and LMICs settings regarding the views and experiences of volunteering. There were a few limitations of this study. For logistic reasons, qualitative data were collected from medical volunteers based in the UK only and there is a need to explore the views of medical volunteers from LMICs in more depth. Regarding the online survey, the response rate was 62% and this may represent selection bias, in that respondents who either really enjoyed or did not enjoy the volunteering experience may have been more likely to have completed the survey. We did not set out (and the sample size was therefore not large enough) to assess if there was an association between age, sex, place of work and cadre of healthcare provider on the difference in expectations, and perceived impacts of the experience of volunteering

on the individual's personal and professional life as a result. A small number of facilitators (n=12) from the UK had not been able to travel overseas and had volunteered to teach on the training workshops for postgraduate students undertaking the Diploma in Tropical Medicine and Hygiene at the Liverpool School of Tropical Medicine, who then travelled to volunteer in a LMIC. Most respondents had volunteered in Kenya and Zimbabwe and comparatively fewer respondents had volunteered in Asian countries, reflective of the implementation activity of the Making it Happen programme in each country. This study assessed the views of a range of medical volunteers regarding a short-term training placement only and the views and experiences of longer-term volunteer clinical placements that focus on direct service delivery may differ.

Interpretation of findings in relation to other studies

In our study, UK based volunteers were motivated to volunteer to help other people, to improve health outcomes in other countries, and, for work and teaching experience. Retired Obstetricians from the UK specifically mentioned their desire to feel useful as a key reason for volunteering. These findings are like those from a recent systematic review that described international medical volunteering benefits such as an increase in clinical skills, management skills, communication and teamwork, appreciation of patient experience and dignity, policy, academic skills and personal satisfaction and interest (27). Our findings are also like other studies in which international medical volunteers report that positive clinical placements contributed to their personal and professional development, and that their new skills and perspectives benefited their working environments in their home countries on their return (10, 28-32). A small number of UK medical volunteers mentioned low familiarity with the local context, highlighting the need for thorough preparation and induction on arrival (32); and a minority reported that local doctors did not want to participate in multidisciplinary workshops and train together with e.g. midwives, highlighting the need for UK based medical volunteers to understand further the local context and possible power imbalances and hierarchy between different cadre of healthcare providers in different settings (33).

A recent study has highlighted that some UK based healthcare providers who have volunteered in LMIC clinical settings reported negative outcomes including a lack of recognition for work undertaken, pressure to work outside one's competence, impact on accreditation, adverse health consequences, culture shock and isolation (34). In contrast to

this study, none of the healthcare providers interviewed or surveyed in our study described such negative outcomes. This may be because the type of medical volunteering in our study was well supported short term, non-clinical, multidisciplinary team based, and the role focussed on clinical teaching in training workshops as part of a large multicounty implementation programme and not a one-off isolated clinical placement.

A new finding in our study is that healthcare providers from LMIC who volunteered in the training workshops themselves also reported that this type of volunteering had positively impacted their personal and professional life; that they were more appreciative of evidence based clinical practice and respectful care; and had developed more leadership and teamwork skills as a result of their volunteering work. Currently there is limited evidence regarding the views and opinions of local healthcare providers, stakeholders and communities towards the impact of international medical volunteering in general, and especially short term teaching placements with training workshops. A recent study explored the views of local Ugandan healthcare providers who had worked alongside international medical volunteers during one year clinical placements with Voluntary Services Overseas (VSO), and reported beneficial impacts of volunteers (clinical service provision, multidisciplinary teamwork, patient-centred care, implementation of audits, improved quality of care, clinical teaching and mentoring for local healthcare providers); identified challenges of working with volunteers (language barriers and unrealistic expectations) and the organisation (lack of clear communication and feedback processes); and provided recommendations to improve volunteer placements and working partnership with the organisation (more local stakeholder input and longer placements) (35). Similar to our study, local Ugandan healthcare providers were overall positive regarding international medical volunteering and recommended that healthcare providers from other countries are enabled to volunteer in such settings if resources are available to do so (35).

Meaning of the study

Medical volunteers from the UK and from LMIC, reported that they could transfer new skills to their workplace, having gained more confidence to become trainers for other courses, and further develop teaching skills. An increase in leadership and management skills was also considered very useful and of benefit for the home country setting as was also described in other reports (1,23). Evidence of a positive impact of the volunteering, including improved

knowledge and skills of healthcare providers, quality of healthcare provision and health outcomes in the host country, was important to the UK based volunteers in our study. This helped keep them motivated to continue to volunteer and was considered by them as important justification for the continuation of the programme. Although rigorous monitoring and evaluation of the programme was in place, and this had been explained, many UK based volunteers had not appreciated the significance and perhaps importance of this before volunteering. It is important in the future to provide more information to international volunteers regarding the overall purpose, expected outcomes and feedback processes of programmes they volunteer for. Similarly, detailed information regarding the dates and place of workshops, travel arrangements, type of venue, and composition of the group proved very important to volunteers, to ensure they were well prepared and supported.

Unanswered questions and future research

Many program managers, clinicians and academics have developed standards, guidelines, training curricula, and manuals for medical volunteers, including detailed recommendations on pre-requisite training, mentorship and supervision, and debriefing (36-38). However, there is currently no standardised framework or agreed international consensus on best practice on how to conduct, support and evaluate both short-term and long-term medical volunteer placements in low-resource settings in an ethical and effective way. There is increasing debate regarding the ethical complexities associated with medical volunteering and researchers have questioned whether ethical approval should be necessary for international medical volunteer projects (39).

It would be beneficial to understand better how the sharing of expertise between different health systems can be facilitated and how this sharing is supportive, ethical and sustainable over time between countries for mutual benefit in both communities. Some researchers have developed core outcomes for the measurement of the impact of different types of medical volunteers and evaluation is awaited (27). There is a need to further investigate the perceptions of stakeholders and partners within host countries regarding the use of and impact of medical volunteers from high income countries and from other LMIC. It would be beneficial to evaluate the effectiveness of such training workshops and to understand how EmOC&NC training workshops impacts the local communities in LMIC settings and whether this approach is sustainable over time.

CONCLUSION

Healthcare providers from the UK and LMIC settings report that medical volunteering benefits the individual (both personally and professionally) and the local communities. UK based volunteers are motivated by the perceived value or impact of the placement; are keen to feel useful, and to learn from other healthcare systems. This study highlights the need to understand the complexity of factors associated with the use of UK based and LMIC based medical volunteers to teach on training workshops. Further research is required on how to best develop and implement effective, ethical and sustainable partnerships to enable equitable knowledge and skills exchange between local healthcare providers and medical volunteers to better improve the availability and quality of care for people living in low-resource settings using such training packages.

DECLARATIONS

AUTHOR CONTRIBUTIONS

JR supervised the qualitative part of this study and interpreted the qualitative data analysis. MMc conceived the quantitative study idea, constructed the questionnaire, conducted data collection, data analysis, interpretation of the data and wrote the manuscript. NvdB helped design both the qualitative and quantitative studies, analysed and interpreted the data and wrote the manuscript. All authors have edited and approved the manuscript for submission.

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COMPETING INTERESTS

The authors declare no competing interests.

DISCLAIMER

The funders played no role in the writing of the manuscript or the decision to submit it for publication.

PATIENT CONSENT

Not applicable.

AVAILABILITY OF DATA AND MATERIALS

Data is available from the corresponding author on reasonable request.

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ETHICS

Ethical approval was given from the Research Ethics Committee at the Liverpool School of Tropical Medicine (10.80 and 16.020). All research was conducted in accordance with the Declaration of Helsinki.

ABBREVIATIONS

EmOC&NC	Emergency Obstetric and Newborn Care
FGD	Focus Group Discussions
LMIC	Low- and Middle-Income Countries
UK	United Kingdom
VSO	Voluntary Services Overseas

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List of figures and tables

Table 1: Description of all medical volunteers (n=282).

Type of data collected	Qualitative interview respondents	Quantitative online survey respondents	
Country of Origin	United Kingdom	United Kingdom	Bangladesh, Ghana, Kenya, India, Malawi, Namibia, Nigeria, Pakistan, Sierra Leone, South Africa, Tanzania, Zimbabwe
Number of respondents	38	120	124
Age (years)	**%**	**%**	**%**
25 -54	Data not collected	46	88
55 -64		41	12
>65		13	0
Gender			
Male	10	31	48
Female	18	69	52
Employment status			
Full time clinical	31	60	82
Part time clinical	0	19	0
Retired from clinical work	7	16	0
Other / missing	0	5	18
Cadre			
Obstetrician	29	50	32
Midwife	6	33	28
Clinical Officer	n/a	n/a	8
Other	0	9	18
Missing	0	8	14
Number of times volunteered			
<5	Data not collected	57	35
5-10		35	42
>10		8	23

Table 2: Key emerging themes from focus group discussions and key informant interviews with UK based volunteers (n=38)

Reasons for volunteering	Experiences of volunteering	Impact of volunteering
• To help others • To improve maternal and newborn care and health outcomes in low resource settings • To gain teaching experience • To do something different • Commitment to being part of an effective programme	• Teaching different cadres of healthcare providers working in resource poor settings was challenging but highly rewarding • Adapting training content and approach to local context could be difficult • Interactions with training workshop participants was enjoyable • Observing poor quality of care was difficult	• Demonstrable increase in knowledge and skills of local healthcare providers • Volunteer increase in teaching, leadership, and management skills • Increased knowledge of challenges for healthcare providers working in low resource settings • A feeling of contributing to the betterment of society, and making an impact • More knowledge of and improved cultural sensitivity • Increased motivation for and renewed appreciation of quality of care and resources available in the NHS
Requirements for Supportive Environment		
At individual volunteer level	**Organisation receiving the volunteer**	**Organisation sending the volunteer**
• Ability to obtain study or professional leave from the NHS work • Volunteers should be flexible, able to work in teams, communicate effectively • Appropriate level of clinical skills and experience and previous tea1ching experience. • Previous travel to low resource settings is helpful • Knowledge of local context: including the health system, drugs and equipment used and common care pathways	• Commitment of local government and in-country partners to programme • Local colleagues to help prepare, support and where possible deliver the training workshops • Selection of the most appropriate participants to attend the training ensuring attendees are those who deliver the services they will be trained in • Provision of a suitable venue for the workshops • Facilitate volunteers to visit local healthcare facilities	• Attention to pre-course logistics including travel arrangements, accommodation is very important • Adequate notice of dates of volunteer placements required to be able to take leave from NHS • Good composition of multi-disciplinary volunteer team including with a range of expertise • Before and after briefings, both face-to-face and online • Sharing information from previous volunteers would be beneficial; and sharing results of monitoring and evaluation and other reports with volunteers • Appointed team leader (by organisation or team itself) should be encouraging, supportive and knowledgeable about the country and setting. • Ensure that volunteers always feel safe and well supported

Figure 1. **Expectations of volunteers (n=244)**

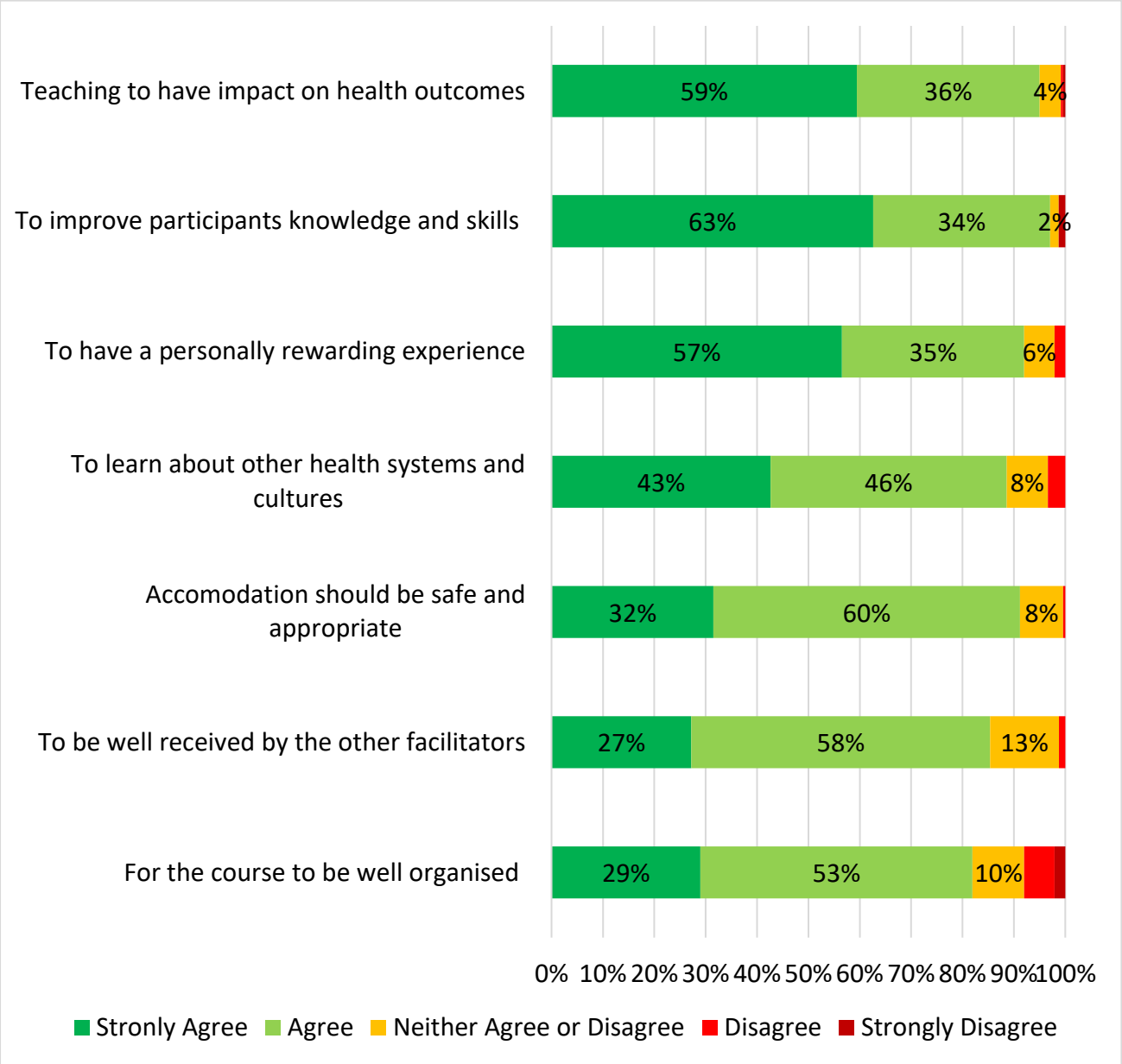
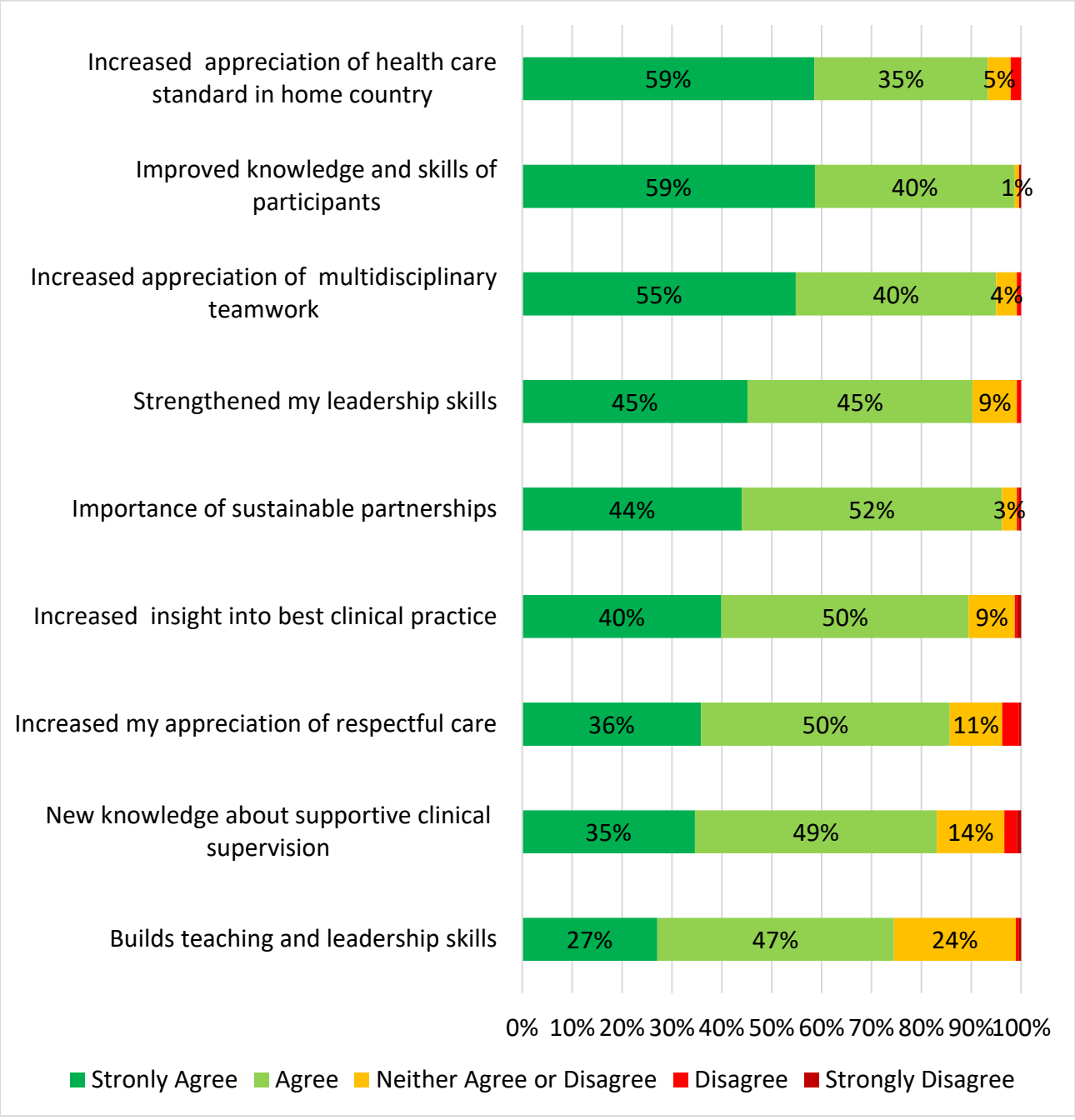


Figure 2. **Benefits and impact of volunteering (n=244)**



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WHO Collaborating Centre and winner of the BMJ Women's Health Award 2015
Striving for global equality in maternal and newborn health

*** Required Information**

page 1

*** 1.**
WELCOME TO THE CMNH VOLUNTEER SURVEY.
As a valued member of the larger community of the Centre of Maternal and Newborn Health (CMNH) at the Liverpool School of Tropical Medicine (LSTM), you are invited to kindly participate in the following survey entitled:
HEALTHCARE VOLUNTEERS WHO FACILITATE TRAINING IN MATERNAL AND NEWBORN HEALTH PROGRAMMES IN LOW AND MIDDLE INCOME COUNTRIES: AN ONLINE SURVEY REGARDING BENEFITS FOR THE VOLUNTEER, THE HOST COUNTRY AND THE HOME COUNTRY.
BACKGROUND
Since 2006, UK volunteers have delivered training in 8 African and 3 Asian countries with over 1681 national facilitators trained who have then helped to train over 16,324 participants. We are keen to explore the impact of this programme to the individual volunteer, the sending country (UK) and the host country.
PURPOSE OF THE STUDY
To understand further the contribution that international healthcare volunteers provide to knowledge and skills facilitation and provision in low and middle income countries. At present, how this sharing of expertise works, the effects on the host countries, home countries and the individuals themselves is not well understood or documented. While it is commonly believed that international healthcare volunteers can play an important role in developing the capacity of healthcare providers in low and middle income countries, there is a lack of robust literature documenting if and how this can be successful. In particular, how volunteering experiences affect the way returned volunteers work in their home countries health systems and how healthcare volunteers can be better prepared to meet the needs of the host country need be to explored.
PROCEDURE
During the study, you will be asked questions regarding your views and perceptions of medical volunteering in the capacity of facilitation of skills and drills 'Making it Happen' courses. This should not take more than 20 minutes of your time to complete.
RISKS
Potential risk of highlighting negative experiences, if this occurs pplease use this opportunity to contact the team for support if required.
None identified
BENEFITS
There are no direct benefits to the participant.
PRIVACY
We will keep all of your data private. No one will have access to the data other than the study staff. Data obtained from you will be used only for the purpose of the study.
VOLUNTARY PARTICIPATION
Your participation in this survey is completely voluntary. You have the right to refuse to participate in any questions at any time during the survey. You can also refuse to respond to specific questions or answer questions if you choose.
RIGHTS OF THE PARTICIPANTS
Please feel free to email the research team to ask any questions you have about the survey. Email address: cmnh@lstmed.ac.uk
COMPLAINTS
If you have a concern about any aspect of this study, you should email the research team. If you remain unhappy and wish to complain formally, you can do this through contacting one of the administrative team of the CMNH-LSTM.

Do you agree to give your consent to participate in this survey? (Select one option)

- ○ Yes
- ○ No

2. Age (in years) (Select one option)

- ○ < 25
- ○ 25 - 55
- ○ 55 - 65
- ○ >65
- ○ Other (Please specify) _____

3. Gender (Select one option)

- ○ Male

- Female
- Other (Please specify) _____

4. In which country are you resident/working currently? (Select one option)

- Bangladesh
- Ghana
- Kenya
- India
- Malawi
- Nigeria
- Pakistan
- Sierra Leone
- South Africa
- Tanzania
- United Kingdom
- Zimbabwe
- Other (Please specify) _____

5. What is your primary professional role? (Select one option)

- Midwife
- Obstetrician
- Anaesthetist
- Paediatrician
- Nurse
- Nurse / Midwife
- Clinical officer
- Health officer
- Other (Please specify) _____

6. Current employment status (Select one option)

- Clinically active - Full time
- Clinically active - Part time
- Retired
- Other
- Other (Please specify) _____

7. How many times have you volunteered as a facilitator on a 'Making it Happen' course? (Select one option)

- 0
- <5
- 5-10
- >10
- Other (Please specify) _____

8. Please specific what country or countries you have volunteered as a facilitiator?
Please select all that apply.

- [ ] United Kingdom
- [ ] Kenya
- [ ] Zimbabwe
- [ ] Sierra Leone
- [ ] India
- [ ] Bangladesh
- [ ] South Africa

- [ ] Malawi
- [ ] Pakistan
- [ ] Ghana
- [ ] Nigeria
- [ ] Tanzania
- [ ] Other (Please specify) _____

9. What were your motivations to volunteer as a facilitator on a 'Making it Happen' training course?

_____
_____

10. Before facilitating on a 'Making it Happen' training course, I had no preconceived ideas or expectations. (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

11. Beofre facilitating on the course I thought the course would be well organised and be straightforward (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

12. I expected to improve participants knowledge and skills (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

13. I expected to have a personally rewarding experience (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

14. I expected to learn about other health systems and cultures (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

15. I expected to impact on maternal and newborn health outcomes through my teaching (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

16. I expected to be well received by the other facilitators (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

17. I expected to be safe and hosted in appropriate accomodation (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

○	○	○	○

18. Other preconceptions not mentioned above?

_____
_____

19. The experience lived up to my expectations (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

20. The challenges in conducting training were greater than I had expected. (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

21. What did you find were the main challenges during the 'Making it Happen' course?
Please select all that apply.

- ☐ Not having enough time to undertake training activities
- ☐ Not understanding the local health systems
- ☐ Language barriers
- ☐ The wide range of knowledge and skills between cadres all trained together
- ☐ Participants not interested in training
- ☐ Attitude of participants regarding lack of urgency in responding to emergency
- ☐ Not agreeing with approach to managing emergency from local faculty
- ☐ Shocked by facilities available in the local setting
- ☐ Power cuts
- ☐ Lack of water and sanitation
- ☐ Difficulty with transport and traffic
- ☐ Local poverty
- ☐ None of the above
- ☐ Other (Please specify) _____

22. Has the experience of volunteering impacted on your current personal life? (Select one option)

- ○ yes
- ○ no
- ○ Other (Please specify) _____

23. Has the experience of volunteering impacted on your current work life? (Select one option)

- ○ Yes
- ○ No
- ○ Other (Please specify) _____

24. Volunteering has increased my appreciation of the standard of health care in my current country of residence (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

25. Volunteering has increased my appreciation of teamwork and communication (Select one option)

strongly			strongly

agree 0	agree 1	disagree 2	disagree 3
○	○	○	○

26. Volunteering has made me less frustrated with my local health system (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

27. Volunteering has made me more confident to manage difficult cases at home (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

28. Volunteering has strengthened my leadership skills (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

29. Volunteering has reduced my confidence (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

30. Volunteering has given me new knowledge about supportive supervision (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

31. Volunteering has been of no benefit (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

32. Volunteering has increased my general administrative skills (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

33. Volunteering has increased my understanding of good clinical practice (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

34. Volunteering has made me better able to manage language barriers (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

35. Volunteering has increased my appreciation of respectful care (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

36. Has the experience of volunteering altered your previous perspectives? (Select one option)

- ○ Yes
- ○ No
- ○ Unsure

37. How has the experience of volunteering changed your perspectives?

- ☐ I have reconsidered my current career pathway
- ☐ I no longer want to be involved in volunteering
- ☐ I appreciate the impact that building capacity of local healthcare providers can have in a low resource setting
- ☐ I am disillusioned by the use of aid in international development work
- ☐ I have a greater awareness of the need for sustainable and collaborative partnerships attaining good quality maternal and newborn health outcomes
- ☐ I understand further the challenges and barriers facing healthcare providers in improving maternal and newborn health outcomes in low resource settings
- ☐ No change in perspective
- ☐ Other (Please specify) _____

38.
In your opinion, did the Making it Happen training course impacted on the country in which you volunteered?

- ☐ Yes
- ☐ No
- ☐ Unsure

39. The 'Making it Happen' programme has contributed more than individual volunteering at a particular clinic or hospital. (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

40. The 'Making it Happen program has no impact (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

41. The Making it Happen project improved knowledge an skills of participants (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

42. The project builds teaching and leadership skills in the host country (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

43. The project is a waste of resources (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

44. THe project promotes and fosters support for multidisiplinary team working (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

45. The project demonstrates the importance of sustainable and collaborative partnerships (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

46. What in your opinion are features that promote a successful volunteering experience?

_____
_____

47. WHat in your opinion are barriers to a successful volunteering experience?

_____
_____

48. Would you recommend volunteering to a colleague? (Select one option)

- ○ Yes
- ○ No
- ○ Other (Please specify) _____

49. Please add any other comments or suggestions regarding the 'Making it Happen' programme.

_____
_____

HEALTHCARE VOLUNTEERS WHO FACILITATE TRAINING IN MATERNAL AND NEWBORN HEALTH PROGRAMMES IN LOW AND MIDDLE INCOME COUNTRIES: AN ONLINE SURVEY REGARDING BENEFITS FOR THE VOLUNTEER, THE HOST COUNTRY AND THE HOME (UK) COUNTRY.

Topic guides for Focus Group Discussion and adapted for Key Informant Interviews

Please answer the following questions in the spaces provided, circle or tick the most appropriate options.

1. What is your professional?

- Midwife or Nurse Midwife
- Nurse
- General Doctor
- Obstetrician
- Anaesthetist

Other: (please describe) _____

What is the name of your place of work?

_____

Thank you for taking the time to complete this questionnaire

Facilitator's welcome, introduction and instructions to participants

Welcome and thank you for volunteering to take part in this focus group/interview. You have been asked to participate as your point of view is important for this research that is part of a much larger project. I realize you are busy and I appreciate the time you have given.

Introduction: This focus group discussion / interview is designed to assess your experiences regarding international medical volunteering. The focus group discussion / interview will take no more than one hour. May I tape the discussion to facilitate its recollection? (if yes, switch on the recorder)

Anonymity: Thank you for signing the consent form. Although this discussion is being taped, I would like to emphasize that this is anonymous and that this is being recorded on a locked devise that only myself knows the password to. And once transcribes have been made, the audio recordings will be deleted. The transcribes will not contain any information that identify you. Please try and be as honest as you can and try and refrain from discussing anything said in this group outside of this group and if there are any questions that you don't want to answer you do not have to. If you want to leave the study at any time you can and if you want to leave the room you can.

Ground rules for focus group discussions (not required for key informant interviews)

- Only one person speaks at a time. There may be a temptation to jump in when someone is talking but please wait until they have finished.
- There are no right or wrong answers
- You do not have to speak in any particular order
- When you do have something to say, please do so. It is important that I obtain the views of each of you
- You do not have to agree with the views of other people in the group
- Does anyone have any questions? (answers).
- OK, let's begin

Warm up

- First, I'd like everyone to introduce themselves **(not required for key informant interviews)**

Introductory question

I am very interested to hear about your general views regarding international medical volunteering and your motivations for and experiences of volunteering as a facilitator with the Making it Happen programme.

Guiding questions

Aim: To identify and describe the reasons why UK based health professionals volunteer to facilitate emergency obstetric and newborn care courses

1. What motivated you to volunteer to be a facilitator for the emergency obstetric and newborn care course?
   - wanting to help others?
   - Teaching experience?
   - contribute to society?
   - wanting to improve maternal and/or newborn care in other countries?
   - personal development?
   - increased cultural sensitivity?
   - work experience in a low resource setting?

- exposure to other types of clinical practice?
- meeting new people/networking?
- Religious beliefs?
- challenge/ new experience?
- Other? (please specific)

2. Why would you volunteer again? Why would you not volunteer again?

3. Why would you recommend volunteering in this capacity to others?

4. Why would you not recommend volunteering to others?

Describe UK based volunteer facilitators' experiences of conducting emergency obstetric and newborn care course in resource poor settings

5. What experiences did you have while facilitating the emergency obstetric and newborn care course?

- teaching experiences?
- cultural experiences?
- experiences in resource poor settings?
- interactions with participants?
- interactions with other facilitators?
- positive experiences?
- negative experiences?
- challenges?
- ethical dilemmas?
- confrontations with other ways of clinical practice than you are used to and/or agree with?

6. What were your expectations of volunteering?

7. In what ways did the actual experience meet or not meet these expectations?

Explore the volunteers' perceptions of the effects of the volunteering experience on their personal development with regard to their thinking about development and aid work, their career and career choices

8. How has your experience of volunteering effected your personal development?
    - increased cultural sensitivity?
    - feeling like you've contributed to society?
    - new skills? WHAT EXACTLY ?
    - new knowledge?

9. How has your perception of development and aid work been effected by your experience of volunteering?

    - different understanding of global concept of maternal and newborn health
    - different understanding of complexity of development work

10. In what ways has your experience of volunteering affected your career or work life?

    - Describe any changes in choice of work or career that you have made since volunteering

Explore the volunteers' perceptions of the effects of the volunteering experience on their work environments and clinical practice back in the UK.

11. How has your experience of volunteering affected your work environment here in the UK?
    - interactions with clients from other cultural backgrounds?
    - teaching or facilitating other courses, workshops; informal teaching sessions; mentoring?
    - use of resources

12. How has your experience of volunteering affected your clinical practice in the UK?
    - any changes or differences in your clinical practice since you volunteered?
    - why did you change them?

Explore the volunteers' perceptions of the effects of their volunteering on the capacity of health care providers to deliver skilled birth attendance and emergency obstetric and newborn care course in the setting in which they volunteered.

13. In what ways do you think your volunteering activity has made a difference to:

    - how health care providers function
    - how health facilities function
    - maternal health
    - newborn health

14. How do you think your volunteering activity may have helped improve maternal and newborn health in resource poor settings?

Describe UK based volunteer facilitators' experiences of conducting emergency obstetric and newborn care courses in resource poor settings

15. What is "successful volunteering"?

16. What needs to be in place for "successful volunteering"?
    - at individual volunteer level
    - at volunteer organisation level
    - at host organisation level

17. How does your experience of volunteering fit with "successful volunteering"?

18. Is there anything you would like to add?

Conclusion

- Thank you for participating.
- Your opinions will be a valuable asset to the study
- We hope you have found the discussion/interview interesting
- If there is anything you are unhappy with or wish to complain about, please contact a member of the research team whose contact details on the information sheets.
- I would like to remind you that any comments featuring in this report will be anonymous
- Before you leave, please hand in your completed personal details questionnaire

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EXPERIENCES AND IMPACT OF INTERNATIONAL MEDICAL VOLUNTEERING: A MULTI-COUNTRY MIXED METHODS STUDY

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EXPERIENCES AND IMPACT OF INTERNATIONAL MEDICAL VOLUNTEERING: A MULTI-COUNTRY MIXED METHODS STUDY

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Abstract

Objective

To assess the experience and impact of medical volunteers who facilitated training workshops for healthcare providers in maternal and newborn emergency care in 13 countries.

Settings

Bangladesh, Ghana, India, Kenya, Malawi, Namibia, Nigeria, Pakistan, Sierra Leone, South Africa, Tanzania, United Kingdom (UK), Zimbabwe.

Participants

Medical volunteers from the UK (n=162) and from low- and middle- income countries (LMIC) (n=138).

Outcome measures

Expectations, experience, views, personal and professional impact of the experience of volunteering on medical volunteers based in the UK and in LMIC.

Results

UK based medical volunteers (n=38) were interviewed using focus group discussions (n=12) and key informant interviews (n=26). 262 volunteers (UK based n=124 (47.3%), and LMIC based n=138 (52.7%)) responded to the online survey (62% response rate), covering 506 volunteering episodes. UK based medical volunteers were motivated by altruism, and perceived volunteering as a valuable opportunity to develop their skills in leadership, teaching and communication, skills reported to be transferable to their home workplace. Medical volunteers based in the UK and in LMIC (n=244) reported increased confidence (98%, n=239); improved teamwork (95%, n=232); strengthened leadership skills (90%, n=220); and reported that volunteering had a positive impact for the host country (96%, n=234) and healthcare providers trained (99%, n=241); formed sustainable partnerships (97%, n=237); promoted multidisciplinary team working (98%, n=239); and was a good use of resources (98%, n=239). Medical volunteers based in LMIC reported higher satisfaction scores than those from the UK with regards to impact on personal and professional development.

Conclusion

Healthcare providers from the UK and LMIC are highly motivated to volunteer to increase local healthcare providers' knowledge and skills in low resource settings. Further research is necessary to understand the experiences of local partners and communities regarding how

the impact of international medical volunteering can be mutually beneficial and sustainable with measurable outcomes.

Keywords: Experiences, training, health, medical, volunteers, healthcare providers, international volunteering, low resource settings.

Article summary

Strengths and limitations of this study

- A multi-country study to assess the experience and impact of medical volunteers based in the UK and in LMIC who facilitated training workshops in maternal and newborn emergency care across thirteen different countries.
- We used mixed methods, qualitative interviews for medical volunteers based in the UK (n=38), and an online survey (n=262) to assess healthcare providers from both the UK and LMIC (total n=300) regarding their views and experiences of international medical volunteering.
- The response rate was 62% (262/422) for the online survey and this may represent selection bias, in that respondents who either really enjoyed or did not enjoy the volunteering experience may have been more likely to have completed the survey.
- Qualitative interviews were conducted with medical volunteers based in the UK only and there is a need to explore the views of healthcare providers who volunteer and are based in LMIC in more depth.
- This study assessed the views of medical volunteers regarding a short-term teaching and training placement as part of a larger capacity building programme only and the views and experiences of longer-term volunteer service delivery clinical placements may differ.

INTRODUCTION

International volunteers are skilled individuals who are motivated to offer their services willingly, without consideration for financial gain, to contribute to another community such as in a low- or middle-income country (LMIC) (1). Sustainable Development Goal number three (SDG 3) is to ensure healthy lives and promote well-being for all at all ages (2). Limited numbers of adequately trained healthcare providers and poor quality of care are barriers to achieving SDG 3 in many LMIC, especially targets concerning healthcare for women (SDG 3.1) and children (SDG 3.2) (3,4). Sub-Saharan Africa has 11% of the world's population and 24% of the global burden of disease yet only 3% of the world's healthcare providers, equating to fewer than 2.5 healthcare providers per 1,000 population (5). The United Nations acknowledge that volunteer groups have a role to work with governments and public institutes to help implement programmes that will contribute to the achievement of the SDGs (3).

There is general recognition and agreement that high-income countries such as the United Kingdom (UK) have a responsibility to support healthcare development in poorer countries where the burden of disease is higher (1, 6). With inequality in the availability of healthcare providers, many skilled healthcare providers from high-income countries (including nurses, midwives, and doctors) engage in voluntary work in LMIC (7-11). Similarly, there are emerging reports of healthcare providers in LMIC themselves engaging in volunteering activities in areas that are less well served (12,13). There are many types of healthcare provider volunteer placements between and within countries and these can be long- or short-term. One such short-term volunteer project is the Making It Happen programme delivered by the Centre for Maternal and Newborn Health at the Liverpool School of Tropical Medicine (14). The Making It Happen programme aimed to reduce maternal and newborn morbidity and mortality by improving the availability and quality of care including the delivery of 'skills and drills' competency-based training workshops in Emergency Obstetric and Newborn Care (EmOC&NC) for healthcare providers in sub-Saharan Africa and Asia (15,16). Medical volunteers played an integral role in the delivery of the Making It Happen programme and facilitated on the standardised 3-5 day EmOC&NC training package, compromising of the management of shock, sepsis, hypertensive disorders of pregnancy, obstructed labour, obstetric emergencies, assisted vaginal delivery, post-partum haemorrhage, manual removal

of placenta, and newborn resuscitation, using adult learning interactive sessions comprising of short lectures, simulation training using obstetric and newborn mannequins, role play and clinical case scenarios (14). Between 2006 and 2016, working as a multidisciplinary team, volunteers from both the UK and LMIC delivered this training EmOC&NC workshop in nine sub-Saharan African and three Asian countries with over 15,000 healthcare providers trained (17).

Studies have reported that the experience of medical volunteering (undergraduate and postgraduate) can affect the individual volunteer personally and professionally, resulting in positive changes in world views, values and outlooks (18-24). There is research exploring the experiences and perceived impact of healthcare providers who have volunteered in healthcare facilities providing a clinical service, although much of this research is low quality and largely anecdotal. To date, there is less research regarding the experiences and impact of healthcare providers, both from the UK and LMIC settings, who undertake short term volunteer placements to teach and facilitate on maternal and newborn training workshops in low resource settings. We conducted a mixed-methods study to assess the views and experiences of medical volunteers from both the UK and LMIC settings and their perceptions of the impact of volunteering, as part of the Making It Happen implementation programme.

MATERIALS AND METHODS

Participants

Highly skilled healthcare providers (Obstetricians, Anaesthesists and midwives) based in the UK or in a LMIC who had attended a preparatory workshop to facilitate the 3-5-day training workshop in EmOC&NC (15,16) and who had volunteered at least once to facilitate such a training workshop, were invited to complete an online survey. A smaller sample of UK based medical volunteers were interviewed in-depth as part of the qualitative study.

Qualitative Study

Purposive sampling was used to identify UK based Obstetricians, Anaesthetists, and midwives who met the inclusion criteria. Topic guides were developed for the focus group discussions (FGD) and key informant interviews (**Supplementary File 1**). FGDs were conducted face-to-face with the multidisciplinary maternity team of Obstetricians, Anaesthetists, and midwives. For a more in-depth exploration of experiences, key informant interviews were conducted

face-to-face or by telephone. All FGDs and key informant interviews were recorded, transcribed verbatim and analysed using the thematic framework approach (25). The coding framework was developed using themes emerging from the data, the topic guides and study objectives. The coding framework was applied to the transcripts, identified codes were grouped into categories and used to describe the themes after being reviewed by all researchers to ensure consistency.

Quantitative study

An electronic survey was developed using an online platform SoGoSurvey in 2018 (26) and sent by email to all healthcare providers based in the UK and in LMIC, who volunteered at least once as a facilitator on the EmOC&NC training workshop as part of the Making It Happen programme between 2014 and 2016. All potential respondents were sent an introductory email with the information leaflet embedded in the text explaining the aims and objectives of the study. Two weeks later the survey was sent embedded by a link in an email. Two reminder emails were sent out at two-week intervals. For this survey, we developed a forty-point questionnaire based on themes obtained from the qualitative interviews (**Supplementary File 2**). There were six sections with questions regarding: (1) socio-demographics; (2) expectations and challenges; (3) personal impact; (4) professional impact; (5) views on impact of volunteering on the local healthcare setting in which the workshops were conducted; (6) and whether the respondent would recommend volunteering to a colleague. Responses used a Likert scale of strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree. Half of the questions were written in a negative way to prevent leading the participant to answer positively. At the time of analysis, the answers to the negative questions were reversed to standardise the presentation of data. The questionnaire was piloted among ten volunteers (five from the UK and five from LMIC) and several questions were re-phrased slightly as a result. At the end of data collection, data from the SoGoSurvey online survey was exported to Excel version 2018 and descriptive analysis performed. Pearson's Chi-square tests was used to compare responses (agree vs disagree) from medical volunteers based in UK and those based in LMIC.

Patient and public involvement

No patient nor members of the public were involved in this study.

Ethics

Ethical approval was given from the Research Ethics Committee at LSTM (10.80 and 16.020). All volunteers were given detailed written information about the nature and purpose of the research before taking part. For the qualitative component, all participants provided written consent. For the online survey, electronic informed consent was embedded on the first page of the online survey as a mandatory question.

RESULTS

INTERVIEWS

Characteristics of 38 volunteers from the UK who were interviewed (12 during three focus group discussions, and 26 key informant interviews) are provided in **Table 1.** The main emerging themes included: reasons for volunteering; expectations and experiences of volunteering; impact on personal and professional development, and the importance of and requirement for a supportive environment. These themes are described in more detail below and in **Table 2**.

Reasons for volunteering

Common reasons for volunteering were to help people, to improve maternal and newborn care in low resource settings and to gain teaching experience. Obstetricians and midwives said that they wished to be '*involved with something rewarding*', where they '*could make a difference*' and for '*personal satisfaction*'. Volunteering gave meaning and fulfilment during retirement; and was generally perceived as a good opportunity to develop teaching skills, for continuing professional development, and it offered an opportunity to learn about and discuss clinical scenarios not common in the UK. For a minority, wanting to experience different healthcare systems, and meeting new people who share an interest in improving maternal and newborn health in low resource settings were key reasons for volunteering.

> *'It's a good opportunity to listen to other people talking about obstetrics in a different setting… and, the opportunity to talk about advanced pathology that we don't necessarily see here in the UK. So, it's good from that perspective, and it does give you a lot of teaching skills.... it provides you with an opportunity to see how things work in a different health setting where there isn't much money around, which for us currently*

is quite topical. So, it gives you a real handle on what's necessary and what's not necessary.' (Female Obstetrician, Key informant interview, UK).

Expectations and experiences of volunteering

Volunteers had a wide range of expectations. The most common response among Obstetricians was that they '*tried not to have any expectations*'. Some midwives and Obstetricians reflected and accepted that '*nothing happens as planned*'. Volunteers expected their teaching would '*filter down*' to other healthcare providers and that they themselves would learn about a different healthcare system. Some had low expectations of the effectiveness of the training workshops on health outcomes or thought course participants in host LMIC might be '*resentful*' of them coming from a high-income country. Several volunteers said they had anticipated the volunteering to be easier than it had been.

'*I thought it was going to be easier than it was. I felt exhausted when I got back. I wasn't expecting that.'* (Anaesthetist, FGD, UK).

Volunteers reported a wide range of experiences and reflected particularly on their facilitation and teaching experiences, teamwork, and the challenges faced. Delivering a training workshop in a different environment, teaching different cadres of staff (nurses, midwives, medical officers, doctors), and discovering what motivated participants to learn was generally considered enjoyable. Learning how to be sensitive to the local situation and context was mentioned as sometimes being difficult. Role play clinical scenarios were enjoyable. Volunteers reported that the participants in the training workshops were mostly positive and engaged well with the training. Many volunteers described being '*very satisfied*' when they could see and experience that a healthcare provider had learnt a new skill or gained new understanding of how to improve their management of obstetric and newborn emergencies. Most volunteers enjoyed meeting other volunteer facilitators as they learnt from each other, and they also specifically appreciated the inter-disciplinary teamwork.

'It was when you were demonstrating skills ... on models... because I'm more a hands-on person than talking. So, those sessions stood out to me because there were midwives who had never done a ventouse delivery before, and having been taught how to do it, and you could see, you could see the glow on their faces when they realised that this is not, it's not such a huge thing... and that with the right training.... you can save lives' (Male Obstetrician, Key informant interview, UK).

There were several challenges which included: needing more time than expected for practical sessions, language barriers and working with a translator, training a variety of cadres of staff with a wide range of levels of knowledge and skills in one group. A minority reported working with some participants who were not interested in the training and had to deal with situations where local doctors did not want to participate in multidisciplinary workshops and train together with e.g. midwives. Some volunteers reported feeling challenged by the different approaches to managing seriously ill women and mentioned that local healthcare providers based in LMIC had different attitudes regarding the level of urgency when responding to obstetric emergencies compared to the UK setting. Volunteers who had been to a LMIC setting before were generally not surprised by the basic healthcare resources and facilities. Volunteers who had no prior experience of working in a LMIC reported being '*shocked*' at witnessing poverty and poorer quality of healthcare services for the first time.

Impact on personal and professional development

Many volunteers reported that they now had '*increased cultural sensitivity*'. Many respondents also talked about a sense of '*contributing to improving standards of care for mothers and babies'* through volunteering and experienced a sense of personal satisfaction regarding this. Some volunteers reported they had gained a moral responsibility to raise more awareness regarding the high maternal morbidity and mortality in LMIC settings. Others reported feeling humbled by the experience of working with healthcare providers from low resource settings and learning about their work and the challenges they face.

> *'I think working in a resource-poor environment does, and in different places in the world, it makes you a more rounded person.'* (Male Obstetrician, FGD, UK)

The majority reported having gained new motivation, confidence, and ability to provide training and were more able to identify what characteristics and skills are required to be a good trainer.

'It's been a massively beneficial experience as far as making me think about different ways of training and what's involved in being a good trainer.' (Anaesthetist, Key informant interview, UK).

Additional skills developed included strengthened leadership skills, improved multidisciplinary and multi-cultural teamwork, and programme management experience. The reported effects of volunteering from UK volunteers on their work when back in the UK were mostly related to a greater awareness of the need for correct and rational use of resources such as drugs, investigations and materials and not wasting these resources. Many reported having a renewed appreciation of the excellent care given to women in the UK, during pregnancy, labour and after childbirth.

'You come back really motivated, and although it's hard work while you're out there, it feels as though you've done something completely different.' (Female Obstetrician, Key informant interview, UK).

Importance of and requirements for a supportive environment

Many volunteers viewed their volunteering experience as being successful and would volunteer again. They felt that they had accomplished what they set out do to and were keen for further opportunities to volunteer. A few volunteers said that they hoped to retire early so that they could spend more time volunteering. There were a number of challenges volunteers had to overcome to be able to volunteer which included requirements for '*work release'* and in a minority of cases the arrangements for accommodation and travel in the host country had not worked out or been of an '*inadequate*' standard which had been difficult for the relevant volunteers (including lost luggage, failure of flights to connect, poor quality accommodation, security concerns). The majority of volunteers felt that it was very useful to visit a local healthcare facility at the time of their volunteering placement, so they could learn about the differences between the health system capacity in a poor versus a well-resourced setting and gain an understanding of the working environment of the participants of the training workshops. Many reported that it was important and valuable as a volunteer to be part of a larger programme which was centrally organised and with approval for implementation of the programme already in place in the host country from the relevant government authorities and other partners in-country. Respondents felt that contributing as

part of a larger programme was more likely to have an impact on maternal and newborn health in the long term, compared to volunteering as an individual clinician working at a healthcare facility for a time.

> *'This has demonstrated to me that you can go for a short (time), within the context of a properly structured programme like this and make a significant impact. Though individually we're only one little tiny part of it, but because you are part of a bigger programme, it works well,'* (Female Obstetrician, Key informant interview, UK).

The majority of volunteers reported they would have liked to know more about the feedback processes and monitoring and evaluation component of the programme, and reported an understanding that the impact of the training workshops on maternal and newborn mortality and morbidity would take time and may be difficult to measure.

ONLINE SURVEY

262 medical volunteers from the UK and LMIC responded to the online survey, a response rate of 62%. Due to incompletion of the questionnaire, 18 volunteers were excluded from analysis, giving a total of 244 completed responses, 120 from the UK (49.2%), and 124 from a LMIC (50.8%) relating to 506 volunteering episodes across 13 countries. There were some differences between the socio-demographics of volunteers from the UK and volunteers from LMIC settings **(Table 1)**. More respondents from LMIC were younger, worked full time in clinical practice, the range of disciplines was wider, and they had volunteered on more occasions, compared to volunteers from the UK. Overall, there was representation from a range of cadre of healthcare providers with similar proportions of Obstetricians or midwives. The 506 volunteering episodes occurred in Kenya (18%, n=91), Zimbabwe (13%, n=66), UK (12%, n=61), Tanzania (9%, n=45), Nigeria (9%, n=45), South Africa (7%, n=35), Sierra Leone (6%, n=30), Ghana (6%, n=30) compared to Malawi, India, Bangladesh, Pakistan or Namibia (all < 5%, n<25).

Expectations

Respondents' most common expectation was that they would be able to improve the knowledge and skills of healthcare providers in poorer resource settings, and that this would ultimately translate to improving the health outcomes of mothers and their newborns **(Figure 1).** Respondents expected a personally rewarding experience and that they would have the

opportunity to learn about different health systems. Volunteers expected the programme and workshops to be well organised, and that accommodation would be safe and appropriate (**Figure 1**). More than 1:4 volunteers felt that the challenges encountered were in reality greater than they expected, including (1) the wide range of baseline knowledge and skills of healthcare providers in LMIC; (2) insufficient time for planned training activities for some; and (3) an apparent healthcare provider attitude of a lack of urgency to take action in cases of a clinical emergency. These expectations and experiences were similar for volunteers from the UK and from LMIC.

Impact

Overall, volunteers reported that volunteering had impacted their personal (70%, n=171) and professional life (64%, n=156). More volunteers from LMIC reported that volunteering had impacted their personal (83% vs 56%, p<0.001) and professional life (81% vs 48%, p<0.001) compared to volunteers based in the UK. Volunteers perceived that volunteering was of benefit (98%, n=239); and increased their confidence (98%, n=239); teamwork (95%, n=232); and leadership skills (90%, n=202) **(Figure 1)**. More volunteers from LMIC compared to respondents from the UK, reported an appreciation of respectful care (94% vs 74%, p<0.001); strengthened leadership (93% vs 85%, p=0.054); teamwork skills (98% vs 91%, p=0.02); and more expected the teaching to have an impact on health outcomes (99% vs 69%, p<0.001). Many volunteers (77%, n=188) reported that volunteering had altered their perspectives, and this view was higher in volunteers from LMIC compared to the UK (77% vs 56%, p 0.001). Overall, when asked how, many volunteers responded that they had a greater appreciation of the process of capacity building for healthcare providers (81%, n=198); a better understanding of challenges facing healthcare providers in poorer resource clinical settings (79%, n=193) and had become enthusiastic regarding advocacy for global maternal health (79%, n=193).

Impact of the overall programme

Volunteers agreed that the overall Making It Happen programme had a positive impact (96%, n=234); built sustainable partnerships (97%, n=237); promoted multidisciplinary team working (98%, n=239); improved the knowledge and skills of volunteers (99%, n=241) and was a good use of resources (98%, n=239). Nearly all volunteers (96%, n=234) reported that the

Making It Happen training programme impacted the country in which they were volunteering as a facilitator. All volunteers (100%, n=244) reported that they would recommend this type of volunteering to a colleague.

DISCUSSION

Statement of principal findings

This study demonstrated that volunteers from the UK and LMIC settings were motivated by altruism and believed that volunteering as part of a larger programme, does improve the knowledge and skills of healthcare providers (and the volunteers themselves), and that this skill exchange translates to better care for women and their newborns in resource poor settings. Volunteering was perceived as valuable, an opportunity to learn from other healthcare systems and to further develop skills in management, leadership, teaching and communication. Volunteers expected to be well supported before, during and after their placement. Compared to respondents from the UK, more healthcare providers based in LMIC reported that volunteering had impacted their personal and professional life; and that they were more appreciative of evidence based clinical practice and respectful care; and had developed leadership and teamwork skills as a result of their volunteering work.

Strengths and limitations of the study

This mixed method study explored and reported the experiences and perceptions of healthcare providers from the UK and from LMIC, who volunteered to train other healthcare providers in thirteen different countries to improve maternal and newborn emergency care. There were a few limitations of this study. For logistic reasons, qualitative data were collected from medical volunteers based in the UK only and there is a need to explore the views of medical volunteers from LMICs in more depth. Regarding the online survey, the response rate was 62% and this may represent selection bias, in that respondents who either really enjoyed or did not enjoy the volunteering experience may have been more likely to have completed the survey. We did not set out (and the sample size was therefore not large enough) to assess if there was an association between age, sex, place of work and cadre of healthcare provider on the difference in expectations, and perceived impacts of the experience of volunteering on the individual's personal and professional life as a result. A small number of facilitators (n=12) from the UK had not been able to travel overseas and had volunteered to teach on the

training workshops for postgraduate students undertaking the Diploma in Tropical Medicine and Hygiene at the Liverpool School of Tropical Medicine, who then travelled to volunteer in a LMIC. Most respondents had volunteered in Kenya and Zimbabwe and comparatively fewer respondents had volunteered in Asian countries, reflective of the implementation activity of the Making It Happen programme in each country. This study assessed the views of a range of medical volunteers regarding a short-term training placement only and the views and experiences of longer-term volunteer clinical placements that focus on direct service delivery may differ.

Interpretation of findings in relation to other studies

In our study, UK based volunteers were motivated to volunteer to help other people, to improve health outcomes in other countries, and, for work and teaching experience. Retired Obstetricians from the UK specifically mentioned their desire to feel useful as a key reason for volunteering. These findings are like those from a recent systematic review that described international medical volunteering benefits such as an increase in clinical skills, management skills, communication and teamwork, appreciation of patient experience and dignity, policy, academic skills and personal satisfaction and interest (27). Our findings are also like other studies in which international medical volunteers report that positive clinical placements contributed to their personal and professional development, and that their new skills and perspectives benefited their working environments in their home countries on their return (10, 28-32). In our study, a small number of UK medical volunteers mentioned low familiarity with the local context, highlighting the need for thorough preparation and induction on arrival (32); and some reported that a minority of local doctors did not want to participate in multidisciplinary workshops, highlighting the need for UK based medical volunteers to understand the local context and possible power imbalances and hierarchy between different cadre of healthcare providers in different settings (33).

A recent study has highlighted that some UK based healthcare providers who have volunteered in LMIC clinical settings reported negative outcomes including a lack of recognition for work undertaken, pressure to work outside one's competence, impact on accreditation, adverse health consequences, culture shock and isolation (34). In contrast to this study, none of the healthcare providers interviewed or surveyed in our study described such negative outcomes. This may be because the type of medical volunteering in our study

was well supported short term, multidisciplinary team based, and the role focussed on clinical teaching in training workshops as part of a large multi-country implementation programme and not a one-off isolated clinical placement.

A new finding in our study is that healthcare providers from LMIC who volunteered in the training workshops themselves also reported that this type of volunteering had positively impacted their personal and professional life; that they were more appreciative of evidence based clinical practice and respectful care; and had developed leadership and teamwork skills as a result of their volunteering work. Currently, there is limited evidence regarding the views and opinions of local healthcare providers, stakeholders and communities towards the impact of international medical volunteering in general, and especially short term teaching placements with training workshops. A recent study explored the views of local Ugandan healthcare providers who had worked alongside international medical volunteers during one year clinical placements with Voluntary Services Overseas (VSO), and reported beneficial impacts of volunteers (clinical service provision, multidisciplinary teamwork, patient-centred care, implementation of audits, improved quality of care, clinical teaching and mentoring for local healthcare providers); identified challenges of working with volunteers (language barriers and unrealistic expectations) and the organisation (lack of clear communication and feedback processes); and provided recommendations to improve volunteer placements and working partnership with the organisation (more local stakeholder input and longer placements) (35). Similar to our study, local Ugandan healthcare providers were overall positive regarding international medical volunteering and recommended that healthcare providers from other countries are enabled to volunteer in such settings if resources are available to do so (35).

Meaning of the study

Medical volunteers from the UK and from LMIC, reported that they could transfer new skills to their workplace, having gained more confidence to become trainers for other courses, and further develop teaching skills. An increase in leadership and management skills was also considered very useful and of benefit for the home country setting as was also described in other reports (1,23). Evidence of a positive impact of the volunteering, including improved knowledge and skills of healthcare providers, quality of healthcare provision and health outcomes in the host country, was important to the UK based volunteers in our study. This

helped keep them motivated to continue to volunteer and was considered by them as important justification for the continuation of the programme. Although rigorous monitoring and evaluation of the programme was in place, and this had been explained, many UK based volunteers had not appreciated the significance and perhaps importance of this before volunteering. It is important in the future to provide more information to international volunteers regarding the overall purpose, expected outcomes and feedback processes of programmes they volunteer for. Similarly, detailed information regarding the dates and place of workshops, travel arrangements, type of venue, and composition of the group proved very important to volunteers, to ensure they were well prepared and supported.

Unanswered questions and future research

Many programme managers, clinicians and academics have developed standards, guidelines, training curricula, and manuals for medical volunteers, including detailed recommendations on pre-requisite training, mentorship and supervision, and post placement debriefing (36-38). However, there is currently no standardised framework or agreed international consensus on best practice of how to conduct, support and evaluate both short-term and long-term medical volunteer placements in low-resource settings in an ethical and effective way. There is increasing debate regarding the ethical complexities associated with medical volunteering (39). It would be beneficial to understand better how the sharing of expertise between different health systems can be facilitated and how this sharing is supportive, ethical and sustainable over time between countries for mutual benefit in both communities. Some researchers have developed core outcomes for the measurement of the impact of different types of medical volunteering and evaluation is awaited (27). There is a need to further investigate the perceptions of stakeholders and partners within host countries regarding the use of and impact of medical volunteers from high income countries and from other LMIC. It would be beneficial to evaluate the effectiveness of such training workshops and to understand how EmOC&NC training workshops impacts the local communities in LMIC settings and whether this approach is sustainable over time.

CONCLUSION

Healthcare providers from the UK and LMIC settings report that medical volunteering benefits the individual (both personally and professionally) and the local communities. UK based

volunteers are motivated by the perceived value or impact of the placement, are keen to feel useful, and to learn from other healthcare systems. This study highlights the need to understand the complexity of factors associated with the use of UK based and LMIC based medical volunteers to teach on training workshops. Further research is required on how to best develop and implement effective, ethical and sustainable partnerships to enable equitable knowledge and skills exchange between local healthcare providers and international medical volunteers to better improve the availability and quality of care for people living in low-resource settings using such training packages.

DECLARATIONS

AUTHOR CONTRIBUTIONS

JR supervised the qualitative part of this study, interpreted the qualitative data analysis and contributed to the writing of the manuscript. MMc conceived the quantitative study idea, constructed the questionnaire, conducted data collection, data analysis, interpretation of the data and wrote the manuscript. NvdB helped design both the qualitative and quantitative studies, analysed and interpreted the data and wrote the manuscript. All authors have edited and approved the manuscript for submission.

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COMPETING INTERESTS

The authors declare no competing interests.

DISCLAIMER

The funders played no role in the writing of the manuscript or the decision to submit it for publication.

PATIENT CONSENT

Not applicable.

AVAILABILITY OF DATA AND MATERIALS

Data is available from the corresponding author on reasonable request.

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ETHICS

Ethical approval was given from the Research Ethics Committee at the Liverpool School of Tropical Medicine (10.80 and 16.020). All research was conducted in accordance with the Declaration of Helsinki.

ABBREVIATIONS

EmOC&NC	Emergency Obstetric and Newborn Care
FGD	Focus Group Discussions
LMIC	Low- and Middle-Income Countries
UK	United Kingdom
VSO	Voluntary Services Overseas

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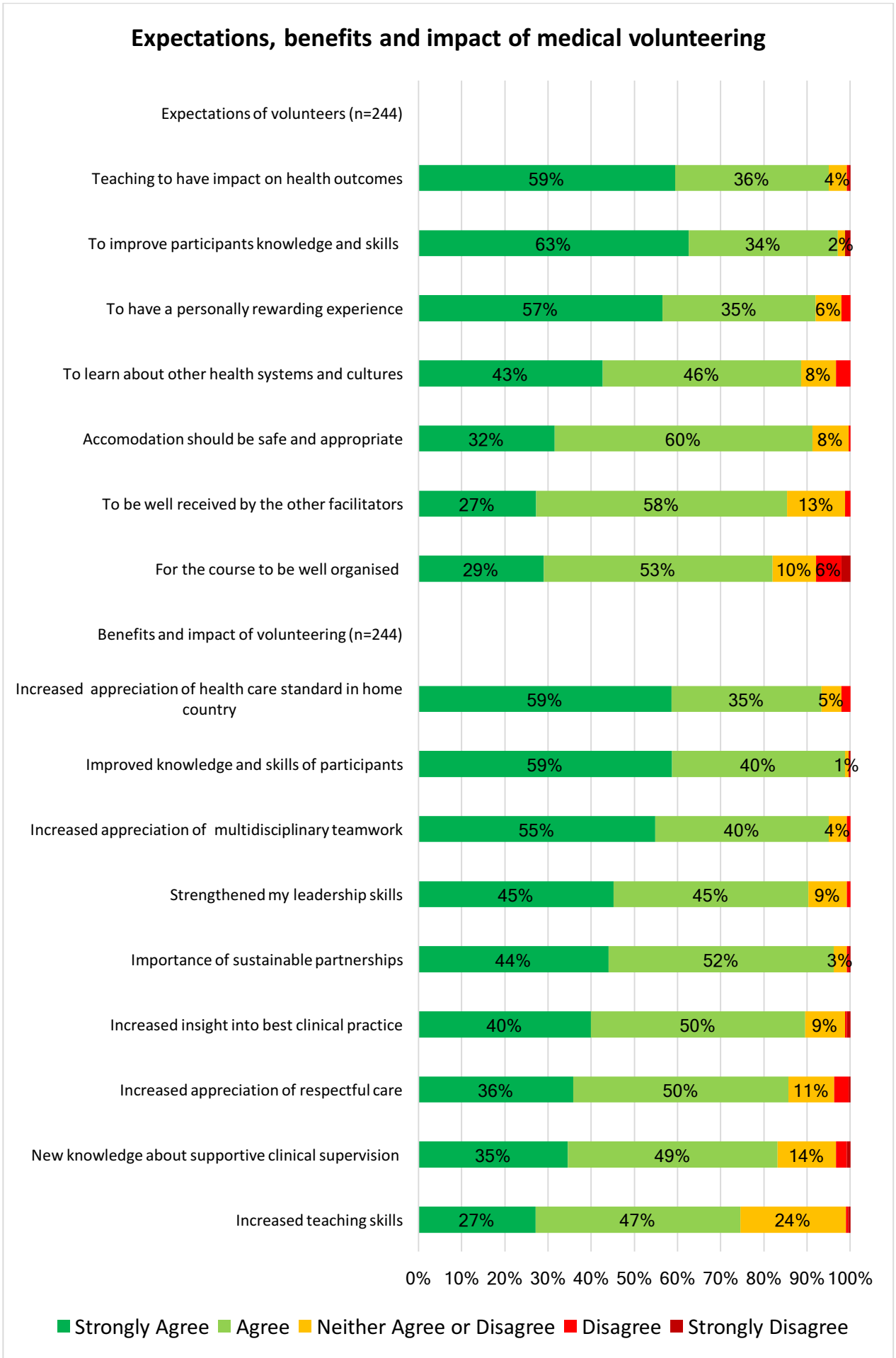
List of figures and tables

Table 1: Description of all medical volunteers (n=282)

Type of data collected	Qualitative interview respondents	Quantitative online survey respondents	
Country of Origin	United Kingdom	United Kingdom	Bangladesh, Ghana, Kenya, India, Malawi, Namibia, Nigeria, Pakistan, Sierra Leone, South Africa, Tanzania, Zimbabwe
Number of respondents	**n=38**	**n=120**	**n=124**
Age (years)	**%**	**%**	**%**
25 -54	Data not collected	46	88
55 -64		41	12
>65		13	0
Gender			
Male	53	31	48
Female	47	69	52
Employment status			
Full time clinical	82	60	82
Part time clinical	0	19	0
Retired from clinical work	18	16	0
Other / missing	0	5	18
Cadre			
Obstetrician	76	50	32
Midwife	16	33	28
Clinical Officer	n/a	n/a	8
Other	8	9	18
Missing	0	8	14
Number of times volunteered			
<5	Data not collected	57	35
5-10		35	42
>10		8	23

Table 2: Key emerging themes from focus group discussions and key informant interviews with UK based volunteers (n=38)

Reasons for volunteering	Experiences of volunteering	Impact of volunteering
• To help others • To improve maternal and newborn care and health outcomes in low resource settings • To gain teaching experience • To do something different • Commitment to being part of an effective programme	• Teaching different cadres of healthcare providers working in resource poor settings was challenging but highly rewarding • Adapting training content and approach to local context could be difficult • Interactions with training workshop participants was enjoyable • Observing poor quality of care was difficult	• Demonstrable increase in knowledge and skills of local healthcare providers • Volunteer increase in teaching, leadership, and management skills • Increased knowledge of challenges for healthcare providers working in low resource settings • A feeling of contributing to the betterment of society, and making an impact • More knowledge of and improved cultural sensitivity • Increased motivation for and renewed appreciation of quality of care and resources available in the NHS
Requirements for Supportive Environment		
At individual volunteer level	**Organisation receiving the volunteer**	**Organisation sending the volunteer**
• Ability to obtain study or professional leave from the NHS work • Volunteers should be flexible, able to work in teams, communicate effectively • Appropriate level of clinical skills and experience and previous tea1ching experience. • Previous travel to low resource settings is helpful • Knowledge of local context: including the health system, drugs and equipment used and common care pathways	• Commitment of local government and in-country partners to programme • Local colleagues to help prepare, support and where possible deliver the training workshops • Selection of the most appropriate participants to attend the training ensuring attendees are those who deliver the services they will be trained in • Provision of a suitable venue for the workshops • Facilitate volunteers to visit local healthcare facilities	• Attention to pre-course logistics including travel arrangements, accommodation is very important • Adequate notice of dates of volunteer placements required to be able to take leave from NHS • Good composition of multi-disciplinary volunteer team including with a range of expertise • Before and after briefings, both face-to-face and online • Sharing information from previous volunteers would be beneficial; and sharing results of monitoring and evaluation and other reports with volunteers • Appointed team leader (by organisation or team itself) should be encouraging, supportive and knowledgeable about the country and setting. • Ensure that volunteers always feel safe and well supported


Expectations, benefits and impact of medical volunteering
Expectations of volunteers (n=244)
Teaching to have impact on health outcomes
59%
36%
4%
To improve participants knowledge and skills
63%
34%
2%
To have a personally rewarding experience
57%
35%
6%
To learn about other health systems and cultures
43%
46%
8%
Accomodation should be safe and appropriate
32%
60%
8%
To be well received by the other facilitators
27%
58%
13%
For the course to be well organised
29%
53%
10%
6%
Benefits and impact of volunteering (n=244)
Increased appreciation of health care standard in home country
59%
35%
5%
Improved knowledge and skills of participants
59%
40%
1%
Increased appreciation of multidisciplinary teamwork
55%
40%
4%
Strengthened my leadership skills
45%
45%
9%
Importance of sustainable partnerships
44%
52%
3%
Increased insight into best clinical practice
40%
50%
9%
Increased appreciation of respectful care
36%
50%
11%
New knowledge about supportive clinical supervision
35%
49%
14%
Increased teaching skills
27%
47%
24%
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Strongly Agree
Agree
Neither Agree or Disagree
Disagree
Strongly Disagree

Topic guides for Focus Group Discussion and adapted for Key Informant Interviews

Please answer the following questions in the spaces provided, circle or tick the most appropriate options.

1. What is your professional?

- Midwife or Nurse Midwife
- Nurse
- General Doctor
- Obstetrician
- Anaesthetist

Other: (please describe) _____

What is the name of your place of work?

_____

Thank you for taking the time to complete this questionnaire

Facilitator's welcome, introduction and instructions to participants

Welcome and thank you for volunteering to take part in this focus group/interview. You have been asked to participate as your point of view is important for this research that is part of a much larger project. I realize you are busy and I appreciate the time you have given.

Introduction: This focus group discussion / interview is designed to assess your experiences regarding international medical volunteering. The focus group discussion / interview will take no more than one hour. May I tape the discussion to facilitate its recollection? (if yes, switch on the recorder)

Anonymity: Thank you for signing the consent form. Although this discussion is being taped, I would like to emphasize that this is anonymous and that this is being recorded on a locked devise that only myself knows the password to. And once transcribes have been made, the audio recordings will be deleted. The transcribes will not contain any information that identify you. Please try and be as honest as you can and try and refrain from discussing anything said in this group outside of this group and if there are any questions that you don't want to answer you do not have to. If you want to leave the study at any time you can and if you want to leave the room you can.

Ground rules for focus group discussions (not required for key informant interviews)

- Only one person speaks at a time. There may be a temptation to jump in when someone is talking but please wait until they have finished.
- There are no right or wrong answers
- You do not have to speak in any particular order
- When you do have something to say, please do so. It is important that I obtain the views of each of you
- You do not have to agree with the views of other people in the group
- Does anyone have any questions? (answers).
- OK, let's begin

Warm up

- First, I'd like everyone to introduce themselves **(not required for key informant interviews)**

Introductory question

I am very interested to hear about your general views regarding international medical volunteering and your motivations for and experiences of volunteering as a facilitator with the Making it Happen programme.

Guiding questions

Aim: To identify and describe the reasons why UK based health professionals volunteer to facilitate emergency obstetric and newborn care courses

1. What motivated you to volunteer to be a facilitator for the emergency obstetric and newborn care course?
   - wanting to help others?
   - Teaching experience?
   - contribute to society?
   - wanting to improve maternal and/or newborn care in other countries?
   - personal development?
   - increased cultural sensitivity?
   - work experience in a low resource setting?

- exposure to other types of clinical practice?
- meeting new people/networking?
- Religious beliefs?
- challenge/ new experience?
- Other? (please specific)

2. Why would you volunteer again? Why would you not volunteer again?

3. Why would you recommend volunteering in this capacity to others?

4. Why would you not recommend volunteering to others?

Describe UK based volunteer facilitators' experiences of conducting emergency obstetric and newborn care course in resource poor settings

5. What experiences did you have while facilitating the emergency obstetric and newborn care course?

- teaching experiences?
- cultural experiences?
- experiences in resource poor settings?
- interactions with participants?
- interactions with other facilitators?
- positive experiences?
- negative experiences?
- challenges?
- ethical dilemmas?
- confrontations with other ways of clinical practice than you are used to and/or agree with?

6. What were your expectations of volunteering?

7. In what ways did the actual experience meet or not meet these expectations?

Explore the volunteers' perceptions of the effects of the volunteering experience on their personal development with regard to their thinking about development and aid work, their career and career choices

8. How has your experience of volunteering effected your personal development?
    - increased cultural sensitivity?
    - feeling like you've contributed to society?
    - new skills? WHAT EXACTLY ?
    - new knowledge?

9. How has your perception of development and aid work been effected by your experience of volunteering?

    - different understanding of global concept of maternal and newborn health
    - different understanding of complexity of development work

10. In what ways has your experience of volunteering affected your career or work life?

    - Describe any changes in choice of work or career that you have made since volunteering

Explore the volunteers' perceptions of the effects of the volunteering experience on their work environments and clinical practice back in the UK.

11. How has your experience of volunteering affected your work environment here in the UK?
    - interactions with clients from other cultural backgrounds?
    - teaching or facilitating other courses, workshops; informal teaching sessions; mentoring?
    - use of resources

12. How has your experience of volunteering affected your clinical practice in the UK?
    - any changes or differences in your clinical practice since you volunteered?
    - why did you change them?

Explore the volunteers' perceptions of the effects of their volunteering on the capacity of health care providers to deliver skilled birth attendance and emergency obstetric and newborn care course in the setting in which they volunteered.

13. In what ways do you think your volunteering activity has made a difference to:

    - how health care providers function
    - how health facilities function
    - maternal health
    - newborn health

14. How do you think your volunteering activity may have helped improve maternal and newborn health in resource poor settings?

Describe UK based volunteer facilitators' experiences of conducting emergency obstetric and newborn care courses in resource poor settings

15. What is "successful volunteering"?

16. What needs to be in place for "successful volunteering"?
    - at individual volunteer level
    - at volunteer organisation level
    - at host organisation level

17. How does your experience of volunteering fit with "successful volunteering"?

18. Is there anything you would like to add?

Conclusion

- Thank you for participating.
- Your opinions will be a valuable asset to the study
- We hope you have found the discussion/interview interesting
- If there is anything you are unhappy with or wish to complain about, please contact a member of the research team whose contact details on the information sheets.
- I would like to remind you that any comments featuring in this report will be anonymous
- Before you leave, please hand in your completed personal details questionnaire

Centre for Maternal and Newborn Health
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WHO Collaborating Centre and winner of the BMJ Women's Health Award 2015
Striving for global equality in maternal and newborn health

*** Required Information**

page 1

*** 1.**
WELCOME TO THE CMNH VOLUNTEER SURVEY.
As a valued member of the larger community of the Centre of Maternal and Newborn Health (CMNH) at the Liverpool School of Tropical Medicine (LSTM), you are invited to kindly participate in the following survey entitled:
HEALTHCARE VOLUNTEERS WHO FACILITATE TRAINING IN MATERNAL AND NEWBORN HEALTH PROGRAMMES IN LOW AND MIDDLE INCOME COUNTRIES: AN ONLINE SURVEY REGARDING BENEFITS FOR THE VOLUNTEER, THE HOST COUNTRY AND THE HOME COUNTRY.
BACKGROUND
Since 2006, UK volunteers have delivered training in 8 African and 3 Asian countries with over 1681 national facilitators trained who have then helped to train over 16,324 participants. We are keen to explore the impact of this programme to the individual volunteer, the sending country (UK) and the host country.
PURPOSE OF THE STUDY
To understand further the contribution that international healthcare volunteers provide to knowledge and skills facilitation and provision in low and middle income countries. At present, how this sharing of expertise works, the effects on the host countries, home countries and the individuals themselves is not well understood or documented. While it is commonly believed that international healthcare volunteers can play an important role in developing the capacity of healthcare providers in low and middle income countries, there is a lack of robust literature documenting if and how this can be successful. In particular, how volunteering experiences affect the way returned volunteers work in their home countries health systems and how healthcare volunteers can be better prepared to meet the needs of the host country need be to explored.
PROCEDURE
During the study, you will be asked questions regarding your views and perceptions of medical volunteering in the capacity of facilitation of skills and drills 'Making it Happen' courses. This should not take more than 20 minutes of your time to complete.
RISKS
Potential risk of highlighting negative experiences, if this occurs pplease use this opportunity to contact the team for support if required.
None identified
BENEFITS
There are no direct benefits to the participant.
PRIVACY
We will keep all of your data private. No one will have access to the data other than the study staff. Data obtained from you will be used only for the purpose of the study.
VOLUNTARY PARTICIPATION
Your participation in this survey is completely voluntary. You have the right to refuse to participate in any questions at any time during the survey. You can also refuse to respond to specific questions or answer questions if you choose.
RIGHTS OF THE PARTICIPANTS
Please feel free to email the research team to ask any questions you have about the survey. Email address: cmnh@lstmed.ac.uk
COMPLAINTS
If you have a concern about any aspect of this study, you should email the research team. If you remain unhappy and wish to complain formally, you can do this through contacting one of the administrative team of the CMNH-LSTM.

Do you agree to give your consent to participate in this survey? (Select one option)

- ○ Yes
- ○ No

2. Age (in years) (Select one option)

- ○ < 25
- ○ 25 - 55
- ○ 55 - 65
- ○ >65
- ○ Other (Please specify) _____

3. Gender (Select one option)

- ○ Male

- ○ Female
- ○ Other (Please specify) _____

4. In which country are you resident/working currently? (Select one option)

- ○ Bangladesh
- ○ Ghana
- ○ Kenya
- ○ India
- ○ Malawi
- ○ Nigeria
- ○ Pakistan
- ○ Sierra Leone
- ○ South Africa
- ○ Tanzania
- ○ United Kingdom
- ○ Zimbabwe
- ○ Other (Please specify) _____

5. What is your primary professional role? (Select one option)

- ○ Midwife
- ○ Obstetrician
- ○ Anaesthetist
- ○ Paediatrician
- ○ Nurse
- ○ Nurse / Midwife
- ○ Clinical officer
- ○ Health officer
- ○ Other (Please specify) _____

6. Current employment status (Select one option)

- ○ Clinically active - Full time
- ○ Clinically active - Part time
- ○ Retired
- ○ Other
- ○ Other (Please specify) _____

7. How many times have you volunteered as a facilitator on a 'Making it Happen' course? (Select one option)

- ○ 0
- ○ <5
- ○ 5-10
- ○ >10
- ○ Other (Please specify) _____

8. Please specific what country or countries you have volunteered as a facilitiator?
Please select all that apply.

- ☐ United Kingdom
- ☐ Kenya
- ☐ Zimbabwe
- ☐ Sierra Leone
- ☐ India
- ☐ Bangladesh
- ☐ South Africa

- [ ] Malawi
- [ ] Pakistan
- [ ] Ghana
- [ ] Nigeria
- [ ] Tanzania
- [ ] Other (Please specify) _____

9. What were your motivations to volunteer as a facilitator on a 'Making it Happen' training course?

_____
_____

10. Before facilitating on a 'Making it Happen' training course, I had no preconceived ideas or expectations. (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

11. Beofre facilitating on the course I thought the course would be well organised and be straightforward (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

12. I expected to improve participants knowledge and skills (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

13. I expected to have a personally rewarding experience (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

14. I expected to learn about other health systems and cultures (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

15. I expected to impact on maternal and newborn health outcomes through my teaching (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

16. I expected to be well received by the other facilitators (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

17. I expected to be safe and hosted in appropriate accomodation (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

○	○	○	○

18. Other preconceptions not mentioned above?

_____
_____

19. The experience lived up to my expectations (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

20. The challenges in conducting training were greater than I had expected. (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

21. What did you find were the main challenges during the 'Making it Happen' course?
Please select all that apply.

- ☐ Not having enough time to undertake training activities
- ☐ Not understanding the local health systems
- ☐ Language barriers
- ☐ The wide range of knowledge and skills between cadres all trained together
- ☐ Participants not interested in training
- ☐ Attitude of participants regarding lack of urgency in responding to emergency
- ☐ Not agreeing with approach to managing emergency from local faculty
- ☐ Shocked by facilities available in the local setting
- ☐ Power cuts
- ☐ Lack of water and sanitation
- ☐ Difficulty with transport and traffic
- ☐ Local poverty
- ☐ None of the above
- ☐ Other (Please specify) _____

22. Has the experience of volunteering impacted on your current personal life? (Select one option)

- ○ yes
- ○ no
- ○ Other (Please specify) _____

23. Has the experience of volunteering impacted on your current work life? (Select one option)

- ○ Yes
- ○ No
- ○ Other (Please specify) _____

24. Volunteering has increased my appreciation of the standard of health care in my current country of residence (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

25. Volunteering has increased my appreciation of teamwork and communication (Select one option)

strongly			strongly

agree 0	agree 1	disagree 2	disagree 3
○	○	○	○

26. Volunteering has made me less frustrated with my local health system (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

27. Volunteering has made me more confident to manage difficult cases at home (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

28. Volunteering has strengthened my leadership skills (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

29. Volunteering has reduced my confidence (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

30. Volunteering has given me new knowledge about supportive supervision (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

31. Volunteering has been of no benefit (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

32. Volunteering has increased my general administrative skills (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

33. Volunteering has increased my understanding of good clinical practice (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

34. Volunteering has made me better able to manage language barriers (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

35. Volunteering has increased my appreciation of respectful care (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

36. Has the experience of volunteering altered your previous perspectives? (Select one option)

- ○ Yes
- ○ No
- ○ Unsure

37. How has the experience of volunteering changed your perspectives?

- ☐ I have reconsidered my current career pathway
- ☐ I no longer want to be involved in volunteering
- ☐ I appreciate the impact that building capacity of local healthcare providers can have in a low resource setting
- ☐ I am disillusioned by the use of aid in international development work
- ☐ I have a greater awareness of the need for sustainable and collaborative partnerships attaining good quality maternal and newborn health outcomes
- ☐ I understand further the challenges and barriers facing healthcare providers in improving maternal and newborn health outcomes in low resource settings
- ☐ No change in perspective
- ☐ Other (Please specify) _____

38.
In your opinion, did the Making it Happen training course impacted on the country in which you volunteered?

- ☐ Yes
- ☐ No
- ☐ Unsure

39. The 'Making it Happen' programme has contributed more than individual volunteering at a particular clinic or hospital. (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

40. The 'Making it Happen program has no impact (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

41. The Making it Happen project improved knowledge an skills of participants (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

42. The project builds teaching and leadership skills in the host country (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

43. The project is a waste of resources (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

44. THe project promotes and fosters support for multidisiplinary team working (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

45. The project demonstrates the importance of sustainable and collaborative partnerships (Select one option)

strongly agree 0	agree 1	disagree 2	strongly disagree 3
○	○	○	○

46. What in your opinion are features that promote a successful volunteering experience?

_____
_____

47. WHat in your opinion are barriers to a successful volunteering experience?

_____
_____

48. Would you recommend volunteering to a colleague? (Select one option)

- ○ Yes
- ○ No
- ○ Other (Please specify) _____

49. Please add any other comments or suggestions regarding the 'Making it Happen' programme.

_____
_____

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