Midwifery 31 (2015) 380–387

Contents lists available at ScienceDirect

Midwifery

journal homepage: www.elsevier.com/midw

Childbirth in a rural highlands community in Papua New Guinea: A descriptive study

Lisa M. Vallely, MSc (Senior Research Fellow)[a,*], Primrose Homiehombo, Bachelor MCH (Research Midwife)[b], Angela Kelly-Hanku, PhD (Principle Research Fellow)[b,c], Andrew Vallely, MBBS, MSc, PhD (Associate Professor)[b,d], Caroline S.E. Homer, RM, PhD (Professor of Midwifery)[e], Andrea Whittaker, PhD (Associate Professor)[f]

[a] Sexual & Reproductive Health Unit, Papua New Guinea Institute of Medical Research, Alotau Branch, Milne Bay Province, Papua New Guinea
[b] Sexual & Reproductive Health Unit, Papua New Guinea Institute of Medical Research, Goroka, Eastern Highlands Province, Papua New Guinea
[c] International HIV Research Group, School of Public Health and Community Medicine, University of New South Wales, Sydney, Australia
[d] Kirby Institute, University of New South Wales, Sydney, Australia
[e] Centre for Midwifery, Child and Family Health, Faculty of Health, University of Technology Sydney, Australia
[f] School of Social Sciences, Faculty of Arts, Monash University, Melbourne, Australia.

ARTICLE INFO

Article history:
Received 9 September 2014
Received in revised form
13 October 2014
Accepted 3 November 2014

Keywords:
Papua New Guinea
Birth huts
Village birth
Isolation
Cultural practices
Cultural beliefs

ABSTRACT

Objectives: to explore men's and women's experiences, beliefs and practices surrounding childbirth in a rural highlands community in Papua New Guinea.
Design: a qualitative study comprising focus group discussions, key informant and in depth interviews.
Setting: the study was undertaken in a rural community in Eastern Highlands Province, Papua New Guinea.
Participants: 51 women and 26 men participated in 11 focus group discussions. Key informant and in depth interviews were undertaken with 21 women and five men.
Findings: both women and men recognised the importance of health facility births, linking village births with maternal and newborn deaths. Despite this, many women chose to give birth in the community in circumstances influenced by cultural and customary beliefs and practices. Women giving birth in the community frequently gave birth in an isolated location. Traditional beliefs surrounding reasons for difficult births, including spiritual beliefs were reported along with the use of traditional methods used to help prolonged and difficult births.
Conclusions: while the importance of health facility births is recognised in this rural community many women continue to give birth in the village. Identifying and understanding local customs, beliefs and practices, particularly those that may be harmful to women and their newborn infants, is critical to the development of locally-appropriate community-based strategies for improving maternal and infant health in rural communities in PNG and other resource-limited, high burden settings.

Introduction

Globally 34% of women give birth without the support of a skilled attendant (UNICEF, 2013). Lack of supervision during childbirth is a leading factor associated with maternal deaths (WHO, 2005). Reasons for lack of supervision during childbirth are widely documented and include decision making, inadequate availability and uptake of health care, geographical, structural and health facility barriers, economic and social constraints and cultural and customary beliefs (Beegle et al., 2001; Seljeskog et al., 2006; Allendorf, 2007; Mrisho et al., 2007; Danforth et al., 2009; Magoma et al., 2010; Sychareun et al., 2012).

Papua New Guinea (PNG) is a developing country situated in the Pacific region. It is a country rich in geography, social and cultural and linguistic diversity with over 800 languages spoken by the seven million inhabitants. The majority of Papua New Guineans (87%) live in rural areas.

PNG has one of the highest maternal mortality ratios (MMR) in the world, with an estimated 594 maternal deaths per 100,000 live-births (Kassebaum et al., 2014). Only 32% of women receive skilled care during childbirth (NDoH-NHIS, 2012). Those living in rural areas are more likely to give birth at home than women living in urban areas (NDoH-NHIS, 2009). The most recent

* Correspondence to: Maternal & Child Health, Sexual & Reproductive Health Unit, PNG IMR, Alotau Branch, 211, Milne Bay Province, Papua New Guinea.
E-mail address: lmvallely@yahoo.com (L.M. Vallely).

http://dx.doi.org/10.1016/j.midw.2014.11.002
0266-6138/

demographic health survey indicates that nearly one-third of women give birth in the village, assisted by a female relative; and 7% give birth alone (PNG-DHS, 2009). The remoteness and geographical difficulties of the locations of many communities can make access to and uptake and availability of professional skilled health care during pregnancy and childbirth difficult. Cultural and traditional beliefs and practices also impact on seeking and receiving care (Albu and Alto, 1989; Whittaker et al., 2009; Vallely et al., 2013).

As part of a wider study exploring women's experiences of pregnancy and childbirth in a rural Eastern Highlands community we described access to care during pregnancy and childbirth from women's perspectives (Vallely et al., 2013). However, experiences and practices surrounding childbirth in this community remain largely unexplored. The overall aim of this paper is to describe women's experiences of childbirth in the community setting; and to describe cultural beliefs and practices that influence practices during childbirth.

Methods

A qualitative, descriptive study (Sandelowski, 2000) comprising focus group discussions (FGDs), key informant and in depth interviews was undertaken. The study took place following a community participatory workshop designed to engage the community in the research and facilitate the study (Vallely et al., 2013).

Study site

Eastern Highlands Province (EHP) is the fourth most populous province in PNG with an estimated population of 600,000, living predominately in rural areas. Maternal health indicators in the province are poor: 74% of women attend once for antenatal care and 44% give birth in a health facility (NDoH-NHIS, 2012). There are an estimated 150 maternal deaths every year in the province (Sanga et al., 2010); postpartum haemorrhage and sepsis are the leading causes of maternal death (Sanga et al., 2010).

This study was undertaken in one of eight districts in the province. Upper Bena in rural Unggai Bena District is an hour's drive from Goroka, the provincial capital. Access to the area is by an unsurfaced road which becomes washed away or is impassible during heavy rain. Many villages are accessible only by bush tracks leading into steep mountain areas. Four government health facilities serve the area, and are situated along the roadside; access to these facilities frequently involves crossing mountain ranges and rivers from the villages. Distances from the villages to the road and onto a health facility varies from a few minutes, up to six or eight hours walk. While an ambulance is available, as are other private motor vehicles, access to the more remote villages is dependent on the weather and state of the road. In addition, local tribal fighting in the area can often mean the road is blocked, denying access to services such as a health facility.

Each of the four health facilities offer a range of curative and preventative health care, including antenatal and well-baby clinics. As in many parts of PNG nurses are trained to carry out routine antenatal care and manage normal births. Antenatal clinics are undertaken on a weekly basis at each of the health facilities, with support from one midwife, who is the officer in charge at one health facility. Two of the four facilities are equipped to manage normal births.

Sample and recruitment

All women and men in the community were eligible to participate in this study. The majority of participants volunteered to join the study, a few were purposively selected following the community participatory workshop or directly from the community. Key informants were identified based on their knowledge or experience of assisting women giving birth in the community. All those purposively selected by the research team to join the study agreed to participate. At the antenatal clinic women were invited to join the study following an explanation of what their participation would mean.

Data collection

Interview guides, developed following the community workshop, provided a series of broad questions allowing the researcher to explore and probe throughout FGDs, key informant and in-depth interviews (Patton, 2002). FGDs were used to identify problems that women experience as a result of pregnancy and childbirth and to explore traditional and customary beliefs surrounding childbirth. Key informant and in depth interviews were undertaken to investigate personal experiences and perspectives relating to childbirth in the community.

Many of the FGDs took place in the local language or *tok-ples*, in this case Bena language, a few took place in *tok-pisin* (a local *lingua franca*), one of three main languages used in PNG. Each FGD was facilitated by trained and experienced researchers from the research institute; men facilitated the men's groups and women facilitated the women's groups.

Key informant and in depth interviews took place primarily in *tok-pisin;* the exceptions were two key informant interviews undertaken in English and one in depth interview conducted in *tok-ples*, for whom a local village health volunteer assisted as an interpreter. All interview guides were piloted and reviewed prior to the start of the study.

All FGDs and interviews were undertaken or overseen by one trained and experienced research midwife. FGDs, key informant and in depth interviews were undertaken in a private location in the community or in a private office space at the health facility. FGDs and interviews lasted between 40 minutes and two hours.

Data collection took place over a six month period between November 2011 and April 2012. All FGDs and interviews were digitally audio-recorded with the consent of participants. Interviews were transcribed verbatim and translated into English by members of the sexual and reproductive health research team at the research institute. Prior to data entry and management, transcripts were cross-checked by one member of the study team. To ensure anonymity, all those participating in the key informant and in depth interviews were assigned a pseudonym at the time of transcription.

Eleven FGDs with 51 women and 26 men took place in three different villages. Women and men participating were grouped according to gender and age (Fig. 1). Participants unsure of their age were invited to participate in which ever group they felt most comfortable. One group of older women consisted of women referring to themselves as ‘village midwives’. These women considered themselves ‘village midwives’ based on their experience of assisting mothers giving birth in the community. They had received no formal training and while their experience varied many had assisted at no more than a few births. In keeping with tradition, all had given birth themselves.

In depth interviews were undertaken with 18 women from 14 different villages, including the three villages where the FGDs took place. Eleven women were recruited at the antenatal clinic and seven were purposively selected following the community FGDs (Fig. 1).

Three women and five men participated in eight key informant interviews (Fig. 1). The three women were interviewed based on their experience of assisting mothers to give in the community;