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Education, employment and practice: Midwifery graduates in Papua New Guinea

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ABSTRACT

Background: Papua New Guinea has a very high maternal mortality rate (773/100,000), low rates of supervised births and a critical shortage of skilled midwives. A midwifery education initiative commenced in 2012, funded by the Australian Government and led by the National Department of Health. One specific objective of the initiative was to improve the standard of clinical teaching and practice in four schools of midwifery. There were 394 midwives educated over the 4 year period (2012–2015) representing half of all midwives in Papua New Guinea. A study was undertaken to describe the educational programme, employment, practices and experiences of graduates who studied midwifery in 2012 and 2013 as part of the initiative.

Objective: the aim of this paper is to explore the education, employment and practice of newly graduated midwives in Papua New Guinea.

Design: a mixed methods descriptive study design was used. Surveys and focus groups were used to gather data. Ethical approval was granted by the relevant Human Research Ethics Committees.

Setting and participants: all midwifery graduates in 2012 and 2013 from the four midwifery schools in Papua New Guinea were included in the study and almost 80% were contacted.

Findings: nearly 90% of graduates were working as midwives, with an additional 3% working as midwifery or nursing educators. This study discovered that graduates exhibited increased skills acquisition and confidence, leadership in maternal and newborn care services and a marked improvement in the provision of respectful care to women. The graduates faced challenges to implement evidence based *care* with barriers including the lack of appropriate resources and differences of opinion with senior staff.

Conclusions: factors affecting the quality of midwifery education will need to be addressed if Papua New Guinea is to continue to improve the status of maternal and newborn health. Specifically, the length of the midwifery education, the quality of clinical practice and the exposure to rural and remote area practice need addressing in many contexts like Papua New Guinea.

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Introduction

There are an estimated 250,000 births in Papua New Guinea (PNG) per year and most of these are in rural areas where 80% of the population resides (National Statistical Office of PNG, 2012, 2014). The rate of skilled attendance at birth is 44% (National Department of Health, 2013) and has not improved over the last decade. PNG did not meet the Millennium Development Goals for child (MDG4) or maternal health (MDG5). Whilst it has been difficult to measure directly, the Maternal Mortality Ratio (MMR) is estimated to be 773 per 100,000 births, making it one of the highest in the world (National Department of Health, 2006).

The most recent State of the World's Midwifery Report (SOWMY), estimated that the workforce in PNG providing maternal and newborn health meets only 49% of the need required for effective maternal and newborn care (UNFPA, ICM, and WHO, 2014). A report by the World Bank also highlighted a severe health workforce shortage across all cadres, however the need for midwives to address issues of deteriorating maternal mortality rates was highlighted (World Bank, 2011).

Given the high maternal mortality rate, low rates of supervised births and the health workforce shortage, the PNG government recognised that efforts needed to be directed towards increasing the number and quality of midwives. Recommendations regarding the preparation of midwives and the acute need to increase capacity in emergency obstetric services and access to family planning arose from the Ministerial Maternal Health Taskforce meeting in 2009 (National Department of Health, 2009).

For the five years prior to 2009, there were approximately 250 midwifery graduates who were not registered due to concerns with their competency to practice (National Department of Health, 2009). A review of midwifery education programmes in PNG (Kruske, 2006) showed that midwives were graduating with insufficient skills and knowledge. A revised curriculum framework was developed in 2008 which was competency based with the theory to clinical components ratio of 40:60 as recommended by the International Confederation of Midwives (International Confederation of Midwives, 2013a, 2013b). At the time, it was only feasible from the perspective of the government to have a 12 month course although more recently efforts are being made to increase this to 18 months.

Scaling up midwifery education

In direct response to the insufficient numbers of skilled midwives and a national taskforce which highlighted the crisis in maternal and newborn health (National Department of Health, 2009), an initiative commenced in 2012 to scale up midwifery education. This was funded by the Australian Government and led by the PNG National Department of Health (Dawson et al., 2015). One objective of the initiative was to improve the standard of clinical teaching and practice in four schools of midwifery. In 2010, these schools had introduced a 12 month postnursing Bachelor of Midwifery degree underpinned by a new curriculum framework. The curriculum is competency based and includes a 60% practical component. Students spend one month on a rural clinical placement, and an Emergency Obstetric and Newborn Care Course (EMoNC) is included within the programme. Twenty scholarships at each of the four institutions were provided annually by the Australian Government as part of Overseas Development Aid (ODA).

This scale up of midwifery education also involved increasing support for midwifery educators to deliver the new curriculum and provide improved clinical supervision. Teaching and clinical simulation resources were provided or updated with ODA funding. Eight international Clinical Midwifery Facilitators (CMFs) were appointed to work alongside national midwifery educators to build their capacity in teaching and facilitating clinical practice. Three hundred and ninety four (394) midwives were educated over the four year period of the initiative (2012–2015). This number comprises 55% of the current estimated number of midwives ($n \geq 700$) in PNG (Papua New Guinea Nursing Council, 2015; UNFPA, 2011).

Aim

The aim of this paper is to explore the impact of strengthening midwifery education in PNG. In particular, the study sought to explore the education, employment and practice of newly graduated midwives in PNG. The graduates were those who studied midwifery in 2012 and 2013 as part of an initiative to scale up midwifery education.

Methods

Design

A mixed method descriptive study was undertaken using a range of approaches, including surveys, focus groups and interviews. Ethical approval was granted by the PNG Medical Research Advisory Committee and the relevant university Human Research Ethics Committee.

Recruitment

A total of 181 midwifery students (*160 were on scholarships, 21 were self-funded*) commenced their training in the four midwifery schools in 2012 and 2013 and 174 graduated. Graduates were recruited to participate in the research either directly or through approaching educators, supervisors or fellow graduates. Attempts to contact all 174 midwifery graduates were made either by telephone, email or by asking them in person. Of graduates, 138 (79.3%) were contacted successfully and consented to participate. There were no refusals. Most of the graduates who could not be contacted were known to be working in very remote areas which made recruitment impossible.

Participants were provided with an information sheet and consent form prior to being interviewed. Written consent was obtained from all participants who were contacted in person. Consent was given verbally to the researcher for those surveys completed by phone, after the information sheet had been read to them.

Data collection

Graduates from each of the four midwifery training schools were surveyed either in person ($n=55$; 39.9%), or by phone ($n=79$; 57.2%) from November 2014 to April 2015. Data collection was undertaken by one of three researchers (two PNG nationals and one expatriate midwife who was familiar with the country) all who had been briefed on the study and the method of data collection. The researchers read each question during the telephone interviews and wrote the graduates' responses verbatim.

Data analysis

All survey responses were entered into Excel spreadsheets. Quantitative data were uploaded into SPSS and analysed using