Social Science & Medicine 71 (2010) 2038–2045

Contents lists available at ScienceDirect

Social Science & Medicine

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

Birth choices in Timor-Leste: A framework for understanding the use of maternal health services in low resource settings

Kayli Wild [a,*], Lesley Barclay [b], Paul Kelly [c], Nelson Martins [d]

[a] Menzies School of Health Research, Charles Darwin University, PO Box 41096, Casuarina, Northern Territory 0811, Australia
[b] Northern Rivers University, Department of Rural Health, University of Sydney, Australia
[c] National Centre for Epidemiology and Population Health, Australian National University, Australia
[d] Ministry of Health, Democratic Republic of Timor-Leste

ARTICLE INFO

Article history:
Available online 29 September 2010

Keywords:
Timor-Leste
Maternal health
Access
Health seeking behaviour
Developing countries
Maternity services
Policy making
Utilization

ABSTRACT

The high rate of maternal mortality in Timor-Leste is a persistent problem which has been exacerbated by the long history of military occupation and ongoing political crises since independence in 1999. It is similar to other developing countries where there have been slow declines in maternal mortality despite 20 years of Safe Motherhood interventions. The national Ministry of Health, United Nations (UN) agencies and non-government organisations (NGOs) have attempted to reduce maternal mortality by enacting policies and interventions to increase the number of births in health centres and hospitals. Despite considerable effort in promoting facility-based delivery, most Timorese women birth at home and the lack of midwives means few women have access to a skilled birth attendant. This paper investigates factors influencing access to and use of maternal health services in rural areas of Timor-Leste. It draws on 21 interviews and 11 group discussions with Timorese women and their families collected over two periods of fieldwork, one month in September 2006 and five months from July to December 2007. Theoretical concepts from anthropology and health social science are used to explore individual, social, political and health system issues which affect the way in which maternal health services are utilised. In drawing together a range of theories this paper aims to extend explanations around access to maternal health services in developing countries. An empirically informed framework is proposed which illustrates the complex factors that influence women's birth choices. This framework can be used by policy-makers, practitioners, donors and researchers to think critically about policy decisions and where investments can have the most impact for improving maternal health in Timor-Leste and elsewhere.

Introduction

After 25 years of occupation by Indonesia, Timor-Leste voted overwhelmingly for independence in a referendum in August 1999. As the Indonesian military exited the country they enacted a 'scorched-earth' policy. This resulted in the displacement of 550,000 people and destruction of 70% of major infrastructure, including homes, schools and health centres across the country (CAVR, 2005). Since full independence in 2002 Timor-Leste has experienced a number of political crises which have continued to impact on the health of the population (Martins, Zwi, Martins, & Kelly, 2009; Wayte et al., 2008).

Timor-Leste has the highest maternal mortality ratio in Southeast Asia, estimated at 929/100,000 live births which is six times higher than the Southeast Asian average and seventh highest in the world (Hogan et al., 2010). Infant and child mortality are also high, with an infant mortality rate of 44/1000 live births and an under five mortality rate of 64/1000 live births (National Statistics Directorate, 2010). The factors leading to increased risk of maternal and infant death in Timor-Leste are multiple and complex. The history of war, famine and ongoing political instability interact with social determinants of health such as low levels of employment and education opportunities, lack of food security, poor transport infrastructure and widespread poverty (UNDP, 2006). These socioeconomic and structural issues are even more problematic in remote and mountainous areas, particularly during the wet season. Medical discourse tends to focus on individual causes of death such as haemorrhage, obstructed labour, sepsis, unsafe abortion and eclampsia which lead to disastrous outcomes when there is limited access to quality emergency obstetric care (Bale, Stoll, & Lucas, 2003).

* Corresponding author. Tel.: +61 402917959.
E-mail address: kayli.wild@menzies.edu.au (K. Wild).

0277-9536/$ – see front matter © 2010 Elsevier Ltd. All rights reserved.
doi:10.1016/j.socscimed.2010.09.012

Despite considerable effort by the Ministry of Health to promote facility-based delivery, investment by UN agencies and substantial support from the Cuban Medical Brigade and NGOs in delivering services, 78% of women continue to birth at home and only 8% of those women are assisted by a health professional (National Statistics Directorate, 2010). In fact, rural women around the developing world are under-represented in the use of facility-based birthing services (Rose, Abderrahim, Stanton, & Helsel, 2001). In light of the ongoing effort to reduce maternal mortality as part of the Millennium Declaration and high-level political support from both the United States President (Moss, Valentine, & Kates, 2010) and the British Prime Minister (Watt, 2010), patterns in the utilisation of maternity services require further exploration as they have profound implications for the development of effective policies and programs.

The literature on access and health seeking behaviour tends to be polarised around two broad approaches: the sociomedical approach which focuses on service factors (accessibility, costs, acceptability) and the anthropological approach which emphasises etiological concepts and culturally-specific world views (Kroeger, 1983; Penchansky, & Thomas, 1981). Martin (2005:49) argues 'factors such as local culture often play a very important role in the outcome of health policy decisions'. While there have been in-depth studies exploring how the meanings attributed to pregnancy and birth affect the types of care that are sought (Allen, 2002; Jordan, 1980), there is a dearth of ethnographic research on this topic in Asia and particularly in Timor-Leste.

This paper investigates the complex interactions that shape the way in which maternal health services are used by women in Timor-Leste. We draw on qualitative field data to identify individual, social, political and health system factors affecting access to and use of maternal health services. In bringing together a range of theoretical approaches and applying these to empirical data we aim to extend explanations pertaining to 'access' in developing countries.

Theoretical framework

The study of health seeking behaviour has become increasingly popular over the past two decades in an attempt to explain the differential use of health services. Mackian, Bedri, and Lovel (2004) outline how the concept of health seeking has been over-utilised and under-theorised and conclude that it provides little insight into understanding the relationship between populations and health system development. Other health researchers have pointed to the deficiency of theory in public health research and have reiterated the importance of using social theory and trans-disciplinary methodology (Higginbotham, Albrecht, & Connor, 2001; Willis et al., 2007).

The concept of the 'three bodies' (Scheper-Hughes & Lock, 1987) is a theoretical tool in critical medical anthropology that can be used for analysing different layers of influence on individuals and medical systems. The *individual body* is the lived experience of health and sickness and is highly variable between individuals and groups. The *social body* refers to the constant exchange of meanings between the natural and social worlds. The body is a symbol for the broader social context and, 'In post-modern terms, the body itself can be read as a text on which the most fundamental values of a society are inscribed.' (Inhorn, 2006:353). The third layer is the *body politic* which examines regulation, surveillance and control, and is particularly relevant to the study of reproduction. Turner (1992) has proposed a multi-level framework for analysing problems in medical sociology. His three levels of analysis span the *individual*, the *social* and the *societal*. He outlines how each of these levels engages with different theoretical paradigms, such as phenomenology, symbolic interactionism and critical theory, to emphasise interrelated causal factors influencing health problems (Turner, 1992). We draw on both Scheper-Hughes and Lock, and Turner's work to analyse the way in which women utilise maternal health services in Timor-Leste.

Methods

This research is part of a larger PhD project evaluating the national maternity waiting home policy in Timor-Leste (Wild, 2009). Quantitative data revealed rural women were no more likely to use birthing facilities after the maternity waiting homes were established, and most women continued to birth at home. The research reported here was initiated to examine the factors affecting decisions to seek medical care for birth. A total of 124 interviews were conducted with policy-makers, health workers, women and families. While these interviews informed the larger study, this paper draws predominantly on 32 interviews and group discussions conducted with women and families. Data collection took place over two periods of fieldwork, the first for one month in September 2006 and the second for five months from July to December 2007. Several other shorter trips were carried out during the study period between July 2005 and July 2009. Ethics approval was obtained from the Human Research Ethics Committee at Menzies School of Health Research, Darwin, Australia. Timor-Leste's Ministry of Health provided written permission to carry out this research as well as support in accessing data, policy documents and key informants.

The sample frame for women and families included any woman who had given birth (or their family), any age or parity, and any education, cultural background or socioeconomic status. From this broad sample we specifically sought women who had used birthing facilities and those who birthed at home. We also aimed to sample for diversity including young women and grandmothers, remote rural or urban women as well as husbands and other family members. We specifically sought unusual cases. For example, we spoke with women who lived very close to a health facility but decided to birth at home and women who lived very far and went to great lengths to attend a health facility for birth.

Participants were recruited into the study in two ways. The lead author (KW) attended health centres and maternity waiting homes and spoke with women and families who used the facilities and agreed to be interviewed. Care was taken to ensure health centre staff were not present during interviews. The researcher explained she was an anthropologist independent from the health system with an interest in social and cultural issues. The second sampling method entailed a period of residence by KW in villages and small towns. Women who chose to birth at home were recruited through community leaders, the local research assistant and through snowballing where informants introduced their sisters and friends who wanted to participate. Interviews were conducted in six of Timor-Leste's 13 districts (Table 1).

Participants were always informed about the research, the confidential nature of the interview, that they did not have to participate and could withdraw at any time. Participants were given an information sheet in Tetum language and provided either signed or verbal consent. A semi-structured interview schedule was used to focus discussion topics around causes of complications in birth, ways to keep pregnant and postpartum women healthy including cultural practices (i.e. ceremonies, traditional medicine, and the role of family/ancestors/religion), decisions around place of birth, barriers to accessing care, enquiring about who decides, when and how transport is arranged and satisfaction with different aspects of maternity services.