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BUILDING MIDWIFERY EDUCATOR CAPACITY THROUGH INTERNATIONAL PARTNERSHIPS: A QUALITATIVE STUDY INFORMED BY THE THEORY OF PLANNED BEHAVIOUR

INTRODUCTION

High level evidence demonstrates that when the quality and quantity of the midwifery workforce is sufficient, maternal and newborn lives are saved (Frenk et al. 2010; Fullerton et al. 2011; Homer et al. 2014; Renfrew et al. 2014; ten Hoope-Bender et al. 2014; UNFPA et al 2014). The International Confederation of Midwives (ICM) has developed global standards to guide the development of a midwifery workforce to provide high-quality, evidence-based care for women. This involves strengthening what is known as the three pillars of midwifery which encompass professional association, regulation and education (ICM 2015; UNFPA et al 2014; WHO 2014). Education, as one of these pillars, is the focus of this paper.

A learning environment that provides strong midwifery leadership, effective governance and adequate resourcing of teaching, clinical simulation and practice can produce quality midwifery graduates (Dawson et al 2015; Frenk et al. 2010). However, in many low and middle income countries (LMIC), midwifery education institutions face many challenges to deliver quality teaching and learning (Frenk et al. 2010). Challenges include staffing shortages that limit the opportunities for educators to take time from their duties to attend professional development (Fullerton et al. 2011). There are also a limited number of suitable professional development opportunities for midwives in rural areas which prevents midwives maintaining confidence and competence (Dawson et al 2015; Frenk et al. 2010; Lemay et al. 2012),
Study abroad, the provision of externally-facilitated online training modules, regional collaboration and support from international consultants are some approaches that have been employed with varying levels of success to build educator capacity (Lasker 2014; Forss & Maclean 2007; West et al 2015).

International partnerships to strengthen midwifery have been facilitated by education institutions, volunteers, faith based organisations, non-government and other international agencies (Yamey 2012). Little is known about the key features of international partnerships that enable individuals and organisations to most effectively strengthen midwifery teaching in education institutions in LMIC.

One international partnership to build midwifery capacity was the Papua New Guinea (PNG) Maternal and Child Health Initiative (MCHI). The aim of this paper is to explore how the approach taken by the PNG MCHI enabled international and national midwifery educators, working in a cross-cultural partnership, to strengthen midwifery teaching and learning in PNG.

The PNG Maternal and Child Health Initiative

PNG is a low-income country in the South Pacific (World Bank 2014) with approximately 250,000 births a year (WHO 2015). The majority of the population reside in isolated rural areas. The rate of skilled attendance at birth is only 44% and the maternal mortality ratio (MMR) is high, estimated to be around 773 maternal deaths per 100,000 live births (PNG National Government 2009; World Bank 2011; WHO 2015b). The MMR is an indicator considered to reflect the health of a population, status of women in society and functioning of the health system (WHO, 2015a). A high fertility rate (4.4) combined with a significant
unmet need for family planning contributes to the high MMR (PNG NDOH 2009). There are low levels of public confidence in the health system with reports of disrespectful care, staff absenteeism, and shortage of medications and essential supplies, which reduce access to health facilities (PNG NDOH 2009). The PNG government recognised that a key component to addressing the MMR and family planning need was to increase the number and quality of midwives (PNG NDOH 2009, UNFPA et al 2014). One strategy was the Maternal and Child Health Initiative (MCHI) which was conducted from 2012 to 2015. The objectives of the PNG MCHI were to improve the standard of midwifery clinical teaching and practice in the four education institutions (that expanded to five in mid-2015) and to improve the standard of obstetric care by placing two international obstetricians in sites identified as requiring additional support.

Two international midwifery educators (known as clinical midwifery facilitators or CMF) were placed in each education institution to work in partnership with the national educators. The international educators delivered theoretical teaching support in the education institution and clinical mentoring in the practicum sites and the national educators shared context-specific experience, skills, and cultural insights. Due to extreme midwifery workforce shortages, the education institutions did not always have the full complement of national educators and consequently the international educators often filled staffing gaps and taught students independent of their national colleagues who would complete other necessary administrative duties. The international midwifery educators were provided with an orientation program before arriving in PNG. This included information on Maternal Newborn and Child Health (MNCH) in PNG, cultural awareness training, and an opportunity to build relationships with other international educators.
Teaching resources, clinical simulation equipment and mannequins, textbooks, copies of World Health Organization (WHO) midwifery education modules (WHO 2008) and other audio-visual resources were provided to the schools. In addition, members of the PNG MCHI coordinating team and educators were represented on the national MNCH steering committee, supported the midwifery regulatory body to improve systems and processes, and conducted ongoing monitoring and evaluation of the Initiative.

Three national education workshops were held each year in PNG which provided opportunities for the educators to learn together in a collaborative and multidisciplinary environment. Workshops were themed to address either leadership, clinical or pedagogical knowledge and skills and involved interactive and participatory sessions delivered by the educators themselves, and national or international experts in MNCH clinical practice, management and education.

The PNG MCHI was mainly focused on education stakeholders, such as education institutions, government health and education departments and the regulatory body for nursing and midwifery. Strengthening the midwifery professional association to publically advocate for the needs of women was also supported. Throughout the MCHI, the international educators role modelled providing respectful maternity care to all women especially those disadvantaged including those who were living with HIV, adolescent, illiterate, extremely poor, homeless or came from an ethnic minority group.

The MCHI approach was a specific one of in-country capacity building and support with external coordination. The aim of this study was to determine whether this approach contributed to strengthening midwifery teaching in this low income context, in particular factors that enabled or constrained these processes.
METHODS

Design

A qualitative exploratory case study design was used. This enables an in-depth understanding of phenomena in a real-life context when the boundaries between phenomenon and context are not always clear (Baxter & Jack 2008; Creswell 2013; Harder 2010; Yin 2012). The design meant that an exploration of the perspectives of both the international and national educators in the MCHI could be undertaken to ensure that different voices could be heard (Yin 2009).

Case studies have been used extensively in social sciences, education and health (Yamey 2012; Yin 2009) and has contributed to knowledge of individual, social and organisational phenomena (Brideson, Glover & Button 2012; Fraser, Avis & Mallik 2013). A theoretical framework of behaviour change, called the Theory of Planned Behaviour (TPB) (Ajzen 1991) was also used to inform the data collection and analysis in order to identify the factors that contributed to and influenced capacity building.

Capacity building is primarily concerned with enabling behaviour change to improve outcomes (Labonte & Laverack 2001; Lavender et al. 2009; West et al. 2011). The TPB is concerned with the key cognitive aspects which motivate or influence an individual to perform (or not) a desired behaviour (Ajzen 1991). The TPB states that human behaviour is determined by three variables. These are: beliefs about the consequences of the behaviour which form the individual’s attitude; beliefs about the expectations of others which form social pressure which is called subjective norm; and beliefs about factors that facilitate or constrain behaviour which is termed perceived behavioural control (Ajzen 1991). In this
study, behaviour change is related to the international expatriate’s adaptive behaviour to the context and the national host’s reciprocal acceptance and utilisation of the recommended methods of teaching and facilitation of learning.

Setting and sample

Criterion sampling (Palinkas et al. 2015; Palys 2008) was used to ensure the selection of rich insights from midwifery educators working in the PNG MCHI. Eighteen PNG national and 15 international educators who were part of the initiative from August 2012 to March 2015 were invited via email to contribute to the research. Thirteen national and 13 international educators consented to participate and were interviewed. Two international midwifery educators and one national educator were not available for interview. All educators were proficient in reading, writing and speaking English.

Participants were provided with an information sheet and a consent form a month prior to data collection and were informed that participation was voluntary. The date and time of data collection was negotiated with the participant.

Data collection

Twenty-six individual, in-depth, semi-structured interviews were conducted in March 2015. Nineteen educators were interviewed face-to-face during a planned midwifery education workshop near the capital Port Moresby. This site was chosen as travelling in PNG is difficult.

Three participants who were geographically located outside Port Moresby at the time of the workshop were contacted by telephone. Four midwifery educators living outside of PNG at
the time of data collection were interviewed using Skype at a time and setting that was convenient for them.

<Table 1 here>

Questions for the individual interviews were informed by an initial scoping review of midwifery capacity building (West et al 2015) and the TPB. Questions aimed to determine the influence of an individual’s behavioural, normative and control beliefs on their intention to improve midwifery teaching and learning. The questions were provided to participants prior to data collection. All interviews were conducted in English and were digitally recorded and transcribed verbatim by the first author as soon as possible after the interview.

Data analysis

A thematic analysis was undertaken (Braun & Clarke 2006). Deductive and inductive coding methods identified repetitions, similarities, differences, exceptions and causal relations (Mills, Durepos & Wiebe 2010; Ryan & Bernard 2003). A deductive approach informed by the TPB was used to identify patterns reflective of the educator’s attitude, the presence of social norms and perceived behaviour controls which influenced their ability to improve midwifery teaching and learning.

Additional codes which did not initially fall into the TPB categories were also identified (Ryan & Bernard 2003).

Ethical approval for this study was obtained from UTS and the PNG Medical Research Advisory Committee (MRAC). Written and verbal consent were obtained from all study participants.
FINDINGS

Seven themes were identified that described how the PNG MCHI approach contributed to strengthening midwifery teaching. The first three themes described the enabling individual attributes, collaborative skills and processes used positively by the educators. The next four themes explored aspects related to individual, partnership and contextual influences which created challenges or constrained the educator’s ability to improve midwifery teaching (Figure 1).

Demographic information

Participants were aged 47 to 57 years old and predominately female which accurately reflected the gender distribution of midwifery educators in PNG (PNG National Government 2009). The international educators were from Australia, New Zealand and Malawi. The national educators were from either coastal, island or highland regions of PNG.

Educators had an average of 27 years of experience in nursing and midwifery (international: 31 years and national: 13 years). They had an average of 15 years of experience (international: 19 and national: 11 years) working specifically in midwifery education.

All national educators completed their midwifery education in PNG and the language of instruction was a mixture of English, local dialects and Tok Pisin (a form of Melanesian Pidgin English). International educators completed their midwifery education in well-resourced high income countries (Australia, New Zealand and Scotland). Eight educators (five international and three national) had completed a Master’s level degree, the remainder had completed postgraduate diploma or certificate level education.
The findings are outlined according to the seven themes. Quotations from seven national educators and eight international educators have been used to highlight the findings.

**Enabling Factors**

Three themes highlighted aspects of the PNG MCHI which were perceived as having improved midwifery teaching and learning.

**Knowing your own capabilities**

The PNG MCHI had enabled educators’ to become more aware of their personal and professional capabilities. This was facilitated by working in partnership with differing cultures and professional backgrounds.

Some national and most international educators perceived that they had adequate clinical skills to be a midwifery educator. Somewould have felt more confident with extra clinical experience and sought learning opportunities to increase their knowledge, skills and confidence. For example, a national educator said:

> I’ve been asking if PNG midwifery educators could have an attachment program in the hospital so we could enhance the skills that we have. Like evidence based practice and the new technologies. (National educator)

Most national and international educators stated they would have felt more prepared if they had a formal adult teaching qualification. The provision of physical teaching resources, such as textbooks, electronic media, simulation aids and audio-visual equipment enabled the national educators to learn new skills in using technology, accessing evidence and creating simulation scenarios in a clinical practice laboratory.
Being able to build relationships

The time frame of the PNG MCHI (4 years) allowed the building of relationships which developed trust and respect and enabled improved information exchange. Working together to prepare lesson plans, co-teach or facilitate clinical practice in the practicum sites provided opportunities for collaboration which was valued by both groups of educators and improved their confidence to implement new methods of practice and/or teaching. An international educator expressed how relationship building during the education workshops enabled improved teaching, saying:

*I think the workshops are very good, the national educators together with us and we are all doing the same thing, and bringing the clinicians (to the workshops) as well. It helps build relationships in the hospital which allows better teaching in the hospital.*

(International educator)

Face-to-face communication during the midwifery education workshops enabled a personal connection to be made. National educators expressed they would pursue more frequent national collaboration as a result.

Being motivated to improve the health status of women

Both groups of educators shared the goal of decreasing maternal mortality and improving access to quality midwifery care, especially in rural areas. Professional experience with maternal deaths was a motivating factor to improve midwifery teaching especially from national educators. One said:
... the experience of maternal death back then was my motivation to use my knowledge to help mothers in PNG ever since. It was a very emotional time for me.

(National educator)

Due to the strong relationships that were formed in the partnership, educators expressed feelings of obligation to their partner and were motivated to improve midwifery teaching.

Many national educators appreciated that the international educators were had left their ‘comfortable’ home country to come and help the PNG people. Both groups of educators stated that the provision of physical resources and opportunities for collaboration provided by the PNG MCHI made them feel valued and enabled to improve midwifery teaching and learning. Educators also perceived that targeting pre-service education was an effective strategy to improve the quality of MNCH services:

I teach 20 students, 30, 40, 50...I share my experience so I can help people instead of just working at this little hospital. (National educator)

In summary, the enabling factors were associated with individual and relationship level factors which strengthened the capacity of educators to work together in an international partnership.

Constraining Factors

The themes which constrained midwifery educators were related to their understanding of capacity building, feelings of being prepared to work together and factors within the institution and wider health system.
Lacking a mutual understanding of capacity building

Despite both international and national educators being oriented to the objectives of the PNG MCHI, how to ‘do’ capacity building in an international partnership was not always similarly interpreted. There was a lack of guidance about how to work together in such an international partnership model. Midwifery education in PNG had previously received limited support and therefore only few national educators had previously worked with an international partner.

The PNG MCHI coordinating team and the PNG Department of Health communicated prior to the start of the Initiative in order to ensure that there was sufficient understanding and acceptance of the role of the international educators. However, in reality, in a decentralised, developing health system with frequent rotation of staff, the information was not always transferred or understood in the same way. This was expressed by a national educator:

*We need a written expectation within this phase of capacity building...this would be helpful because I think some national people may just be thinking that these international people are just additional hands to help us.* (National educator)

Both international and national educators adapted to working together as the MCHI progressed. They acknowledged that working in partnership required different skills compared to working independently. The four education institutions had different ways of working and this depended on workforce numbers, individual skill and experience and the teaching schedule set by the administration of the education institution.

There also seemed to be a lack of understanding about the capacity building role as expressed by a national educator:
I have had some of my colleagues from the National Department of Health say ‘these white meris (white women) come up to our office and I was wondering what this was for?’ There was no communication and preparation to say ‘this is what capacity building is’ and what should we do? (National educator)

The lack of mutual understanding of the role of the international educators constrained the capacity building relationship.

**Not feeling adequately prepared to work together**

Some national educators expressed that they were not asked whether they wanted to work in a partnership model and this affected their willingness to collaborate. A national educator stated:

*The challenge I see in partnering is different types of people and you try and make them work together. It is really difficult at times. There are some, you partner them and there is no problem. There are some and you partner them and lots and lots of problems.* (National educator)

Some expressed that they did not feel confident in all aspects required of the role. National educators did not have many opportunities for continuing professional development in clinical practice or pedagogy throughout their career and felt that during the PNG MCHI they were learning ‘on the job’. A national educator said:

*I see the PNG educators as really good clinicians and most of the educators have not been to formal training in teaching before. So how do we impart it to the students, the knowledge and skills?* (National educator)
The international educators were required to work at a more complex clinical practice level than what was expected in their home countries. An international educator expressed her perception of needing an education qualification in this way:

*I’ve never done any formal education training ... so I’ve been learning on the hoof really. I’ve done a gazillion courses over my career ... but I’ve never done any formal post-grad. I think the best thing is for people to do some formal training to have some understanding of how lessons are set and how people learn (International educator)*

Some national educators found it challenging to adapt from a didactic way of learning to a problem solving approach. For example:

*I follow one step and when I do that every time, it is like I memorize it. But if I tend to do other steps from what I have been doing, I cannot get it straight. It is all over my mind. I have to do the one sequence over and over again. (National educator)*

Other national educators acknowledged that their rote-learning teaching style was not effective to produce a quality midwifery graduate and were willing to learn other methods to facilitate learning. Being prepared to use different methods of facilitating learning built educator confidence.

*Not feeling culturally competent*

The national educators perceived that the international educators were not always able to provide feedback in a culturally sensitive way and were occasionally too outspoken. Although speaking frankly was culturally appropriate in the international educator’s home
country, this way of speaking was contrary to the indirect communication style typical in PNG culture (Saffu 2003). International educators needed to learn about culturally appropriate communication methods including accommodating a longer pause between sentences which is common in Pacific Island cultures (Saffu 2003).

National educators identified that their spoken and written English language skills constrained their ability to be effective in their role. For example:

> *I think a big issue is English. If we are good in English we could guide the students effectively so they could be academic as well as clinicians. (National educator)*

International educators acknowledged that they did not impose the same standard of academic English that they would expect in their home countries and expressed that they modified their own language in order to be understood.

_Lack of an enabling environment_

The Department of Health and the individual schools made the decision around the number of educators they would employ. The international educators found it challenging to have little control over staffing numbers and insufficient numbers impacted on their capacity to be effective. For example:

> *The universities have to have a full complement of staff. It is hard to capacity build when you don’t have many people to capacity build with. (International educator)*

National educators reported a lack of career progression and role development with few opportunities for professional mentorship or guidance. A national educator explained:
When I first started at the education institution (in an education role), I found it quite difficult. There was no one there to mentor me, even though my colleagues were there, they were more into their own subjects. (National educator)

The knowledge, skills and attitudes of the clinicians who supported student learning were not always consistent with those of the midwifery educators. This created tension between the clinicians and educators and inhibited the educator’s capacity to facilitate quality learning. An international educator expressed it in this way:

We’re teaching the students one thing and then they are going to the clinical area and being taught something else or they are going to the clinical area and not being supported by the staff, they don’t see it as their role to teach students, they see it as our role as educators. (International educator)

The educators perceived that within the clinical practicum sites, there were few disciplinary measures in place for absenteeism or unprofessional conduct and limited opportunities for their colleagues to access in-service continuing professional development.

DISCUSSION

This study identified that behavioural, normative and control factors influenced the capacity of international partnerships to improve teaching. The PNG MCHI international partnership model of capacity building provided opportunities for individuals to identify their personal and professional capabilities and motivations for improving midwifery teaching; both areas aligned with the TPB. Increased individual awareness enabled positive behaviour change. This finding is aligned with other research which suggests that strengthening skills in critical self-reflection and awareness encourages positive behaviour change (Abdul Malek &
Using self-reflection to improve practice emphasizes that the attitude of the care provider is as important as clinical skills (Hunter & Warren 2014). Educational research (Viano, Holbrook & Rannikmae 2012; Webb & Sheeran 2006) has also shown that an individual’s behaviour can be modified once they become aware of their motivations to carry out certain behaviour. Educators who reflect on their individual capabilities and motivations, and supported to develop knowledge and skills, improve their personal confidence and professional capabilities (Girot & Enders 2003; Michie et al 2008). International partners working in LMIC could better support national midwifery educators to provide high quality services by aligning national standards with international guidelines (Fullerton et al. 2011). The Basic Competencies for Midwifery Practice (ICM 2013) and the Midwifery Educator Core Competencies (WHO 2013) are useful tools that could be used to reflect upon individual knowledge, skills and behaviours (Fullerton et al. 2011).

The three themes in the study that were mapped to the subjective social norm variable of the TBP were: being able to build relationships, lacking a mutual understanding of capacity building and not feeling culturally competent. These show that educators valued the role of effective, culturally appropriate communication to facilitate improved teaching.

The PNG MCHI provided opportunities for social networking, by connecting the educators virtually, during regular teleconferences, email forums and teleconferences, and in person, during the nationally attended education workshops. Employing a variety of methods to engage partners working in international development has been found to be beneficial (Maclean 2013; Rhodes 2014). The 4-year time frame of the PNG MCHI assisted relationship building. Other research suggests that a strong relationship between partners is a key
component of sustaining capacity building over time (Lasker 2016, Maclean 2013; West et al 2015).

This study has identified that misunderstandings about the partner’s role and the purpose of capacity building can constrain effective collaboration. A stronger social normative influence for improving midwifery teaching may have been achieved by involving the individual national educators in the initial development of the capacity building program enabling the clarification of roles and responsibilities and the achievement of prerequisite professional skills in preparation for the partnership (Algeo 2015).

Cultural awareness is known to contribute to the success of cross cultural partnerships in international health (Fee, McGrath-Champ & Yang 2011; Lasker 2016; Maclean 2011; Requejo et al. 2010; Rhodes & Rumsey 2016; Rhodes 2014; UNDP 2009; Van Vianen et al. 2004; Zheng et al. 2001). However, cultural awareness is underpinned by cognitive, affective and behavioural skills that are thought to be learnt over time which implies that preparatory training alone may not be sufficient (Holmes, Baviieri & Ganassin 2015; Perry & Southwell 2011). Strategies to mitigate against cultural misunderstandings may include providing national stakeholders with cultural training about the dimensions of their international colleague’s country (Hofstede 2001) in addition to providing international expatriates with cultural awareness training.

The two themes in the study that were mapped to the perceived behaviour control variable of the TBP were: *not feeling adequately prepared to work together* and *lack of an enabling environment.*
It is clear that a consistent supportive environment must be present in order for a behaviour to be fully realized (Webb & Sheeran 2006). The midwifery educators in our study perceived that they did not have a high level of job control in their respective institutions and that this, together with challenges in the health system, affected their ability to deliver quality of teaching and learning. These are unfortunately typical concerns in most LMIC combined with limited governance and leadership both within and external to the education institution (UNFPA et al 2014).

Strategies to improve the functioning of the midwifery regulatory and professional association bodies may help to reduce the theory-practice gap in clinical placement sites, regulate the midwifery scope of practice and improve collaboration and partnership between stakeholders (ICM 2015; Lopes et al. 2016).

Having a clearer understanding of the midwifery educator’s attitude, the degree to which social pressure influence behaviour and the level of perceived behaviour control may mean that capacity building process can be most effective.

CONCLUSION

This study has explored how the approach taken by the PNG MCHI enabled international and national midwifery educators, working in a cross-cultural partnership, to strengthen midwifery teaching and learning in PNG.

International partnerships can provide the opportunity for increased awareness and self-reflection which promotes information-seeking behaviours. This study suggests that having an enabling and supportive environment enhances feelings of control over improving
midwifery teaching. Increasing the leadership and management capacity of midwifery educators in LMIC may ensure these individuals can advocate for improvements.

Developing a model to guide the planning and implementation of capacity building programs for midwifery education may be useful to adequately prepare health systems and individuals to work together to strengthen midwifery education in LMIC. Further research would be useful to examine how these findings are applicable in other LMIC contexts.
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