Women and Birth 29 (2016) 180–188

Contents lists available at ScienceDirect

Women and Birth

journal homepage: www.elsevier.com/locate/wombi

ORIGINAL RESEARCH – QUALITATIVE

Midwifery capacity building in Papua New Guinea: Key achievements and ways forward

Angela Dawson [a,*], Mary Kililo [b], Lahui Geita [b], Glen Mola [c], Pat M. Brodie [a], Michele Rumsey [d], Felicity Copeland [a], Amanda Neill [d], Caroline S.E. Homer [a]

[a] Centre for Midwifery Child and Family Health, Faculty of Health, University of Technology, Sydney, PO Box 123, Ultimo, NSW 2007, Australia
[b] Papua New Guinea National Department of Health, AOPI Centre, Waigani Drive, PO Box 807, Waigani 131, Port Moresby, National Capital District, Papua New Guinea
[c] Department of Obstetrics and Gynaecology, School of Medicine and Health Sciences, University of Papua New Guinea, PO Box 320, University 134, Port Moresby, National Capital District, Papua New Guinea
[d] World Health Organization Collaborating Centre for Nursing, Midwifery and Health Development, Faculty of Health, University of Technology, Sydney, PO Box 123, Ultimo, NSW 2007, Australia

ARTICLE INFO

Article history:
Received 12 May 2015
Received in revised form 13 October 2015
Accepted 14 October 2015

Keywords:
Capacity building
Midwifery
Papua New Guinea
Midwifery workforce
Maternal health

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. Documentation from stakeholder meetings and regular site reports were reviewed. Each data set was analysed separately and meta-inferences were drawn across all data.
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.

1 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.[1] The report, *Scaling up the capacity of nursing and midwifery services to contribute to the MDGs*, emphasises the importance of improving key result areas including education and training, engaging nurses and midwives in decision making, enhancing workplace environments, building leadership and global collaboration particularly twinning with other institutions.[1]

Insight into ways to translate "key result areas" into action have been outlined in the *Strategic Directions for Strengthening Nursing*

* Corresponding author at: Centre for Midwifery Child and Family Health, Faculty of Health, University of Technology, Sydney, PO Box 123, Ultimo, NSW 2007, Australia. Tel.: +61 2 9514 4892.
E-mail address: angela.dawson@uts.edu.au (A. Dawson).

http://dx.doi.org/10.1016/j.wombi.2015.10.007
1871-5192/

and Midwifery Services 2011–2015.[2] Scaling up midwifery education involves more than just increasing production. Students need enough competent teachers and the curriculum must be standardised and accredited to ensure success.[3] Endeavours in this area include efforts to develop clinical programs and staff expertise in Africa and Latin America.[4,5] Materials have been produced to facilitate the involvement of nurses and midwives in decision making around health service planning, policy development[6] and workforce planning.[7] Other initiatives include the networks to enhance workplace environments such as improving employment conditions and reducing violence in the workplace.[8] Examples such as the South Pacific Chief Nursing and Midwifery Officers Alliance[9] and workshops for midwife leaders[10] have provided opportunities to build leadership skills. Finally, examples of global collaboration reveal efforts to strengthen midwifery capacity in many of these key results areas.[11]

Despite a range of efforts to build midwifery capacity, there are few donor-funded initiatives with detailed strategies addressing all key result areas in a co-ordinated manner. Few international initiatives involve comprehensive interventions across all levels of capacity building.[12] These levels of capacity building include the development of midwives' skills, increasing the availability of midwives, improving midwives' supervision and enhancing maternity services through education and health system change.[11] There are however examples where the building of midwifery capacity alongside investment in the health system and overall country development have resulted in dramatic reduction in maternal mortality.[13] These success stories indicate the need for a comprehensive long term commitment and shed light on when and how international development programs could target key result areas for midwifery capacity building and facilitate positive change at all levels.

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. These capacity building strategies includes improving midwifery teaching tools, skills, staff, structures and systems development. The concept of midwifery capacity building is defined in this paper as an approach to the development of sustainable skills, organisational structures, resources and commitment to health improvement in health and other sectors, to prolong and multiply health gains.[14] Capacity building in this context involves working in partnership, in this case with our Papua New Guinean colleagues, to learn to solve problems together. Capacity building uses a strengths-based approach, harnessing opportunities within the current environment and with the support of others, to assist individuals, groups, organisations and governments to build independent capability to bring about positive change. Capacity building programs should be underpinned by appropriate change theories and evaluation processes that document the various approaches taken.[15] This includes documenting how new learning is incorporated in an on-going manner and how feasible, pragmatic methods and measures have been used to ensure accountability.[16] Such documentation, in order to share success and learn from challenges, is the focus of this paper.

1.1 The maternal and child health initiative in Papua New Guinea

Papua New Guinea has some of the poorest health outcomes in the Asia-Pacific region and beyond, with a low human development index ranking of 157 out of 187 countries.[17] The maternal mortality ratio (MMR) is one of the highest in the world; estimated to be at 733 per 100,000 live births.[18] Forty percent of the population live in poverty,[19] only about 40% of women access a facility-based supervised birth.[18] Despite an urban drift due to poverty, drought and famine, 85% live in rural and remote areas.[20]

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*[21] as having a severe midwifery shortage and needing to at least quadruple the workforce. There is 1 midwife per 1000 births which is well below the international benchmark of 6 per 1000 births. The reasons for the significant decline in the midwifery workforce over the past decades are multiple and include limited education programs, poor clinical exposure, weak regulation and the absence of a strong professional identity without a clear mandate to improve outcomes or provide leadership for change. In recognition of this extreme situation, the Ministerial Taskforce on Maternal Health in Papua New Guinea was launched in 2009 to establish a way forward to protect the future health of girls and women.[22]

In January 2011, the PNG National Department of Health (NDoH), with technical advice from the PNG office of the World Health Organisation (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). This was one of a number of key initiatives aimed at addressing the identified emergency in maternal and child health. The MCHI was funded by the Australian Government initially for two years (January 2012–December 2013), with the long-term objective to contribute to decreasing maternal mortality rates in PNG through improved essential maternal and newborn care. The MCHI has subsequently been extended until the end of 2015. The MCHI is coordinated through Family Health and the Human Resources Departments in the NDoH.

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 international midwives 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. Midwifery educational resources including textbooks, teaching resources and mannequins were supplied to the four midwifery schools. Three training workshops were held each year for midwifery educators and clinicians to build confidence and competence in teaching, clinical practice skills and leadership. Weekly teleconferences were conducted with the CMFs and monthly communication occurred between the CMFs, obstetricians and the team at WHO Country office in Port Moresby. The Australian government also provided PNG midwifery student scholarships that included a stipend for the duration of the 12 months course that covered accommodation and living expenses.

All midwifery programs are guided by a standard midwifery curriculum and all schools have undertaken a process of accreditation of their program in line with the national standards. The National Midwifery Curriculum was developed in collaboration with WHO and NDoH and first taught in 2010 at the four training institutions in PNG. The course is only available to those who are registered nurses. The 12-month program is known as a Bachelor of Midwifery and includes supervised clinical practice and theoretical teaching in the midwifery school, as well as a rural placement.

The MCHI is directed through a Steering Committee meeting led by the NDoH. This provides leadership, as well as being a forum for communication updates, information sharing and feedback to enhance all facets of the MCHI.

A longitudinal evaluation research project was undertaken throughout the implementation of the first, two year phase of the MCHI 2012–2013. The aim of the evaluation was to monitor the progress of the initiative and identify lessons for scaling up