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Nurses' contribution to short-term humanitarian care in low to middle income countries: an integrative review of the literature

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ABSTRACT

Aim: To appraise the literature related to voluntary humanitarian work provided by international nurses in low to middle income countries (LMICs).

Background: Nurses and other health professionals are engaged with both governmental and non-governmental organisations to provide care within international humanitarian relief and development contexts. Current literature describes accounts of charitable health professional activity within short-term health focused humanitarian trips; however, there is minimal research describing the care that nurses provide and the professional roles and tasks they fulfil whilst participating in international volunteer health care service.

Design: Integrative review.

Methods: A search of articles published between 1995-2015 was conducted using seven bibliographic databases. Inclusion criteria incorporated nurses and allied health professionals' involvement in a volunteer short term medical team capacity. Papers describing military and/or disaster response, with a service learning focus were excluded. Nineteen papers were selected for review, description and discussion of findings.

Results: Findings revealed limited data describing the care nurses provide and the professional roles and tasks they fulfil within the context of international humanitarian short-term medical trips. Issues raised included a description of demographic data regarding participants and sending agencies, motivation for volunteer participation, perceptions of effectiveness of particular programmes and sustainability issues related to cultural, ethical or moral obligations of foreign health professionals working in a LMIC.

Conclusion: Study findings highlighted that although nurses are recruited and participate in health-focused humanitarian activities in LMICs, there is extremely limited documented research about the amount and type of care that nurses specifically provide in this context.

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Furthermore, when identified, it is most often hidden within studies outlining services provided by health care teams and not specific to the discipline of nursing. Further research is therefore required to enable greater understanding of nursing care in this context, and to inform prospective volunteers of expected nursing practice.

Relevance to Clinical Practice

This paper provides an analysis of available literature describing nursing involvement within the particular context of short term medical teams delivering charitable health care.

Keywords: International health, nursing practice, development, job motivation, cultural Issues.

INTRODUCTION

Globally, vast inequities exist in the availability and provision of health care services for those in need (Gordon 2010; Lee et al. 2015). Recent estimates by the World Health Organization (WHO) state that although more people have access to basic health care than any other time in history, over 400 million people are still lacking access to one of the seven essential services (World Health Organization 2015b). Lack of access to these essential services occurs primarily in low to middle income countries (LMICs) (World Health Organization 2015b). The term, low to middle-income country (LMIC) describes countries that are still yet to achieve a significant degree of industrialisation relative to their populations, and have, in most cases, a medium to low standard of living (World Bank Group 2016). The Human Development Index (HDI) is a measurement ranking developed by the

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United Nations (UN) which assesses human wellbeing, encompassing a number of factors including life expectancy, educational levels and income per capita (Jahan 2015). The ranking gauges where countries stand in relation to each other, although the scarcity of statistical information can be seen as a limitation. LMICs are generally placed within the bottom third on the HDI scale. Poverty, overburdened health care systems, lack of infrastructure and humanitarian crises compound the disproportion between available services in industrialised countries and those that are still yet to gain economic stability (Langowski & Iltis 2011).

A major factor contributing to global inequitable health care delivery was a shortage of almost 4.3 million health care professionals worldwide, predominately in LMICs. (Tschudin & Davis 2008). In 2012, the World Health Organization highlighted these personnel health care inequities by reporting a range between two and 90 nurses and midwives for 10,000 people in low and high-income countries respectively (World Health Organization 2012). In addition, the WHO predicted that there would be a shortage of 12.9 million health care workers globally by 2035 (World Health Organization 2013). This under-provision of health services in developing countries is a philanthropic concern that rouses media attention (Koplan et al. 2009). To see a positive change in health outcomes, a significant increase in the number and quality of health professionals participating globally is fundamental (Cancedda et al. 2015).

BACKGROUND

International health equity is promoted through the collaboration of government and non-government organisations (Lurie 2012). High-income countries rendering global humanitarian assistance to their poorer counterparts within a health care context is not a

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new concept. However, advances in technology have led to a remarkable rise in reports of the scale and impact of improvement, and has brought an increased demand for coordination and accountability between governments and organisations (Australian Council for International Development 2014). The international relief aid and development sector contributes to reducing the inequality gap between various nations' health care needs and the delivery of such care, and sets goals towards reversing contributing causes such as poverty (Bido et al. 2015; VanRooyen et al. 2001; Walsh 2004).

As the impact of globalisation expands, borders are becoming more undefined and travel between countries has become easier and cheaper (Grootjans & Newman 2013). Previously defined borders between countries and their populations are decreasing (Bradbury-Jones 2009; Wong et al. 2015). One consequence is that that health professionals are seeking to gain both personal and professional experience internationally with the intent of both giving of their resources, and gaining a broader skill set for professional practice (Bjerneld et al. 2006). Health care personnel travel to countries other than their own on health-focused service trips, often with the altruistic objective of addressing unmet needs to improve the health of individuals and communities (Vernon 2009; Yates 2005). On a less altruistic level, epidemics such as the recent Ebola and Zika Virus outbreaks have alerted high income countries to the need for international cooperation in the health sector, as impacts are wider reaching than the previously somewhat contained systems in the developing world and threaten the wellbeing of these high income countries (Briand et al. 2014). This has seen an increase in budgets, personnel and resources committed to the prevention, treatment, and further research of these factors.

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Nurses and other health professionals are engaged via governmental and non-governmental organisations to provide care in international humanitarian relief and development contexts (Jones & Sherwood 2014; Sagar 2015). Nurses are a vital and significant part of those who respond to humanitarian needs via short-term health focused humanitarian team assignments (Gilbert, Yan & Hoffman 2010; World Health Organization 2007). Such volunteer work has been described as having either a humanitarian aid focus, which is commonly in response to a disaster or crisis situation, or a longer term development focus. However, these boundaries are not so easily defined and many positions encompass overlapping roles with varying aims from both sectors (Royal College of Nursing 2010).

The United Nations (UN) established the Sustainable Development Goals (SDG's) to replace the eight Millennium Development Goals (MDG's) which expired in 2015. The SDG's describe universal aims to improve the overall quality of life of all people globally with a new end target for achievement by 2030. Of the seventeen goals, a number are specifically focused on improving health and wellbeing: The first goal is to eradicate poverty, the third goal specifies a means to ensure healthy lives, and the tenth goal aims to end inequality between nations (United Nations 2015b; World Health Organization 2015c).

One approach to begin achieving these overarching SDGs is to render global humanitarian health-care assistance in response to identified health care needs (United Nations 2015a). A scaling up of health services to provide universal health coverage has been identified as a necessary step to achieve the goals (Subramanian et al. 2011; World Health Organization 2015b). Support is given by individuals, governments and/or non-government organisations (NGOs) in response to urgent needs and aims to improve the

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health outcome of individuals, communities, and therefore the overall population's wellbeing (Kopinyak 2013).

Many organisations have adopted the International Committee of the Red Cross (ICRC) Sphere Project framework (Young & Harvey 2004) even though there is no internationally accepted guideline. These humanitarian principles include neutrality, independence and impartiality, where every possible effort is taken to protect life and prevent suffering, with no distinction made related to race, gender, nationality, political or religious affiliations (Pictet 2010). Nurses and other health professionals are engaged by these organisations to extend compassion and often work under high-risk circumstances to fulfil these tasks of protecting life and preventing suffering. This global health nursing is action aimed at **"**delivering nursing interventions through individual and/or population-centered care addressing social determinants of health with a spirit of cultural humility, deliberation, and reflection on true partnership with communities and other health care professionals" (Upvall, Leffers & Mitchell 2014, p. 6).

Nurses constitute the largest entity to the provision of health care globally; nursing and midwifery services comprise over 80 percent of health care services (World Health Organization 2015a). The body of research that addresses the experience of nurses involved in these settings and roles remains relatively under-investigated. The shortages of health professionals, and especially nursing staff shortages are exacerbated by the global migration of nurses, especially those trained in developing countries seeking employment in high-income countries (Martiniuk et al. 2012; Nichols, Davis & Richardson 2010). Some service trips provide immediate health-focused humanitarian assistance through the provision of medical and/or surgical services, usually with a short-term focus (weeks to several months and extending up to one year), but some attempt to extend capacity by providing further

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education, training and support of local systems (Snyder, Dharamsi & Crooks 2011). Classification of short term service trips is problematic due to the diverse nature of these platforms and terms being used interchangeably.

Health care professionals from around the world are volunteering in various capacities to resource poorer regions, share knowledge and offer services to benefit those in need (Langowski & Iltis 2011). Nurses, as the largest group of health professionals in this humanitarian context, play a vital role in the provision of health care to vulnerable populations in developing countries, and are found to respond willingly and quickly in situations of need (International Council of Nurses 2009). A recent review of the WHO documents to identify global nursing issues revealed a number of concepts that were of concern. The impact of the changing workforce on nurses, their professional status and ongoing educational needs was highlighted, with a recommendation to increase the visibility of nursing within the WHO (Wong et al. 2015).

REVIEW

An integrative review approach was selected to enable inclusion of a broad range of study designs and data collection processes for this topic area. This framework incorporates a defined review question, an explicit search strategy across a range of study designs, quality appraisal of study methods, and synthesis of study findings (Whittemore & Knafl 2005). Selection of a wide sample of designs allows a comprehensive and rigorous analysis of the available literature (Tavares de Souza, Dias da Silva & de Carvalho 2010).

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AIM

To review published research literature with a specific focus on the provision of nursing care in the international, voluntary, humanitarian short-term context and to synthesise selected publications to describe the involvement and relevance to clinical practice that nurses have in the context of international volunteer work. The following research question was developed to guide the review: 'What role and activities do nurses perform in short term medical mission (STMM) teams administering professional health care in LMICs?'

SEARCH METHODS

Based on the review question, a bibliographic electronic search of publications indexed in seven medical and social science scholarly databases was performed: Proquest Health and Medicine, Academic Search Complete (EBSCO), PubMed, MEDLINE, Embase, Science Direct and Scopus. The search dates spanned from 1995 through to Jan 2015.

The four major initial key words searched were 'nursing', 'humanitarian', 'international', and 'volunteer'. Subject headings were expanded to encompass 'short-term medical mission/trip/team', 'surgical brigade', 'humanitarian organi* (organisation/organization), humanitarian aid/assistance', 'development agency', 'non-governmental organization (NGO)', 'faith-based', 'charity', 'health care provision', altruism', 'developing country', 'low-middle income country' and marginali* (marginalised/marginalized). Search results were imported into a bibliographic database, EndNote® (Thompson Reuters, New York) and duplicate citations were removed. Titles and abstracts were assessed for eligibility for inclusion in the review. Hand searching of articles reference lists to identify additional publications that were not initially located was used.

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SELECTION OF PAPERS FOR INCLUSION

Papers were included for review if they met the following inclusion criteria:

- Primary research related to charitable health care provision in a LMIC, including medical capacity building
- Peer-reviewed papers of primary research related to STTM
- Published 1995-2015 in English language
- Assistance was short-term (< 2 years duration)
- Participants were qualified health professional international volunteers that specifically included nurses as part of the STMM team.

In addition, any of these studies were excluded that reported a response to an acute disaster, including military efforts for terrorism or war; or focused on team learning with undergraduate and/or post graduate teams, rather than serving or teaching the recipients.

A PRISMA flow diagram (Moher et al. 2009) was used to document each stage of the study selection process (see Figure 1).

QUALITY APPRIASAL

The rigor, credibility and relevance of the selected studies were appraised for retention in the review. Qualitative, quantitative and mixed method research papers were assessed according to the Critical Appraisal Skills Programme tool (CASP [UK] 2013). Systematic reviews were assessed according to the PRISMA guidelines (Moher et al. 2009). Twenty-five papers were critically appraised; six were excluded as they did not meet the accepted criteria for detailing the research process, research method or ethics

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requirements. Nineteen papers were therefore retained following critical appraisal; eight qualitative, four quantitative, three mixed methods and four systematic reviews.

DATA ANALYSIS

Whittemore and Knafl's (2005) framework was used to guide analysis and synthesis of the data extracted from the studies. A thematic analysis framework (Whittemore & Knafl 2005) enabled inclusion of a diversity of study findings from a range of designs to be grouped into categories (Schneider & Whitehead 2013). A matrix was developed to identify and compare common topics. Findings emerged through repeated readings of the studies to identify similarities between studies, until categories were clearly identified and issues identified (Torraco 2005). For the quantitative studies, key narrative findings from the study authors were examined in a constant comparative approach with findings from the other designs, and incorporated where appropriate into the synthesis.

FINDINGS

The included studies were a combination of reviews, qualitative, quantitative and mixed method designs. Table 1 summarises the papers included in the review. Key findings from the review papers are initially reported separately below, to provide context for the evidence base and subsequent synthesis of findings. A brief description of the primary studies is also provided below, before presentation of the identified issues in the following section.

Of the nineteen articles included, four were systematic and/or integrative reviews, two of which reported the participation of health professionals via short term trips to LMICs and the impact and quality of their involvement on health systems (Martiniuk et al. 2012;

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Sykes 2014). These reviews identified a lack satisfactory reporting, including limitations in conceptual or theoretical analysis Martiniuk, et al. (2012). Furthermore, as these STMMs were likely to increase in the future, the authors urged organisations to ensure they report more specifically on the work they are doing to enable a more accurate picture of team geographical placement, roles and responsibilities of team member, and the anticipated impact of these trips on both volunteers and those facilitating and receiving the care.

From a primary research perspective, eight articles included some aspects of the experience of expatriate health professional staff (including nurses) whilst working in the described context (Adams et al. 2012; Asgary & Lawrence 2014; Bjerneld et al. 2004; Busse, Aboneh & Tefera 2014; Chapin & Doocy 2010; Chiu, Weng, Chen, Yang, Chiou, et al. 2012; Lal & Spence 2014; Withers, Browner & Aghaloo 2013), and fourteen described the evaluation of a particular programme whilst serving on a short-term medical mission trip, which included varying aspects of team dynamics and nursing involvement within those teams (Bido et al. 2015; Busse, Aboneh & Tefera 2014; Chiu, Weng, Chen, Yang, Chiou, et al. 2012; Chiu, Weng, Chen, Yang & Lee 2012; Compton, Lasker & Rozier 2014; Dawson et al. 2014; Dawson & Homer 2013; Elnawawy, Lee & Pohl 2014; Green et al. 2009; Haglund et al. 2011; Laleman et al. 2007; Martiniuk et al. 2012; Sykes 2014; Withers, Browner & Aghaloo 2013). There was an overlap of the two categories in three articles (Busse, Aboneh & Tefera 2014; Chiu, Weng, Chen, Yang, Chiou, et al. 2012; Withers, Browner & Aghaloo 2013).

ISSUES

A number of issues were identified from the chosen articles: a description of demographic data (demographics of volunteers); the reasons why health professionals offered their services (motivation for involvement); how effective the work was (assessing

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particular organisations or programmes how sustainable the services given might be in the longer term (sustainability); and issues related to cultural safety and ethical or moral obligations of foreign health professionals volunteering in a LMIC (cultural, ethical and moral obligations).

Demographic data of volunteers and trips

The term short–term medical mission (STMM) is not clearly defined in the literature, has no internationally agreed upon definition and is therefore problematic to compare studies (Martiniuk et al. 2012). Laleman, et al, (2007) proposed that no known framework had been developed to analyse the contribution of global health volunteers. In addition, there is no known global body or register that records all international NGO participants and activities.

Although a nursing focus was sought, data was sparse. In calculating the number of nurses identified in the chosen articles, approximately 14% of health professionals involved were described as having a nursing role. A range of other health professionals, including anaesthetists, generalist doctors, kinesthiologists, physiotherapists, paramedics, pharmacists, psychologists, radiologists, and surgeons were identified as participating volunteers within teams.

Collective results suggested health volunteers completed assignments within broad and varied time frames; with up to two years as the longest (Martiniuk et al. 2012), and as short as just five days (Chiu, Weng, Chen, Yang, Chiou, et al. 2012). A large proportion of volunteers tended to go on multiple trips and felt positive about their contributions (Bjerneld et al. 2004; Busse, Aboneh & Tefera 2014; Compton, Lasker & Rozier 2014). In one systematic review, it was determined that over the past 25 years, 230 accounts of short-

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term medical missions to low-middle income countries were identified within literature, with the USA, Canada, Australia and the United Kingdom the top four sending countries (Martiniuk et al. 2012). Another study identified 2,300 participants' involvement in a minimum of 949 trips over a five year period to 45 countries (Compton, Lasker & Rozier 2014) and results of a further survey study noted over 2000 volunteers were deployed to sub-Saharan Africa in one year (2005), however, suggested it could be as many as 5000 (Laleman et al. 2007). As the data cannot be pooled from these studies, the picture remains incomplete as to a realistic prediction of the number of people deployed or number of trips being made globally.

Findings clearly revealed nurses as being under-represented, with only one study in this review reporting a purely nursing focus (Lal & Spence 2014). Eight included nurses within the context of health care and the remaining 11 articles had varying degrees of description of STMM teams and roles, albeit very limited or no discussion about any specific nursing roles. If specified, nurses' involvement covered clinical practice areas such as midwifery in Nepal (Elnawawy, Lee & Pohl 2014), cardiovascular care in Peru (Adams et al. 2012), clinical skill assessment in Ethiopia (Busse, Aboneh & Tefera 2014), generalist nursing in Mexico (Withers, Browner & Aghaloo 2013) and in Guatemala (Green et al. 2009), nurses assisting in orthopaedic surgery in Dominican Republic (Bido et al. 2015), part of a neurosurgery team in Uganda (Haglund et al. 2011), acute surgical nursing in LMIC hospitals generally and primary health care nursing in more remote communities (Lal & Spence 2014). A common thread that runs through these articles is an expectation for volunteers to pass on knowledge through teaching and mentoring of local health care staff.

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Motivation and experiences

Global health volunteers more often than not participated with the altruistic objective of addressing unmet needs to improve the health of less fortunate individuals and communities (Asgary & Lawrence 2014; Dawson & Homer 2013; Elnawawy, Lee & Pohl 2014; Withers, Browner & Aghaloo 2013). They also declared motives for adventure, to contribute to diplomatic relations and a desire and willingness to travel (Chiu, Weng, Chen, Yang, Chiou, et al. 2012).

Overall, volunteers expressed satisfaction in their participation and recommended the experience to others, noting significant growth in personal and professional development through challenges, including character building and strengthening of confidence (Asgary & Lawrence 2014; Bido et al. 2015; Compton 2014; Dawson & Homer 2013; Lal & Spence 2014; Withers, Browner & Aghaloo 2013). Many participated in multiple trips over a number of years, reporting reward to themselves as participants and perceived benefits to the recipients of their care (Asgary & Lawrence 2014; Bido et al. 2015; Chapin & Doocy 2010; Chiu, Weng, Chen, Yang & Lee 2012).

Responses gave insight to the humanitarian workers' perceived identities. That is, although participants had idealistic intentions, and sensed the stress of their ongoing need to fight for justice and equity, they declared they were driven by the overwhelming need which was fuelled by adrenaline in response to the urgency of the situations they were presented with, and had noble aspirations to 'rescue' those in need. Sometimes, the outcomes led to unfulfilled expectations as volunteers did not always witness a change to the overall situation (Asgary & Lawrence 2014; Bido et al. 2015; Dawson & Homer 2013; Elnawawy, Lee & Pohl 2014).

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Further issues raised by nurses included stress of adapting to humanitarian settings, about the different scope of practice, challenges faced when trying to understand the health disparity, and finally re-entry adjustment on return home after an assignment (Lal & Spence 2014).

Effectiveness

Articles evaluating the NGO sending teams on STMM trips were generally positive about the involvement or work accomplished. Several studies examined the effectiveness of a particular medical or surgical programme by numbers of surgeries completed, patients treated and commitment to follow up care (Adams et al. 2012; Berry 2014; Bido et al. 2015; Elnawawy, Lee & Pohl 2014; Green et al. 2009).

A common thought of volunteers was that doing something is better than doing nothing (Elnawawy, Lee & Pohl 2014), but to date there was lack of published guidelines and measures to evaluate programmes and people involved with providing medical care (Chapin & Doocy 2010), and especially no nursing related literature associated with assessment of care given in this context. Sykes (2014) concluded that although STMM's are becoming more popular, these trips to LMIC's are mostly under-evaluated and raised serious ethical concerns being that internal review by organisations themselves was common, however, there was little published data from external or independent sources on the quality of any care given (Chapin & Doocy 2010). This suggests further development and implementation of an assessment tool to measure effectiveness of such trips for accountability to donors and recipients is important (Sykes 2014). In relation to the overall care provided by the

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health care team, understanding the nursing contribution as a separate role within the team would be important.

Sustainability, and accountabiity

Although humanitarian focused short-term medical teams have provided essential surgical procedures for many patients in LMIC's who would have not otherwise had access to care, there is a much greater opportunity of volunteer teams to engage with the local healthcare community to give training and resources for more sustainable outcomes into local systems (Adams et al. 2012; Chapin & Doocy 2010). An exploration of the effectiveness of an individual surgical programme in Guatemala, from both participant and recipient perspectives, identified a desired collaboration between NGOs and the local health services, but also reported that trust was a vital part in the partnership to strengthen sustainability (Green et al. 2009). Success should be measured within a commitment to build stable relationship between hosts and those on STMM teams earmarked by genuine sharing of ideas, resources and knowledge and good communication (Dawson et al. 2014; Elnawawy, Lee & Pohl 2014). With an identified gap in the literature about how STMM's interact with the communities they serve and the health care systems that support them, there is opportunity for greater research into the sustainability of programs delivering short-term medical care, and especially the specific nursing involvement in mentoring and building capacity for ongoing care.

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Cultural/Ethical/Moral Obligations

Experiences embodied challenges that included confusion of roles and feeling stretched to involve themselves in things they hadn't intended or expected, or without adequate training (Bjerneld et al. 2004; Dawson & Homer 2013; Lal & Spence 2014). Furthermore, worthy aspirations of contributing does not necessarily mean it will bring benefit to the recipient (Elnawawy, Lee & Pohl 2014). Volunteers described experiencing an ethical dilemma when in the situation of being expected to provide leadership and mentoring of locals when they felt ill-equipped and therefore reluctant (Dawson & Homer 2013). Some volunteers felt it was morally important to gain a deeper understanding of the local system before giving advice (Lal & Spence 2014) and developing a greater understanding of cultural differences.

Another issue identified some volunteers' realising that their presence may be causing dependence on foreign aid by locals which could have a detrimental effect on the government's ongoing support and development of services (Green et al. 2009). Corruption and inability to trust were further issues that caused a moral predicament leading to anxiety (Dawson & Homer 2013).

DISCUSSION

The emphasis of this review highlighted short-term health focused volunteer teams' involvement in some charitable humanitarian efforts in selected international contexts, including some nurses. Data related to the nursing discipline specifically were indiscriminate, however, some broad categories could be drawn. That is, data related to the contribution of, preparation of and experience of health professionals. The goal of the review was to quantify the role and responsibility of the nurse in the described context, but

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limited data highlighted the fact that further research was necessary to support findings. Findings brought to the forefront that nurses and other health professionals are highly motivated to involve themselves in voluntary service in LMICs, even to the extent that they are willing to put themselves at higher risk and forgo their own comfort but does not give voice to the potential for distress and exposure to trauma, and their needs of subsequent emotional support and re-entry strategies on return to their home countries.

Identifying the importance of the role and function of the nurse in health related humanitarian service is important as nurses currently work in a wide variety of roles including those in a volunteer capacity outside their normal country of residence, and often outside their usual practice areas. Sustainability of care by involvement of short term medical trips is under-researched and nursing involvement within deployed teams requires further research to clarify the nursing workforce impact.

As there is a growing emphasis on nursing competency standards (Halcomb et al. 2016), there is little acknowledgment of educational and support needs to nurses in preparation for them taking on these roles, whilst they are there, or even after they return. It identifies the need for further empirical evidence of nurses' involvement within this context to validate the charitable, somewhat hidden work of nurses and their experiences and to inform prospective volunteers and recruiters alike to allow for better preparation for such work. It highlights the opportunity to give voice to nurses' experiences in the wider global clinical nursing community, and highlights the benefits and challenges of working in broader practice environments. Furthermore, there is responsibility for those recruiting nurses to participate in volunteer service to educate and prepare them for and manage the higher risks associated with working internationally (Asgary & Junck 2013).

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The concept of care, which is intricately interwoven into nursing, fundamentally seeks to improve the quality of life by extending compassion, promoting dignity, and to nurture and empower both individuals and communities (Rytterström, Cedersund & Arman 2009). The nurses' ability to dedicate oneself to others welfare, coupled with selfless compassion are altruistic traits that have been attributed to the nursing profession (Gormley 1996). Embracing that responsibility, many nurses have risen to the challenge in collaboration with other health care professionals within short-term health focused teams to provide some level of this care (Upvall & Leffers 2014). Most often, nurses are required to function in conjunction with other health care team members in a multi-disciplinary team, so literature within this realm is well situated. However, as there are many anecdotal accounts where nurses are also being called upon to function autonomously (Arbon 2004), function out of their scope of practice and give holistic care to the patient in the context of their experience and environment, further research into specific unique environments and communities of nursing practice within the context of charitable health care in short term medical mission teams is warranted. Furthermore, those engaging nurses in voluntary service have a responsibility to prepare, follow and support nurses before, during and after their service.

A limitation to this review is that searched articles were in English only.

RECOMMENDATION AND CONCLUSION

Further research in the area of nurses fulfilling short-term health care placements related to voluntary humanitarian care is long overdue. This integrative review identified various contexts and aspects of health care offered outside of disaster and military nursing contexts, however, the lack of literature specific to nurses' participation and the lack of

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consistency in terminology gives justification for further research in this particular field to inform the professional bodies related to the discipline of nursing. As it seems likely that nurses are highly motivated to continue volunteering for such service, it is important for sending agencies to provide adequate preparation and follow up care to nurses placed in these positions. There is a definite chasm in research knowledge that describes the unique environments nurses are volunteering in outside their home countries, the roles they are fulfilling, including specific tasks they may be called on to do, the quality of care given including nurses' competency within their assigned roles, factors that motivate or deter their willingness to serve and the lack of preparation and educational programmes to support them in making a decision to get involved in this service.

What does this paper contribute to the wider global clinical community?

- An important analysis of available literature describing nursing involvement within the particular context of short term medical teams delivering charitable health care.
- A beginning evaluation of the factors that could impact nurses' motivation in deciding to volunteer in STMM teams.

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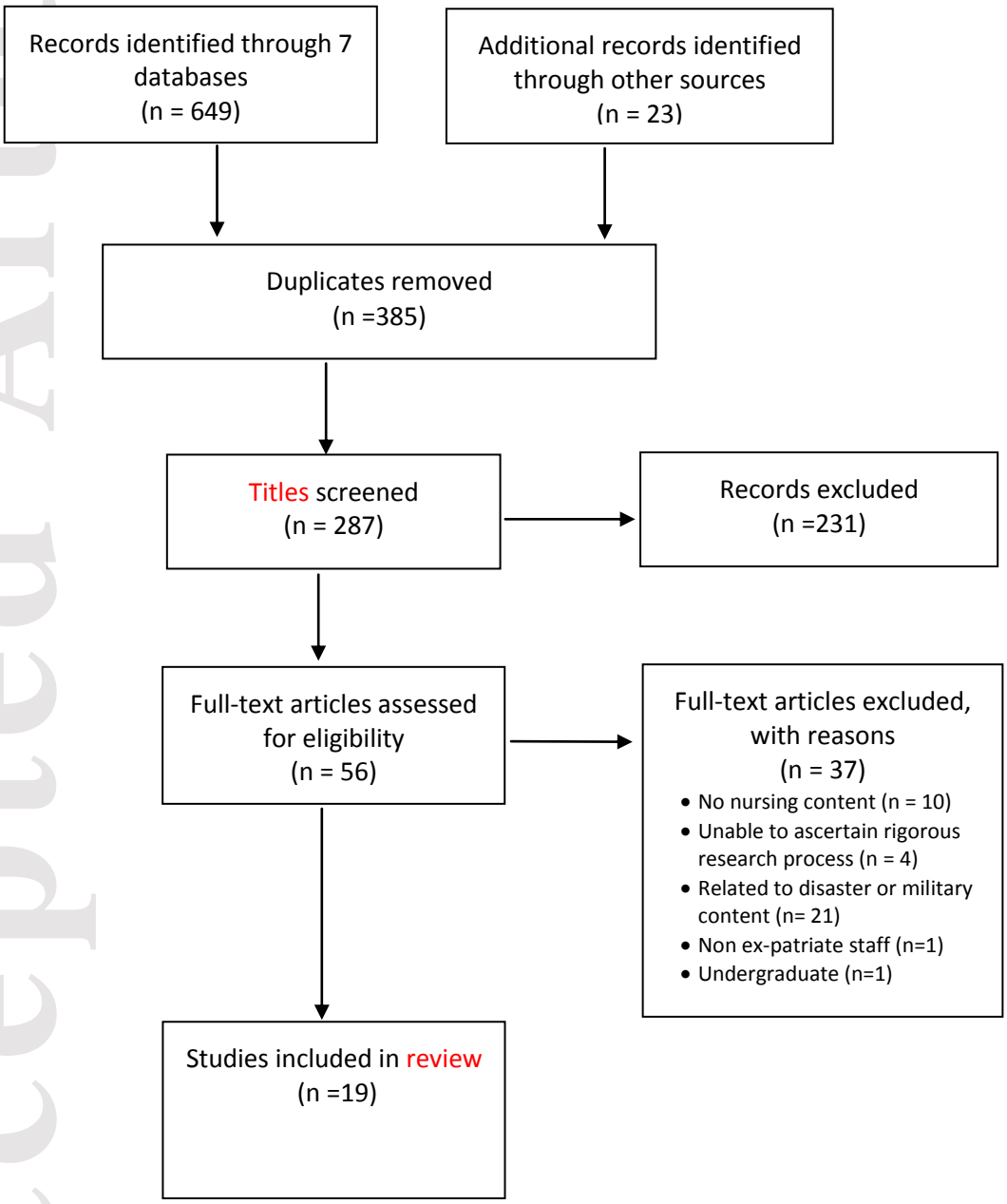
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Figure 1: PRISMA (2009) Flow Diagram

(Moher et al. 2009)



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Authors, date	Aims/Objective	Context related to nursing	Design / Method	Sample	Results
Asgary & Lawrence, 2014	To explore experiences and perspectives of *experienced* humanitarian actors	Minimal; unable to differentiate as to specific nursing involvement in results; experience	Descriptive qualitative, interviews	N=44 career humanitarian workers > 3 years involvement, incl. 6 nurses	Values and beliefs of humanitarian actors are strongly linked to personal/organisational ideologies and influenced by shared experiences
Adams et al, 2012	To report on the experience of a surgical team offering humanitarian assistance via STMM	Some; described nursing as pre-operative assessment, post-surgical clinical care and education to local nursing staff; experience	Descriptive qualitative, case study	N=54 (incl. 40 nurses) in two visits of a cardiac surgical team from Canada to Peru.	Demographic data about number of patients treated and types of cardiac conditions managed, relationship between visiting and host teams discussed, along with challenges in managing environment and resources.
Bido et al, 2015	To obtain humanitarian actors perspective of their effectiveness of participation in STMM and sustainability of changes	Non-specific; brief description about autonomy of US nurses, and clinical education skills offered] evaluation of team	Descriptive qualitative, interviews	N=21 STMM health professional participants to one orthopaedic NGO in Dominican Republic incl.one expat US nurse	Dominican Republic (host) nurses were positively influenced by exposure to visiting team structure, continuing education and cultural exchange increased sensitivity of both visiting and host teams to each other.
Bjerneld et al, 2004	To assess impact on recipient and professional behaviour of volunteer after participation on return to home country	More nursing than medical; experience	Descriptive qualitative, interviews	N=20 Swedish health professionals working with national and international NGO's incl. 15 nurses	6 themes incl. both positive and negative thoughts and unexpected nature about work, feelings about other 'actors', role of recruiting organisations and factors affecting success

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Busse et al, 2014	To quantify & evaluate personal and professional impact on participants of STMM	Some; description of improved clinical nursing skills; experience and evaluation	Survey questionnaire and open ended questions	N=63 health care professional participants to one health NGO in Ethiopia incl.19 nurses	Participants rated personal and professional impact from involvement as high with 83% accomplishing goals of trip(s). This included being positively changed by experience.
Chapin and Doocy, 2010	To quantify the current practices of STMM trips from USA conducted by a range of organisations	Non-specific ; very brief description about capacity building related to local nurses ; experience	Survey questionnaire and open ended questions	N=40 experienced STMM volunteers [not specified as nurses – however stated 40% other health professionals likely including nurses therefore up to 16]	Demographics of participation, including types of medical and surgical involvement, donations, and collaboration with local health providers.
Chiu, Weng, Chen, Yang & Lee, 2012	To measure efficiency and perception of participants of STMM	Although nurses were included in sample, unable to differentiate any further specific nursing-related data from results; evaluation	Retrospective data analysis, questionnaires	N=71 reports of STMM activity from Taiwan to Central America and South Pacific N= 253 participants incl.75 nurses	Cohort analysis of health professionals STMM involvement to two geographical areas (Central America and South Pacific) and a comparison of services showed visits to Central America were primarily communities whilst in South Pacific mainly to hospitals with no significant difference in demographic data or expectations of those participating in STMM to different geographical locations.

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Chiu, Weng, Chen, Yang, Chiou et al, 2012	To quantify participants of STMM and explore motives and perceptions of them	Non- specific; Although nurses were included in sample, results did not differentiate any further specific nursing-related data. Experience and evaluation of programme	Survey questionnaire	N=278 participants in Taiwan International Cooperation + Development Fund incl. 86 nurses	Demographic data about numbers and types of health professionals, as well as destination of STMM trips, motivation and expectations.
Compton et al, 2014	To assess a particular organisation's effectiveness from the participant's perspective.	Non-specific; unable to discern specific nursing activity evaluation of programme	Survey questionnaire and in depth interviews	N=500 + N = 18 interviews incl. 69 nurses	Cohort analysis; number of trips, trips, countries visited and estimated costs. Results reflected overall satisfaction by participants in trips.

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Dawson et al, 2014	To explore literature related to collaboration of midwifery services supporting education and professional activity in LMIC's	Specific to midwives and clinical nurse educators evaluation of programme	Systematic integrative review	Ten non-research articles and five research articles were included in meta-synthesis.	Identified activities that were instrumental in building capacity, which included education training and research programmes.
Dawson & Homer, 2013	To identify the needs and experiences of international health workers	Non-specific- unable to discern specific nursing activity evaluation of programme	Integrative narrative review	N=11 studies	Identified 8 themes including skills needed, challenges, motivations, identity, ethical dilemmas, cultural issues and personal health needs
Elnawawy et al, 2014	To obtain international medical volunteers' experiences and expectations of participation	Minimal; development focus of primary health care; clinical skills teaching programme; midwives; evaluation of team	Grounded theory, interviews	N=13 British health volunteer placements with one organisation to Nepal incl. 5 auxiliary nurse midwives	Themes included motivation of volunteers, contextual naivety, relationship between volunteers and local health workers, expectations

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Green et al, 2009	To assess local (Guatemalan) and foreigner perceptions of short term medical volunteer work provided by foreigners	Minimal; unable to discern specific nursing activity; evaluation of team	Ethnography, interviews	N=72 [23 Guatemalan health care providers 2 of which were nurses and 21 foreign medical providers, parents of recipients of care, government officials and non-medical personnel.	Themes identified health care needs of Guatemalan communities, their perception of dependence on foreign providers and the burden on host community, community needs, perceived quality of care and the sharing of resources
Haglund et al, 2011	To determine if a twinning partnership via training camps could improve capacity and efficiency of neurosurgical services in a LMIC (Uganda)	Minimal; continuing education offered by nurses in post neurosurgical clinical care, sterile technique, and surgical equipment preparation. Evaluation of programme	Case study approach	Demographical data collected for 2 years after commencement of programme on productivity and efficiency of neurosurgical cases	Capacity building was accomplished and maintained through twinning training camps
Lal & Spence, 2014	To explore the lived experiences of NZ nurses participating in aid work within surgical settings and war zones	Specific; clinical / surgical role experience	Interpretive phenomenology, interviews	N=4 nurses in surgical STMM teams	Three themes included participants thoughts on (i) anxiety (ii) different practice (iii) re-entry to life on return

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Laleman et al, 2007	To quantify the contribution of STMM International Health volunteers in Africa	Non-specific; evaluation of team	Survey questionnaire	N=13 questionnaires plus N=8 in 2 focus groups (not delineated to nursing)	Demographical data incl. contribution of FTE International Health Volunteers to Africa is 5000 in one year (2005), with 1500 being doctors.
Martiniuk et al, 2012	To quantify and highlight potential advantages and disadvantages of STMM from literature [1995-2009]	Non-specific; evaluation of team	Systematic review	N=230 articles reviewed (9% of total articles located according to their criteria).	Lack of common definition of medical mission trips. Poor reporting. Room for improvement
Sykes, 2014	To quantify impact of STMM [in medical literature 1993-2013]	Non-specific ; evaluation of team	Systematic review	N=67 articles included (<6% total articles, low level evidence)	Diversity of terms (> 45 identified to describe short term medical teams), majority of articles represent low level evidence related to reliable and consistent research evaluation tools and > 80% reported on trips with a surgical focus.
Withers et al, 2013	To explore motivation and importance of individuals participation to one dental health NGO in Mexico	Minimal; experience and evaluation of team	Descriptive qualitative case study, interviews	N=30 incl. 5 nurses + 4 days observation	Themes emerged regarding personal motivation and positive professional benefits of participation. Recommendation to facilitate first time volunteers service ensuring definite roles and responsibilities to improve satisfaction and to sustain volunteerism.

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