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Birth environment facilitation by midwives assisting in non-hospital births: A qualitative interview study

Toshiko Igarashi, PhD, RN, RM (Associate Professor of Midwifery)[a,*], Mariko Wakita, MEd, RN, RM (Professor of Midwifery)[a], Kikuko Miyazaki, PhD (Assistant Professor of Public Health)[b], Takeo Nakayama, PhD, MD (Professor of Public Health)[b]

[a] Department of Maternity Nursing, Faculty of Nursing, Nara Medical University School of Medicine, 840 Shijo-cho, Kashihara, Nara 634-8521, Japan
[b] Department of Public Health, Kyoto University School of Public Health, Yoshida-Konoe-cho, Sakyo-ku, Kyoto 606-8501, Japan

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ABSTRACT

Objective: midwifery homes (similar to birth centres) are rich in midwifery wisdom and skills that differ from those in hospital obstetrical departments, and a certain percentage of pregnant women prefer birth in these settings. This study aimed to understand the organisation of the perinatal environment considered important by independent midwives in non-hospital settings and to clarify the processes involved.
Design: semi-structured qualitative interview study and constant comparative analysis.
Participants: 14 independent midwives assisting at births in midwifery homes in Japan, and six independent midwives assisting at home births.
Setting: Osaka, Kyoto, Nara, and Shiga, Japan.
Findings: midwives assisting at non-hospital births organised the birth environment based on the following four categories: 'an environment where the mother and family are autonomous'; 'a physical environment that facilitates birth'; 'an environment that facilitates the movement of the mother for birth'; and 'scrupulous safety preparation'. These, along with their sub-categories, are presented in this paper.
Key conclusions: independent midwives considered it important to create a candid relationship between the midwife and the woman/family from the period of pregnancy to facilitate birth in which the woman and her family were autonomous. They also organised a distinctive environment for non-hospital birth, with preparations to guarantee safety. Experiential knowledge and skills played a major part in creating an environment to facilitate birth, and the effectiveness of this needs to be investigated objectively in future research.

Introduction

Non-hospital settings such as homes are among the options available to low-risk pregnant women in their choice of places to give birth in some countries (American College of Nurse Midwives, 2003; The Royal College of Midwives, 2007; NICE, 2007; Australian College of Midwives, 2011). According to previous studies, it seems that planned non-hospital births for low-risk women are standard in developed countries (Johnson and Daviss, 2005; Leslie and Romano, 2007; Hutton et al., 2009; Janssen et al., 2009; Olsen and Clausen, 2012; Catling-Paull et al., 2013), women have a strong sense of giving birth through their own strength and high levels of satisfaction with the care they receive (Morison et al., 1998; Borquez and Wiegers, 2006; Christiaens and Bracke, 2009; Lindgren and Erlandsson, 2010; Hodnett et al., 2012), and cost-effectiveness is high (Schroeder et al., 2012). However, some studies have shown that the rates for both perinatal and neonatal deaths, especially in primiparas, are high for home births (Kennare et al., 2010; Wax et al., 2010; Birthplace in England Collaborative Group, 2011).

Few studies have focused on midwives assisting in non-hospital births, including home births (Vedam et al., 2009; Bond, 2010; Vedam et al., 2010; Blix, 2011), and there seems to be no research clarifying ways in which midwives organise the birth environment in these places. When low-risk women deliver within an integrated service, outcomes for both mothers and infants have been shown to be good (Homer, 2013; Birthplace Study, 2013).

In Japan, a midwifery home is defined as 'a place where midwives provide midwifery practice for a population or a special majority (excluding hospitals and medical clinics)' (Ministry of Health Labour and Welfare, 2005, 2013), and is where midwives assist at normal births without a doctor in attendance, in co-ordination with medical facilities. The responsibility of midwives for treatment, care, and

* Corresponding author.
E-mail address: igarashi@naramed-u.ac.jp (T. Igarashi).

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management is similar to that in Western birth centres, but midwifery homes in Japan are privately managed by midwives and are often in the same building as the midwife's home. There are also practices that do not have premises, where the midwife goes out to the mother's home to assist in the birth. As in the UK, where the main place to give birth has switched from home to hospital over the past 50 years (Fraser and Cooper, 2009), there has been a shift from home to hospital births in Japan since after the end of the Second World War, following the introduction of American medical policies and the change in midwifery education from direct entry to a Nurse-Midwife system (Japanese Midwives' Association, 2008). Using the American medical system as a model, policies were adopted for hospital births (Obayashi, 1989; Suzui, 2006; Sato, 2009), which subsequently increased in number. Even now, although gradually decreasing year by year, over 10,000 of approximately 1 million births (1%) each year in Japan take place at home or in midwifery homes or similar venues (Mother and Child Health Organization, 2011). On the other hand, the expectations of society for midwives are increasing. Due to obstetrician shortages, there is an increased necessity for midwives to lead birth care for normal births within a hospital, and teaching hospitals are now developing birth centres. Birth centres are units within a hospital where midwives lead birth care. They are different from midwifery homes run by midwives. However, it is probable that the opportunities for midwives to be responsible for birth care at hospitals will increase in the future. Therefore, it is important to identify experienced midwives' views of the birth environment. Midwives who operate midwifery homes are known as independent midwives. In these places, there is very little medical intervention. An anaesthetic is never used to relieve the pain of contractions. Therefore, it is necessary to develop a candid relationship that promotes health and prevents problems from early pregnancy and prepares the mother and her family for the birthing experience to get through the birth as an autonomous unit. Midwives working in midwifery homes have a rich tradition of wisdom and skills (Misago et al., 2000; Gepshtein et al., 2007).

The aim of this study was to explore the birth environment that independent midwives consider important, as well as to identify the process by which they organise the birth environment.

Methods

Research design

This was a semi-structured, descriptive interview study, and constant comparative analysis was used. The participants ($n=20$) were midwives assisting at births. The study was approved by the Medical Ethics Committee of Nara Medical University (6 August 2010, No. 310).

Participants

The participants ($n=20$) were midwives assisting at births in midwifery homes or at the mother's home. They were recruited through convenience and snowball sampling. In terms of convenience sampling, experienced midwives who were known to the researchers and had a number of years of experience and a high number of births annually since becoming established were recruited. In terms of snowball sampling, midwives who were appropriate for the purposes of the study were introduced by midwives participating through convenience sampling. Recruitment of participants and setting of the number of participants were carried out with a view to theoretical saturation.

The process of recruitment involved telephoning participants in advance to briefly explain the aims and methods of the study and ethical considerations, and obtaining their informal agreement verbally. At the time of the interview, the aims and methods of the study and ethical considerations were explained orally and in writing, and consent was obtained in writing.

Data collection

Data were collected through semi-structured interviews based on an interview guide in 2010 and 2011. Interview sites were decided by participants and were sites that assured privacy. Interviews were conducted once with each participant. Interviews were recorded with the permission of the participant and transcribed verbatim.

In terms of content, participants completed a written questionnaire about their age, number of years of experience as a midwife, number of years of experience since becoming established as an independent midwife, and number of births they had assisted at as an independent midwife. After this, each participant underwent a semi-structured interview based on an interview guide. Interview content covered issues of the aspects they considered important in the birth environment, ways in which they created the environment, organisation of the room used for birth, the environment, actions and attitude of the mother once the contractions start and who makes the main decisions, and any occasions when there had been panic because of the free environment and attitude.

Data analysis

The method of analysis was the constant comparative method, with sentences spoken by midwives about what they considered to be important in the perinatal environment and the process of organising this constituting the units of context. The process was based on the Grounded Theory Approach of Glaser and Strauss (Glaser and Strauss, 1967), using Kinoshita's Revised Grounded Theory Approach (Kinoshita, 2003), which is revised to make it easier to use with Japanese, a language characterised by many ambiguous expressions and complex grammar. The process was as follows. (1) The verbatim transcript was read. (2) A participant who enunciated her own thoughts about the birth environment clearly and in detail, for which there was a substantive text record, was identified. Analysis began from this transcript. (3) From the first transcript, text describing what the midwife valued most in the environment was identified. The 'first sub-category' was created from this text. (4) The same transcript was searched for other data related to the 'first sub-category'. If none was evident, other texts were searched to create the 'second sub-category'. (5) After finishing the analysis of the first transcript, the transcript of the second participant was analysed, and in so doing, text relating to the identified sub-categories was added as supportive data to these sub-categories. After having performed this process, if there was remaining text that described the environment, a new sub-category was created. (6) This process was then repeated. (7) Finally, the relationships between sub-categories were evaluated and clustered together to form categories.

The specialised fields of the researchers were midwifery, medicine, and medical sociology. Analysis was performed by two midwives, and the researchers who were not midwives confirmed the analysis. In particular, confirmation was conducted to ensure that the analysis was not biased in favour of midwives, and that the midwives did not overlook data that were obvious to them. These verification processes were carried out at the time of preparing the interview guide, after the first analysis, after half of the analyses were completed, after the analyses were finished, when categories were being made, and during article writing. These tasks were undertaken collaboratively by two co-researchers (KM and TN) to strengthen the validity of the analysis. The process of interviews and data analysis was conducted entirely in Japanese. All researchers and participants were born and raised in Japan. After the article was written in