Midwifery ∎ (∎∎∎∎) ∎∎∎–∎∎∎

Contents lists available at ScienceDirect

Midwifery

journal homepage: www.elsevier.com/midw

Occupational exposure to maternal death: Psychological outcomes and coping methods used by midwives working in rural areas

Rhoda Suubi Muliira, RN, BSN, MSc (Lecturer)[a,*], Mathie C. Bezuidenhout, RN, D Litt et Phil (Unisa) (Professor)[a,b]

[a] College of Nursing, Sultan Qaboos University, P.O. Box 66, AlKhod, Muscat, Oman
[b] PHC Community Based Clinic, The Adelaide Tambo School of Nursing Science, Tshwane University of Technology, Pretoria, South Africa

ARTICLE INFO

Article history:
Received 13 December 2013
Received in revised form
10 June 2014
Accepted 13 August 2014

Keywords:
Maternal death
Coping
Psychological well-being
Midwives

ABSTRACT

Aim: to explore the psychological outcomes of occupational exposure to maternal death and the coping methods used by midwives working in rural areas.
Background: maternal deaths are common in rural areas of developing countries because of the shortages of human and other resources needed for maternity services. When maternal deaths occur, midwives often experience emotional distress while striving to perform their work. This may have a negative impact on their well-being.
Methods: Descriptive design. A self-administered questionnaire in the English language, comprising the Death Distress Scale and Brief COPE Scale, was used to collect data from 238 midwives working in two rural districts of Uganda.
Findings: the majority of participants were female (81%) and had a diploma in midwifery (36%). Mean age and years of professional experience were 34 [standard deviation (SD) 6.3] years and three (SD 1.3) years, respectively. The majority of participants (94%) had witnessed a maternal death. The results from the Death Distress Scale showed that the majority of midwives who had witnessed a maternal death had moderate to high death anxiety (93%), mild to moderate death obsession (71%) and mild death depression (53%). Most midwives coped with their distress using methods such as active coping, venting, positive reframing, self-distraction and planning.
Conclusion: midwifery educational programmes and work settings need to understand the importance of maternal death from the midwives' perspective and their ability to cope with this detrimental experience.
Implications for practice: there is a need for midwifery practice settings to provide respite care, education on coping with death experiences and counselling after traumatic experiences in order to maintain the well-being of midwives. As occupational exposure to maternal death can have a negative effect on the well-being of midwives, this can affect their professional quality of life and clinical practice.

Introduction

Globally, 287,000 maternal deaths were estimated to occur in 2010; this represents a decline of 47% from 1990 (WHO, UNICEF, UNFPA, World Bank, 2012). Developing countries accounted for 99% (284,000) of these deaths, and the majority occurred in Sub-Saharan Africa (WHO, UNICEF, UNFPA, World Bank, 2012). In 1994, the International Conference on Population and Development made a commitment to improve reproductive health with the focus on reducing maternal mortality (Prata et al., 2010; WHO, UNICEF, UNFPA, World Bank, 2012). In 2000, the reduction of maternal mortality became the fifth millennium development goal (MDG 5), with a target of reducing the maternal mortality ratio (MMR) by three-quarters (75%) by 2015. MDG 5 identified skilled birth attendance at childbirth as an indicator for this goal (Prata et al., 2010; WHO, UNICEF, UNFPA, World Bank 2012). However, the quality of midwifery and obstetric care depends on many factors, including the health and work ability of health care professionals (Knezevic et al., 2011).

Many developing countries are still unable to meet the goals of reducing maternal deaths for reasons including severe shortage of human resources, lack of competent health care practitioners, lack of transportation or viable roads to reach high-level care facilities in case of referrals, unpredictable availability of essential medicines, electricity outages and lack of necessary infrastructure (Pettersson, 2007; Prata et al., 2009). These factors predispose

* Corresponding author.
E-mail address: suubiracs@gmail.com (R.S. Muliira).

http://dx.doi.org/10.1016/j.midw.2014.08.005
0266-6138/

to maternal death in rural areas in resource-poor settings, where resources are even more scarce and inaccessible. Various projects and interventions have addressed these factors in order to reduce the high number of maternal deaths in developing countries. Interventions addressing human resources have generally focused on the skills of midwives, and increasing the number of midwives, resources and supplies (WHO, UNICEF, UNFPA, World Bank, 2012); the well-being of midwives has received little attention. The MMR in developing regions is 240 per 100,000 live births, which is 15 times higher than the MMR in developed regions (WHO, UNICEF, UNFPA, World Bank, 2012). The high MMR in developing regions may cause cumulative stress and emotional turmoil among professional caregivers (Peterson et al., 2010). The stress of constant experience or exposure to maternal death may have adverse effects on the well-being of midwives and their ability to provide quality work (Knezevic et al., 2011).

When maternal deaths occur, midwives often find themselves in conflicting roles; on one hand, they must remain strong and give support to the affected family members, and on the other hand, they are affected by the loss of someone with whom they were intimately involved (Gerow et al., 2010). If these conflicting roles and emotions are not dealt with adequately, the midwives may experience anxiety, difficulty in concentration, negative emotions, depression and fatigue, and these can affect their well-being and performance (Knezevic et al., 2011). Furthermore, the midwives may adopt ineffective coping mechanisms such as avoidance and compartmentalisation of the experience, and this can result in burnout and other physical and emotional problems as opposed to healthy grieving (Gerow et al., 2010; Peterson et al., 2010). Gerow et al. (2010) used a phenomenological design to describe the lived experience of 11 nurses surrounding the death of their patients, whereas Peterson et al. (2010) used the grounded theory approach to examine the resources used by 15 nurses when coping with the death of a patient.

Failure to recognise and address emotional turmoil can trigger the stress cascade, leading to maladaptive coping, anger, decreased morale and inefficiency of care provision (Mollart et al., 2013). In addition, the trauma caused by a distressing experience such as experiencing multiple maternal deaths may cause post-traumatic stress disorder (PTSD) (Asfour and Ramadan, 2011). PTSD is known to lead to significant life impairment and occupational dysfunction by reducing the individual's capacity to interact with others, decreasing self-esteem and self-efficacy, and causing physical and mental fatigue and exhaustion (Leinweber and Rowe, 2010).

According to the World Health Organization (WHO, 2006), midwives play a critical role in emergency risk reduction, preparedness and response to obstetric complications. Unfortunately, very few midwifery training programmes in developing countries incorporate obstetric emergency management in their curricula (WHO, 2006). During this study, evidence could not be found to establish that the situation has improved. Thus, when some midwives in developing countries are faced with emergencies that they are not prepared to handle, and which result in severe outcomes such as maternal death, they may not know how to respond appropriately to the emotional trauma resulting from this disturbing experience. These consequences could affect their physiological and psychological well-being and behavioural outcomes (Houtman et al., 2007). De Silva et al. (2009) stated that only 5–10% of workers in developing countries have access to occupational health services which could serve as a means of support for traumatised employees. It should also be noted that work-related psychosocial issues are rarely dealt with, even where occupational health services are available (Houtman et al., 2007). Thus, this study was designed to explore the psychological outcomes of occupational exposure to maternal death and the coping methods used by midwives working in rural areas of Uganda.

In this study, maternal death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to, or aggravated by, the pregnancy or its management, but not from accidental or incidental causes (WHO, 2007). Witnessing a maternal death and participating in the care of a case of maternal death is defined as being present when a mother died while pregnant or within 42 days of termination of pregnancy. Occupational exposure to maternal death is defined as workplace hazards attributed to physical, psychological and social stress resulting from witnessing a maternal death.

Methods

Study design

A typical descriptive design was employed in this study. This design is important for the acquisition of knowledge in an area where little research has been conducted (Burns and Grove, 2009).

Study setting

The study was conducted among professional midwives working in two rural districts (Mubende and Mityana) in central Uganda. The districts were selected at random from the 21 rural districts of central Uganda. The two districts were selected because they have been reported to have high maternal death rates (Nakkazi, 2011; Akumu, 2012). In Uganda, the estimated MMR is 435 maternal deaths per 100,000 live births, and the majority of maternal deaths occur in rural areas where the majority of the population live (Ministry of Health, 2011). The midwives were employed in Level II, III or IV government or private health centres. Level II health centres serve the parish-level population and provide preventive, promotive and curative services on an outpatient basis. Level III health centres serve the subcounty-level population, and offer preventive, promotive, curative, maternity and inpatient services. Level IV health centres serve the county-level population (or health subdistrict) to provide all services of Level III health centres, plus surgery, supervision of Level II and III health centres, collection and analysis of data on health, and comprehensive emergency obstetric care in Uganda (Ministry of Health, 2010).

Participants

All 250 midwives employed in the rural health care units (RHCU) in the two selected rural districts were approached to participate in the study. For inclusion in the study, the midwives had to be: officially registered by the Uganda Nurses and Midwives Council; directly involved in maternal health care services; and employed by the RHCU for at least six months. Midwives and other health professionals in Uganda are educated in English. English is the official language of instruction at all levels of education, and the official national language used for all official business and therefore in all health care settings.

Ethical considerations

Permission to conduct the study was obtained from the research and ethics committees of Uganda National Council for Science and Technology, Mubende and Mityana district authorities and all the RHCUs where the midwives were employed. All the participants gave voluntary written informed consent before receiving the questionnaire used for data collection. The authors had no conflict of interest with regard to the study.

Please cite this article as: Muliira, R.S., Bezuidenhout, M.C., Occupational exposure to maternal death: Psychological outcomes and coping methods used by midwives working in rural areas. Midwifery (2014), http://dx.doi.org/10.1016/j.midw.2014.08.005