BMJ Open 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. UK and Zimbabwe.

Participants Medical volunteers from the UK (n=162) and from low-income 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 (UKbased 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.

INTRODUCTION

International volunteers are skilled individuals who are motivated to offer their services

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 low-income and middle-income countries (LMIC) who facilitated training workshops in maternal and newborn emergency care across 13 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 on-line 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 volun-teers 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.

willingly, without consideration for financial gain, to contribute to another community such as in a low-income or middle-income country (LMIC).¹ Sustainable Development Goal number 3 (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 LMICs, especially targets concerning healthcare for women (SDG 3.1) and children (SDG 3.2).³⁴ 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 1000 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 highincome countries such as the UK have a responsibility to support healthcare development in poorer countries where the burden of disease is higher.¹⁶ 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 LMICs.⁷⁻¹¹ Similarly, there are emerging reports of healthcare providers in LMICs 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-term 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, postpartum haemorrhage, manual removal of placenta and newborn resuscitation, using adult learning interactive sessions comprising of short lectures, simulation training using obstetric and newborn manikins, role play and clinical case scenarios.¹⁴ Between 2006 and 2016, working as a multidisciplinary team, volunteers from both the UK and LMICs delivered this training EmOC&NC workshop in nine sub-Saharan African and three Asian countries with over 15000 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, anaesthetists and midwives) based in the UK or in an 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 (online supplemental 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 2018²⁶ and sent by email to all healthcare providers based in the UK and in LMICs, 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 2-week intervals. For this survey, we developed a 40-point questionnaire based on themes obtained from the qualitative interviews (online supplemental 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; and (6) 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 10 volunteers (five from the UK and five from LMICs) and several 6

questions were re-phrased slightly as a result. At the end of data collection, data from the SoGoSurvey online survey was exported to Excel V.2018 and descriptive analysis performed. Pearson's χ^2 tests were 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.

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

Table 1 Description of all medical volunteers (n=282)				
Type of data collected	Qualitative interview respondents	Quantitative online survey respondents		
Country of origin	UK	UK	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	46	88	
55–64	collected	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	57	35	
5–10	collected	35	42	
>10		8	23	

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)

Table 2 Key emerging themes from foc	us group discussions and key informant	interviews with UK-based volunteers (n=38)
Reasons for volunteering	Experiences of volunteering	Impact of volunteering
To help others	 Teaching different cadres of healthcare providers working in resource poor settings was challenging but highly rewarding 	 Demonstrable increase in knowledge and skills of local healthcare providers
 To improve maternal and newborn care and health outcomes in low- resource settings 	 Adapting training content and approach to local context could be difficult 	 Volunteer increase in teaching, leadership and management skills
To gain teaching experience	 Interactions with training workshop participants was enjoyable 	 Increased knowledge of challenges for healthcare providers working in low- resource settings
 To do something different 	 Observing poor quality of care was difficult 	 A feeling of contributing to the betterment of society, and making an impact
 Commitment to being part of an effective programme 		 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 environm	ient	
At individual volunteer level	Organisation receiving the volunteer	Organisation sending the volunteer
 Ability to obtain study or professional leave from the NHS work 	 Commitment of local government and in-country partners to programme 	 Attention to pre-course logistics including travel arrangements, accommodation is very important
 Volunteers should be flexible, able to work in teams, communicate effectively 		 Adequate notice of dates of volunteer placements required to be able to take leave from NHS
 Appropriate level of clinical skills and experience and previous teaching experience. 	 Local colleagues to help prepare, support and where possible deliver the training workshops 	 Good composition of multidisciplinary volunteer team including with a range or expertise
 Previous travel to low-resource settings is helpful 	Selection of the most appropriate participants to attend the training ensuring attendees are those who deliver the services they will be trained in	 Before and after briefings, both face-to- face and online
 Knowledge of local context: including the health system, drugs and equipment used and common care pathways 	 Provision of a suitable venue for the workshops 	 Sharing information from previous volunteers would be beneficial; and sharing results of monitoring and evaluation and other reports with volunteers
	 Facilitate volunteers to visit local healthcare facilities 	Appointed team leader (by organisation or team itself) should be encouraging, supportive and knowledgeable about th country and setting.
		Ensure that volunteers always feel safe

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, for example, midwives. Some volunteers reported feeling challenged by the different approaches to managing seriously ill women and mentioned that local healthcare providers based in LMICs had different attitudes regarding the level of urgency when responding to obstetric emergencies compared with the UK setting. Volunteers who had been to an LMIC setting before were generally not surprised by the basic healthcare resources and facilities. Volunteers who had no prior experience of working in an 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 multicultural 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 to do 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 with 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

Two hundred and sixty-two medical volunteers from the UK and LMICs 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 an 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 LMICs were younger, worked full-time in clinical practice, the range of disciplines was wider and they had volunteered on more occasions, compared with 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 with 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 LMICs; (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 LMICs.

Impact

Overall, volunteers reported that volunteering had impacted their personal (70%, n=171) and professional life (64%, n=156). More volunteers from LMICs reported that volunteering had impacted their personal (83% vs 56%, p<0.001) and professional life (81% vs 48%), p<0.001) compared with 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 LMICs compared with 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 LMICs compared with 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

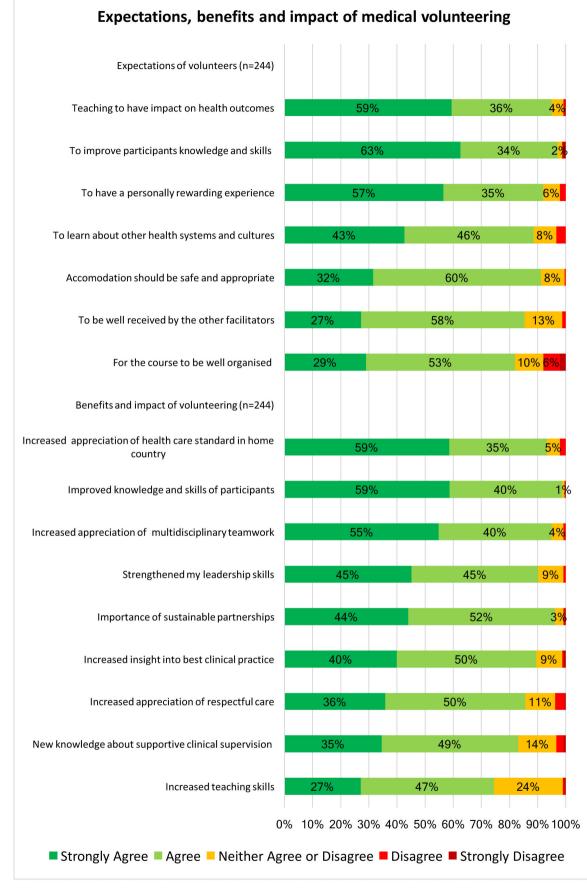


Figure 1 Expectations, benefits and impact of volunteering of medical volunteers from the UK and low-income and middle-income countries (n=244).

and after their placement. Compared with respondents from the UK, more healthcare providers based in LMICs 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 this study

This mixed method study explored and reported the experiences and perceptions of healthcare providers from the UK and from LMICs, who volunteered to train other healthcare providers in 13 different countries to improve maternal and newborn emergency care. There were a few limitations of this study. For logistic reasons, gualitative 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 an 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 focused 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 LMICs 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 1-year clinical placements with Voluntary Services Overseas, 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 LMICs, 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 prerequisite 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 lowresource 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 LMICs. 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 lowresource settings using such training packages.

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