



# MIDWIFERY CAPACITY BUILDING IN PAPUA NEW GUINEA: KEY ACHIEVEMENTS AND WAYS FORWARD

2015, vol 1

WORLD HEALTH ORGANIZATION COLLABORATING CENTRE  
FOR NURSING, MIDWIFERY AND HEALTH DEVELOPMENT  
Midwifery Capacity Building in Papua New Guinea: Key achievements and ways forward



**Angela Dawson**, Research Fellow, UTS

**Mary Kililo Samor**, Principal Advisor, Training Branch, HR section, National Department of Health

**Lahui Geita**, Technical Advisor, Family Health Services, National Department of Health

**Glen Mola**, Head of O&G department, School of Medical and Health Sciences, University of PNG, Obstetrician, Port Moresby General Hospital

**Pat Brodie**, Adjunct Professor of Midwifery, UTS

**Michele Rumsey**, Director of Operations, WHO CC UTS

**Felicity Copeland**, WHO MCHI Project Evaluation officer, UTS

**Amanda Neill**, Project Manager, WHO CC

**Caroline Homer**, Professor of Midwifery, Associate Dean, International and Development, UTS

Citation: Dawson A, Kililo M, Geita L, Mola G, Brodie PM, Rumsey M, Copeland F, Neill A, Homer CSE. Midwifery Capacity Building in Papua New Guinea: Key achievements and ways forward. *Women and Birth* (accepted 14 October 2015).

## ABSTRACT

**Background:** Papua New Guinea has some of the poorest health outcomes in the Asia-Pacific region. Maternal mortality is unacceptably high and there is a severe midwifery shortage requiring a quadrupling of the workforce.

**Aim:** This paper outlines the findings of an evaluation of the Maternal Child Health Initiative (MCHI) (2012 – 2013) to determine key factors contributing to maternal health workforce strengthening.

**Method:** A descriptive mixed methods study was undertaken. Data were gathered through interviews, focus group discussions and surveys with clinicians, midwifery students and staff from nursing and midwifery schools and National Department of Health staff.

**Findings:** Learning opportunities were found to have increased for midwifery educators and improvements were described in midwifery educators teaching capacity and student clinical education experience. There was an increase in the number of midwifery graduates and improvements were noted in the working environment and skills of clinical staff. Education challenges were described including the lack of clinical preceptoring and limited continuing education for clinical educators. Participants recommended increasing clinical education hours and extending the length of the midwifery program. Ongoing efforts to accredit the midwifery curricula and regulate midwifery graduates were noted.

**Conclusion:** The MCHI has contributed to strengthening the midwifery workforce nationally. However, scaling-up and sustaining these achievements requires leadership and funding commitments from the midwifery schools and government alongside the accreditation of midwifery curricula and regulation of new graduates.

## INTRODUCTION

Building the capacity of midwives to deliver evidence-based interventions to improve maternal health and provide universal access to reproductive health in low and lower-middle income countries (LMIC) is the focus of a number of international efforts.

Scaling up midwifery education involves more than just increasing production. Students need competent teachers and the curriculum must be standardised and accredited. This paper reports on the progress of the first phase of an Australian Aid funded midwifery capacity strengthening project in Papua New Guinea (PNG) that addressed a critical need to strengthen midwifery in the country.

### The Maternal and Child Health Initiative in Papua New Guinea

PNG has a critical health workforce shortage. In relation to maternal and child health, the country was identified in the first State of the World's Midwifery Report as having a severe midwifery shortage and needing to at least quadruple the workforce. In January 2011, the PNG National Department of Health (NDoH), with technical advice from the PNG office of the World Health Organization (WHO) and support from the WHO Collaborating Centre at the University of Technology Sydney (WHO CC UTS) developed the Maternal and Child Health Initiative (MCHI).

The MCHI utilises a capacity building approach involving support, guidance, mentoring and continuing professional development. Eight international Clinical Midwifery Facilitators (CMFs) were placed in four midwifery training schools across the country to mentor Papua New Guinean midwifery educators. Two international obstetricians were placed in two regional hospitals that previously did not have ready access to an obstetrician. The role of these CMFs



and obstetricians was to facilitate an improvement in clinical teaching and practice in addition to providing mentoring and supervision to midwifery educators, students and other clinicians.

The aim of this paper is to present the findings of the evaluation of the first two years of the MCHI and lessons learned that may be transferable to midwifery capacity building efforts in other settings.

#### METHOD

This descriptive study employed a mixed methods design involving concurrent collection of data from a variety of sources to provide multiple perspectives on the outcomes of interest. Ethical approval was provided by The Government of Papua New Guinea's Medical Research Advisory Committee (NDoH MRAC No. 11.36) and ratified by the Human Research Ethics Committee at the University of Technology Sydney.

#### Data analysis

Qualitative data were analysed using a directed content analysis in the first instance to identify the participants' accounts that related to the MCHI and other inputs and outputs and the effects of these. Qualitative data analysis was undertaken using the software tool QSR NVivo 10. Regular meetings with the research project team were held to discuss the findings from the qualitative data and to identify patterns within

***"I feel better about looking to the future. The students are an amazing source of great hope for me. I look at them and I see what they're learning. They're not all thinking at the same level but there's enough questioning and learning and moving forward with the students that makes me think that there is actually hope that at the end of this we are going to produce midwives who are going to be great midwives and great advocates for women"***  
(PNG Midwifery Educator)

and across all transcripts. The qualitative findings were also discussed in the light of the survey results. These were analysed descriptively using Microsoft Excel, as they became available from field staff in PNG.

#### FINDINGS

##### Increased learning opportunities for midwifery educators

The PNG midwifery educators reported benefits from the role provided by the capacity building provided through the MCHI, both in the clinical setting and in the teaching sites in the universities. The PNG midwifery educators described the enhanced learning opportunities that had resulted from the mentoring and support provided by the CMFs. One reported:

*This year, I am becoming more confident with my counterpart around me. She is helping me in so many different ways in my skills, especially midwifery. Like some things I am used to doing but they say, oh this is not evidence based, and I go, OK, I have to change this practice. That's good - it's challenging. It took me lot of time to adjust to the CMFs (PNG midwifery educator).*

The midwifery course coordinators identified those areas where they felt the CMFs had contributed most to increasing their knowledge and skills. These were using different assessment strategies and tools; planning and organization; curriculum design and development; using different approaches to teaching and enhanced presentation techniques in the classroom.

The workshops were useful for building skills and strategies in teaching and learning, and for receiving updates on clinical topics. The workshops were seen as a valuable means to participate in continuing professional development (CPD), an opportunity that few midwives in PNG have ready access to. Barriers to taking up CPD were highlighted where heads of schools and educators reported that high workload demands often made it difficult for staff to be released from teaching duties to attend educational events. Other barriers to professional development included a lack of awareness of events, events that were not relevant to practice and a lack of funding.





### Increased midwifery educators teaching capacity

The PNG midwifery educators reported improved teaching capacity as a result of working alongside the CMFs. One PNG educator said “I have learnt a lot from the CMFs, like some of the teaching methodology. These are all new things which I was not exposed to previously” (PNG midwifery educator FGD). The educators had introduced a number of new teaching techniques such as the use of visual teaching aids, computer skills and the creation of worksheets for specific topics.



### Improved clinical education for students

The majority of midwifery students provided positive and consistent feedback regarding the knowledge, skills, attitudes and approaches to teaching as provided by their educators and CMFs in the classroom and in the clinical settings. Many also reported that undertaking theory as well as practical application was important for their learning:

*Both theory and clinical because what we learnt during theory when we are not in clinical we implement the knowledge and skills which is good. When you learn something and put into practice, you will remember (Student survey).*

Clinical supervision to enhance learning was an important issue. Just over 50 per cent of students indicated that clinical supervision was adequate while other students highlighted that, due to a shortage of staff it was not always possible to receive supervision. In extreme cases, some students indicated that they had not received any supervision at all or only rarely received supervision in the clinical setting. Reasons for this situation included: educators were either too busy, or absent from the clinical areas; a lack of midwives on the wards to supervise student learning and; a lack of supervision due to large

### **The longitudinal study sought to answer the following:**

*What are the experiences of PNG midwifery students and midwifery educators?*

*Has the supply of midwives increased?*

*Has the quality of midwifery education increased?*

*Has midwifery clinical training capacity been strengthened through development of the faculty?*

*What changes have there been at service delivery points?*

*What changes have occurred in midwifery regulation?*

numbers of students from different disciplines each competing for clinical supervision from limited numbers of staff.

### Increased quantity and quality of midwifery graduates

The scholarships funded by the Australian Government were important in increasing the number of midwifery graduates. There were 49 graduates in 2011, increasing to 76 in 2012 and 107 at the end of 2013. Each school has increased its uptake considerably. The attrition rate for 2013 was low, less than 4%, mainly due to sickness.

Feedback from midwifery educators and CMFs regarding the quality of graduates was encouraging, for example, one reported:

*The Initiative has made the most impact in the skills of the students. I believe that the recent graduates are more compassionate to the women. In addition they have increased their knowledge and skills in all areas of midwifery care. (CMF Survey 2013).*

One of the strengths of the CMF's input was to gently shift the philosophical underpinnings of

midwifery into a more woman-centred respectful and compassionate model of care. Some graduating students spoke about how they have changed the way they speak to women in labour and “be there for the mother”, “allow women to take different positions in labour” and “involve men as much as possible”.

### Increased capacity of clinicians in participating sites

The obstetricians reported significant improvements in the safety and quality of health care delivery as a result of the MCHI. One noted that there is “now a qualified midwife in every health centre who is able to manage complications that arise” and that clinical practice had improved due to increased number of clinical meetings and outreach programs. Obstetricians also reported that educating midwives and nurses caring for women after miscarriages had resulted in a reduction of women presenting with sepsis and other complications resulting from unsafe village family planning practices.

### Progress towards regulation of midwifery

Considerable work had been undertaken by the four schools towards gaining accreditation of the midwifery curricula by the PNG Nursing Council. Much of this work was supported through the MCHI. Additional technical support funded by Australian Aid was also provided to the Nursing Council. The midwifery curricula in all midwifery schools have now been formally accredited and midwifery graduates registered with the PNG Nursing Council, a process that had not occurred in the past five years.

***I am becoming more confident with my counterpart around me. She is helping me in so many different ways in my skills, especially midwifery. Like some things I am used to doing but they say, oh this is not evidence based, and I go, OK, I have to change this practice. That's good - it's challenging. (PNG midwifery educator)***



MCHI Activities: Phase 1, 2012-13	
<ul style="list-style-type: none"> <li>• MCHI staff: 8 Clinical Midwifery Facilitators (CMF) and 2 Obstetricians</li> </ul>	
<ul style="list-style-type: none"> <li>• Midwifery educators in five Schools of Midwifery provided with mentoring from CMFs</li> <li>• Bimonthly teleconference with CMFs to review processes of capacity building with the PNG educators and the MCHI more generally</li> <li>• Midwifery educators have opportunities for mentoring:               <ul style="list-style-type: none"> <li>○ Maternal Child Health Initiative (MCHI) workshops</li> <li>○ Other training (eg Reproductive Health Training Unit [RHTU])</li> <li>○ Conference attendance</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>• Midwifery educators have opportunities for ongoing continuing professional development:               <ul style="list-style-type: none"> <li>○ MCHI workshops</li> <li>○ Other training (eg RHTU)</li> <li>○ Conference attendance</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Localised training provided by CMFs and obstetricians and gynaecologists, for example:               <ul style="list-style-type: none"> <li>○ Family planning training</li> <li>○ Community Health Worker up-skilling</li> <li>○ Neonatal resuscitation</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Resources supplied to PNG midwifery educators in each MCHI site</li> </ul>	
<ul style="list-style-type: none"> <li>• Workshop program developed with PNG midwifery educators from each teaching site</li> <li>• Evaluations reviewed for Steering Committee to inform future workshop content</li> </ul>	
<ul style="list-style-type: none"> <li>• Monthly teleconference with CMFs and PNG educators to review issues related to teaching and learning and support ongoing development</li> </ul>	
<ul style="list-style-type: none"> <li>• Regular involvement by clinicians with midwifery student teaching</li> <li>• Training (formal and informal) provided for PNG clinicians.</li> <li>• Rural placements with students undertaken</li> <li>• Clinicians and other stakeholders supported by CMFs and MCHI obstetricians</li> </ul>	
<ul style="list-style-type: none"> <li>• Regular mentoring, supervision and teaching of PNG clinicians by obstetricians</li> <li>• Regular contact between MCHI obstetricians and senior PNG obstetrician</li> </ul>	
<ul style="list-style-type: none"> <li>• Evidence of increased numbers of graduates               <ul style="list-style-type: none"> <li>○ Numbers of midwifery students commencing training</li> <li>○ Number of midwifery students completing</li> <li>○ Number of graduates registered with the PNG Nursing Council</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Liaison with Australian Awards to assist with scholarship planning and recruitment for the next year               <ul style="list-style-type: none"> <li>○ Australian Awards invited to MCHI Steering Committee to provide input</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Three workshops delivered in 2012</li> <li>• Three workshops delivered in 2013</li> </ul>	

**Table 1: PNG MCHI activities**

#### Increased opportunities for key stakeholders and participating PNG clinicians to network and collaborate

The regular MCHI workshops provided an opportunity to collaborate and network especially with senior personnel from NDoH and WHO. Opportunities for networking enabled better communication with service providers in provincial health care facilities that have strengthened referral and in-service training.

The PNG staff also commented on collaborative practice that resulted from working with the CMFs:

*We have a very good working relationship. There is consultation and you know, working with our curriculum and all those things. It's clear we all work together as a team and I think the workload is good because we share the workload and especially with our CMFs. They are really so much help and assistance (PNG Midwifery educator).*

The MCHI evaluation also identified challenges in relation to building a supportive midwifery working environment in health and training facilities. These included a lack of supervision for students primarily related to resource issues, communication issues between partners and low staff motivation. Other research examining the working environment of health workers in PNG may provide further insight into factors affecting staff motivation and job satisfaction that the MCHI may need to consider. Table 1 outlines some of the MCHI activities from 2014.

#### CONCLUSION

This paper suggests that the MCHI has contributed to key areas of midwifery capacity building including improving education and training, engaging nurses and midwives in decision making, enhancing workplace

environments, building leadership and global collaboration. The Australian Government is supporting a second, two year phase of this initiative which is currently underway, providing an important opportunity to consolidate these achievements and work towards integrating strategies to strengthen midwifery in PNG into local, provincial and national structures and systems in a sustainable manner.

#### Further Information

Phone: +61 9514 4877/4771

Email: whocc@uts.edu.au

Web: www.health.uts.edu.au/whocc