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Shaping the midwifery profession in Nepal – Uncovering actors' connections using a Complex Adaptive Systems framework

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ABSTRACT

Objectives: To explore how actors connect in a system aiming at promoting the establishment of a midwifery profession in Nepal.
Methods: A qualitative explorative study based on the framework of Complex Adaptive Systems. Semi-structured interviews were conducted with 17 key people representing eight different organisations (actors) promoting the development of the midwifery profession.
Results: The actors' connections can be described with a complex set of facilitators for and barriers to promoting the establishment of a midwifery profession. The identified facilitators for this establishment in Nepal are (1) a common goal and (2) a desire to collaborate, whilst the barriers are (1) different political interests and priorities, (2) competing interests of the nursing profession and societal views, (3) divergent academic opinions on a midwifery profession, and (4) insufficient communication. The results also showed that Nepalese society cannot distinguish between nursing and midwifery and that the public support for a midwifery profession was hence minimal.
Conclusion: The move of midwifery from an occupation to a profession in Nepal is an on-going, challenging process. The study indicates the importance of understanding the motivations of, and barriers perceived by, actors that can promote or obstruct the establishment of the midwifery profession. It also points to the importance of informing the wider public about the role and responsibility of an autonomous midwifery profession.

Introduction

It is widely acknowledged that strengthening the midwifery profession is an important factor in improving maternal and child health [1–6]. Although substantial global efforts have been made, many maternal health targets set for 2015 have not been met. This is an urgent global public health challenge that needs to be addressed in order to reduce mortality and morbidity. According to a 2014 series on midwifery in *The Lancet*, over 80% of all maternal deaths and neonatal stillbirths can be avoided [2]. To achieve these figures it is imperative to integrate professional midwives, educated to international standards and appropriately deployed, in national health systems to ensure the provision of safe reproductive, maternal and new-born services [1–3,5].

Midwifery care has been identified as an important contributor to the improvement of maternal and child health [2], yet in many countries professional midwives are not recognised (by law) or educated to appropriate standards [6–8]. This is true for South Asia [9,10], a region that accounted for 24% of global maternal deaths in 2013 [11]. Nepal, despite its challenging geography and political instability [12], is one of the South Asian countries that have made impressive gains in maternal health outcomes. Prior to the two devastating earthquakes in Nepal during the spring of 2015, the country was on track to achieve international targets [11]. Despite this progress, 149 women are still dying for every 100,000 live births [11], and only 36% of all births are conducted by a skilled birth attendant; i.e. an auxiliary nurse-midwife, a nurse or a doctor [13]. According to the latest Nepal Demographic Health Survey [14], 50% of all pregnant women have four or more antenatal care visits and only 35% of births occur in a facility. With a population of nearly 30 million and a total fertility rate of 2.6 children per woman, it is more common to have a skilled attendant at birth in urban areas (73%) than rural ones (32%) [14].

Nepali women do not have access to professional midwives who are educated, licensed and regulated [9,10,15] to the ICM's

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(International Confederations of Midwives) Global Standards [7,8]. This may explain why maternity care there does not always uphold optimal quality [16]. The existing policy in Nepal, supporting the development of a separate cadre of professional midwives, expired in 2012 [13] and has yet to be updated.

Facing these problems requires a national midwifery policy that protects the public (women and families) as well as the midwifery profession, and thus enables possibilities for nationwide coverage offering accessible, acceptable, available and quality midwifery care [2]. Such an approach requires close collaboration and connections between actors on different levels such as the government, professional associations, academia, and UN (United Nations) agencies [10,17]. In this study we focus on the interactions and relationships between actors (organisations) in a complex political and social system in Nepal, who have the power to influence (positively or negatively) the establishment of a separate midwifery profession. Our starting point is that there are factors beyond the official agenda [13] which are relevant to the development of a midwifery profession. The aim was thus to explore how different actors connect in a system aiming at promoting the establishment of a midwifery profession in Nepal.

Methods

Study design

This is a qualitative explorative study based on the framework of Complex Adaptive Systems [CAS] [18–21]. A system can be called complex if it contains non-linear relationships between many parts that interact in unstable and unpredictable ways. The term "complex" emphasises that the necessary competence to perform a task or fulfil a mission is not owned by any one part, but comes as a result of co-operation within a system. "Adaptive" means that system change happens through successive adaptations. A CAS consists of several subsystems, called actors, which act in relation to one another. CAS is described as an integrated model that connects the actors of a system instead of exploring the characteristics of each actor [22,23]. The actors in the system interact in a self-organised manner. In the analysis of such systems, the individual parts are of subordinated interest; instead, we analyse the parts based on how they interact and take advantage of each other's unique competence to the benefit of the system as a whole. The more complex the external environment, the more important it is for the parts to interact to solve a specific task [24].

Through the lens of CAS [18], we view actors influencing the midwifery profession in Nepal as components in a system and explore how they relate to each other within that system. Hence, CAS is used as a framework to analyse the connections, interactions and relationships among relevant actors.

Setting and participants

Eight Kathmandu-based actors (organisations) involved in promoting the midwifery profession in Nepal were identified and selected. The actors consisted of different departments within the government, academia, the professional association, and donors (Table 1). Seventeen key people, 13 females and four males, representing the eight actors were purposively selected for interviews based on their position and policy influence in their respective organisation (Table 1). Fifteen of the 17 interviewees were Nepalese citizens. The actors representing academia were working towards starting a midwifery education, and were selected based on the criteria identified by a previous study in Nepal [10]. The interviewees' professional backgrounds included nurse-midwife (n = 3), nurse (n = 8), medical doctor (n = 5), and other (n = 1). The median age was 55 years for female interviewees and 53 for males. The interviewees had been employed within their current organisation between one and 39 years, with an average length of employment of eight years.

Table 1
Characteristics of interviewees and actors.

Interviewees [I1–17]	Actors/organisation	Gender	Professional background
I1	Donor 1	Female	Nurse and midwife
I2	Donor 1	Female	Nurse
I3	Professional association	Female	Nurse
I4	Government 1	Male	Medical doctor
I5	Government 1	Female	Nurse
I6	Academia 1	Female	Nurse
I7	Academia 3	Female	Nurse
I8	Academia 3	Female	Nurse and midwife
I9	Academia 3	Female	Nurse
I10	Professional association	Female	Nurse and midwife
I11	Academia 1	Male	Medical doctor
I12	Academia 2	Male	Medical doctor
I13	Professional association	Female	Nurse
I14	Academia 2	Male	Medical doctor
I15	Donor 2	Female	Medical doctor
I16	Donor 1	Female	Non-medical
I17	Government 2	Female	Nurse

Data collection

Data were collected through semi-structured individual interviews. An interview guide was developed with the purpose of identifying and mapping connections between the actors and their influencing factors. The interview guide consisted of open-ended questions based on four key areas: (1) the organisation and its resources; (2) collaboration; (3) communication channels; and (4) future plans. The questions addressed interactions, connections and driving forces concerning these four areas. All interviews were conducted in English in April 2014, were audio-recorded and lasted about 30–75 minutes, with an average interview time of 50 minutes. The interviewees were encouraged to speak freely, and probing questions were asked when necessary. All interviews took place at the interviewees' workplace.

Data analysis

The interviews were transcribed verbatim. Qualitative data analysis was performed, inspired by Miles, Huberman and Saldana [25]. The first and last authors analysed the interviews to get a sense of the whole. Finally, the findings were discussed among all authors until consensus was reached. The data analysis included:

Data condensation

Each transcript was read several times and condensed to distil information relevant to the study aim. Secondly, the text was coded relevant to the study aim, dividing the content into parts, with the purpose of making it possible to identify content characteristics on a more abstract level.

Data display

Codes were imported into a designed matrix, with rows and columns representing each of the 17 interviews. In the analysis, patterns of meaning were clustered and essential structures successively emerged that described and explicated how actors connected to promote Nepal's midwifery profession.

Conclusion – drawing and verification

This involves testing the meaning that emerges from the data for their likelihood and for whether or not they can be confirmed. Final conclusions were reached after the first and last authors

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