

Original Paper

Midwifery Trained Registered Nurses' Perceptions of Their Role in the Labor Unit



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Citation Jayathilake S, Jayasuriya-Illesinghe V, Samarasinghe K, Molligoda H, Perera R. Midwifery Trained Registered Nurses' Perceptions of Their Role in the Labor Unit. *J Holist Nurs Midwifery*. 2021; 31(3):175-183. <http://dx.doi.org/10.32598/jhnm.31.3.2078>

Running Title Role of Midwifery Trained Registered Nurses in Labor

DOI <http://dx.doi.org/10.32598/jhnm.31.3.2078>



Article info:
Received: 05/09/2020
Accepted: 13/02/2021
Available Online: 01/07/2021

ABSTRACT

Introduction: A Midwifery Trained Registered Nurse (MTRN) is a member of the multi-professional maternity health care team in Sri Lanka. Her contribution to the maternity care team is poorly understood, often undermined, and undefined. In the context of low- and middle-income settings where traditional midwives play a crucial role in domiciliary care, the MTRNs role as a member of the multi-professional hospital-based maternity care team has not been well-described.

Objective: The study aimed to describe MTRNs' perceptions of their role in the Labor Unit within the multi-professional maternity health care team at five tertiary care hospitals in the Capitol Province of Sri Lanka.

Materials and Methods: A descriptive cross-sectional study was conducted among 186 MTRNs working in labor rooms in the study setting. All MTRNs in the selected hospitals were invited and included in the sample. A postal survey was carried out using a pre-evaluated, pretested self-administered questionnaire, and descriptive statistics were derived.

Results: All respondents were females, aged 27 to 60 years (Mean±SD: 40±8.3 years). The majority (66%) was less than 45 years old. Almost all (>96%) MTRNs perceived 12 tasks of the listed tasks as their primary responsibility. Regarding other tasks, they perceived a high degree of overlap between their role and those of the doctors and midwives. Although almost all MTRNs rated the level of interprofessional collaboration from Registered Nurses (RNs) and doctors as average to good, nearly half (49%) of them rated support from midwives ranging from very poor to average.

Conclusion: A high degree of perceived overlap between MTRNs' tasks with those of the other members of the maternity care team can cause role confusion, conflicts, and poor patient care. MTRNs' role in the Labor Unit within the multi-professional maternity health care team was controversial. Clarifying the MTRNs scope of practice will help improve interprofessional understanding of roles and responsibilities and collaboration.

Keywords:
 Midwifery, Work performance, Obstetrics, Parturition

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Highlights

- Most midwifery trained registered nurses' tasks overlapped with other health care professionals in the maternity health care team.
- Overlapping tasks may lead to role confusion, conflicts, and poor quality patient care.
- Midwifery trained registered nurses' role within the maternity health care team is contentious.

Plain Language Summary

There is a wide diversity in midwifery practice across the world. In Sri Lankan hospital settings, both (direct entry) midwives and Midwifery Trained Registered Nurses (MTRNs) work as members of the multi-professional maternity-care team together with registered nurses and doctors. MTRNs' contribution to the maternity care team is poorly understood, often undermined, and undefined. This study aimed to understand MTRNs perceptions about their role in the Labor Unit within the multi-professional maternity health care team at tertiary care hospitals in the Capital (Western) Province of Sri Lanka. The tasks of most MTRNs overlap with other professionals within the maternity health care team. The study findings suggest a need for clear professional role descriptions for MTRNs and a better understanding of other professionals' roles to minimize conflicts and improve collaboration among professional groups on the maternity care team.

Introduction

Modern-day midwifery training and practice are complex in most settings. They have to function as a part of a multi-professional maternity health care team [1]. There is also a wide diversity in midwifery practice across the world with regard to their professional name, training, qualifications, and scope of practice [2-4]. In addition to this complexity in naming, there are different pathways of midwifery training and education. A registered nurse (RN) can obtain additional specialization in midwifery or choose direct entry into midwifery without prior nursing training. In the UK and Australia, both direct entry midwifery and nurse-midwifery are possible. In the USA, Sweden, Brazil, and Norway, nurse-midwifery is the more common pathway [3, 5, 6].

In Sri Lanka, both pathways of entry are available. Midwives can either have direct entry or could be an RN with additional midwifery specialization. The second group, referred to as Midwifery Trained Registered Nurses (MTRNs), has both RN and Registered Midwife (RM) titles. Although the direct entrants are referred to as midwives and recognized as a unique professional group by their unique midwives' uniform and professional title, MTRNs who wear the regular nurses' uniform are not recognized as a unique professional group

[7]. MTRNs do neither have proper official recognition in the form of an official title nor a distinctive uniform.

As maternity care teams become more multi-professional, the team members face challenges understanding and navigating intra- and inter-professional roles, tasks, and responsibilities. Most developed countries have written guidelines that provide a framework for assigning tasks or delegating roles to each health team member to facilitate collaborative practices among professionals [8]. However, this is not the case in less developed regions. Several studies have revealed that role confusion adversely affects inter-professional collaboration on the health care team [9, 10]. This condition is particularly the case in low- and middle-income countries, especially in Asian and sub-Saharan African countries where health care workers have less well-demarcated professional boundaries [11, 12]. Although there is a small yet expanding body of work on interprofessional collaboration in low- and middle-income settings, studies from South Asian settings are somewhat limited.

In Sri Lankan hospital settings, both (direct entry) midwives and MTRNs work as members of the multi-professional maternity-care team together with RNs and doctors. In the past, there have been reports of conflicts between MTRNs and midwives (direct entry) within the maternity care team [13, 14].

In the South Asian context, understanding the modern midwives' role can also highlight the changes and challenges faced in places where it was traditionally informal and or predominantly domiciliary. This issue would address a knowledge gap as studies involving and focusing on MTRNs who are professionally-trained midwives operating outside the traditional midwives' domain of caregiving are the most lacking [15].

This study aimed to understand MTRNs perceptions about their role in the Labor Unit within the multi-professional maternity health care team at tertiary care hospitals in the Capital (Western) Province of Sri Lanka. Furthermore, MTRNs' perceptions of collaboration among the multi-professional groups in the maternity care team can help understand the barriers to their growth and development as a professional body.

Materials and Methods

A descriptive cross-sectional survey utilizing quantitative methods was conducted in five selected tertiary care hospitals in the Western Province of Sri Lanka. These five hospitals are some of the largest maternity care centers in the country, providing routine and specialized care for women admitted directly or referred from primary and secondary healthcare for advanced medical treatments. All MTRNs working in the Labor Rooms (LRs) in the study setting at the time of data collection were invited to participate in the study. Therefore, the main inclusion criteria were being an MTRN and the workplace at the study time.

Based on an assumed probability of 50% (for the proportion of sample identifying a task as their primary role), the minimum required sample size for the finite population was 169, considering a 95% confidence interval and type I error of 5%. As a postal survey was to be used as a recruitment method, accounting for a non-response of 25%, a total number of 227 MTRNs in selected hospitals were invited to participate in the study.

A self-administered semi-structured questionnaire was used as the data collection instrument. Questionnaire items were developed based on literature and data derived from results of a series of Focus Group Discussions (FGDs) conclude in a previous stage of this study [7]. Once the question items were identified, they were examined by a panel of experts consisting of a professor in obstetrics and gynecology, a public health specialist, two special grade nursing officers, and one nurse manager for content and face validity. Accordingly, a few modifications were made.

The questionnaire was pilot tested among 15 MTRNs who were not included in the study sample. Then, based on the feedback, modifications were made to improve the clarity and flow of questions. The reliability of the instrument was assessed by performing the Cronbach α test. The study instrument showed internal consistency with a Cronbach α of 0.74 (within the accepted level of alpha range of 0.70 to 0.95) [16].

The questionnaire consisted of 31 questions categorized into four sections. Part A consisted of 4 questions to gather sociodemographic information (age, marital status, highest educational level, and work experience) about the participants. Part B comprised 9 questions, which focused on structural facilities and resources in their work settings, support of coworkers, and adequacy of coworkers, overcrowding, and workload of the unit. Part C contained 7 questions about organizational aspects of their work, including job description, rosters, work schedule, tasks, and roles carried out by them in the intra-natal and postnatal units, and Part D contained 11 questions about job satisfaction and other personal aspects of their work.

A postal survey was used as the method of data collection for the study. Before commencing the study, the Ethics Review Committee (ERC), Faculty of Medical Sciences at the University of Sri Jayawardenepura, reviewed and approved the protocol and data collecting instruments (No-33/14). After obtaining approval from the chief special grade nursing officers of the selected hospitals to conduct the study, all MTRNs currently working there were contacted by mail. An information sheet, the consent form, questionnaire with instructions, and a postage-paid envelope with the return address were mailed to each MTRN. The participants received the researcher's contact information (contact number and email) to ask questions and clarify any doubts. The participants were informed through the information sheet that participation in the study was voluntary, and they could refuse to participate in the study or withdraw from the study at any time. Those who consent to participate in the study were asked to return signed consent forms and completed questionnaires in the provided envelope.

Data collection was started on July 30, 2015, and completed on October 30, 2015. After one month, a reminder letter was sent to non-respondents and followed up with reminders every month for up to three months. The participants were assured about their information confidentiality and anonymity. Although the names of the participants were known to the lead researcher, this

information was only used to send and receive questionnaires. Once the completed forms were gathered, they were identified with a code and de-linked from the participants' personal information. The participants' contact information was permanently deleted at the end of the three-month data collection period. During data entry and analysis, the codes were used to identify each unique case in the dataset.

Once the data entry and cleaning were complete, data analysis was performed using SPSS, version 20.0 (Armonk, NY: IBM Corp). Descriptive statistics, including the Mean±SDs, are used to summarize the characteristics of the sample. To identify how respondents rated their opinion regarding labor and postnatal tasks for four professional groups, i.e., MTRNs, RNs, doctors, and midwives, univariate analysis was conducted, and proportions were calculated and reported in graphs.

Results

Of 227 questionnaires sent out, 192 were returned. Of which, 4 were incomplete, and 2 were not filled in at all. So, the number of completed questionnaires returned was 186, and the response rate was 81.9%.

All respondents were females, aged 27 to 60 years (Mean±SD: 40±8.3 years). The majority were less than 45 years (66%) and married (77.4%). Most respondents

were nursing diploma holders (93%), others were BSc. Nursing degree holders. Fifty-six percent of the respondents had fewer than five years of work experience (Mean±SD: 7.04±6.53 years).

MTRNs were presented with 39 identified tasks that should be routinely completed in the Labor Room (LR). Almost all (>96%) of the MTRNs rated 12 of those tasks as their primary responsibility. These tasks included admitting the mother to the LR, preparing syntocinon (oxytocin) infusion, administering syntocinon, adjusting drop rate, deciding to perform an episiotomy, deciding the time to perform an episiotomy, performing an episiotomy, administering medications to the mother, recording the birth time of the baby, applying identification bands, maintaining the birth register and issuing birth documentation to the parents.

Eight tasks were identified to be the primary responsibility of the doctor by more than 97% of MTRNs. These tasks included deciding the time for cardiotocography (CTG), observing CTG, taking actions accordingly, episiotomy suturing, performing VE (Vaginal Examination) before delivery, deciding the time for VE, deciding the type of the pain killer, and deciding the mode of delivery. However, considerable overlap was evident in the MTRNs perceptions of responsibility with regard to these tasks. About 25% to 46% of MTRNs reported these as also their primary responsibility. The responses

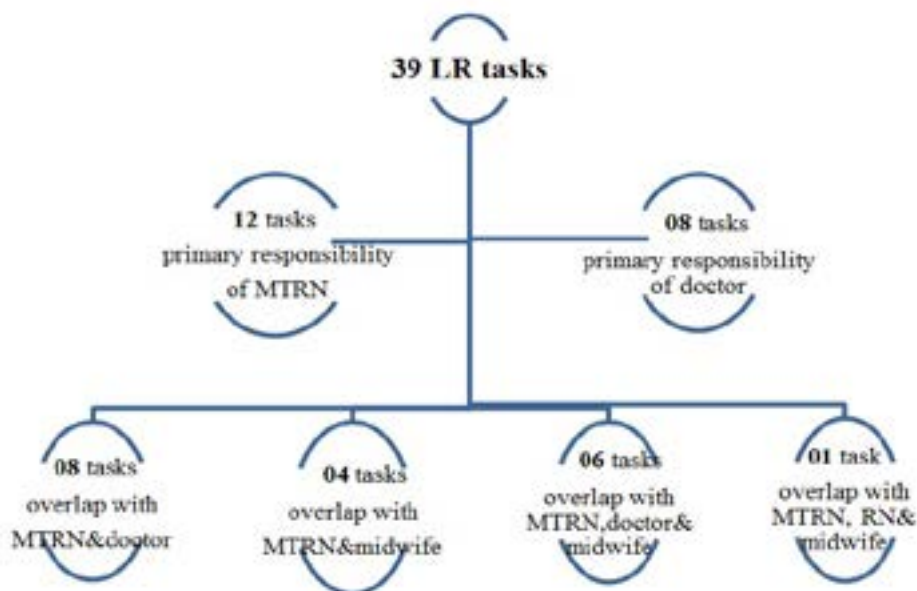


Figure 1. Labor Room (LR) tasks

LR: Labor Room; MTRN: Midwifery Trained Registered Nurse; RN: Registered Nurse.

regarding the remaining 19 tasks showed MTRNs' confusion about who is primarily responsible for them. There was overlap as it was reported as the responsibility of multiple groups: midwife, doctor, and RN (Figure 1).

Eight tasks were considered by most MTRNs (55%-94%) to be the primary responsibility of both MTRNs and doctors. These tasks were putting the CTG monitor on the mother, detecting problems in CTG, maintaining the portogram, detecting problems in the portogram, taking actions for identified problems, deciding the time for giving pain medication, deciding to perform the delivery, and deciding the time for performing the delivery. Out of those 8 tasks, most overlaps could be seen in 3 tasks: deciding the time for performing the delivery, deciding to perform the delivery, and detecting problems in the portogram. More than 80% of MTRNs reported these tasks as the primary responsibility of both doctors and MTRNs. About 51% to 96% of respondents identified four other tasks as the primary responsibility of both the MTRN and the midwife: assisting for episiotomy suturing, assisting Vaginal Examinations (VE), establishing breastfeeding, and taking measurements of the baby (Figure 2).

MTRNs were most conflicted about the primary responsibility involved with 7 out of 39 tasks. They reported the most overlap between the 3 professional groups. Six of the seven tasks were considered the primary responsibility of the MTRN, the doctor, and the midwife.

These tasks consist of assisting during VE, performing the delivery, monitoring the second stage of the delivery, delivering the Placenta, Observing (PV) Per Vaginal bleeding, and examining the fundus. One task of taking blood for direct test was identified as a primary responsibility of MTRN, RN, and doctor.

It is note worthy that performing the delivery was the most contentious task. It was identified as a primary responsibility of MTRNs, midwives, and doctors. More than 75% of MTRNs believed that it was their own and or the midwives' responsibility, and 40% of MTRNs believed it was the doctors' duty. There were some tasks for which four groups were reported to have overlapping primary responsibility, but those overlaps were minimal. These tasks included assisting VE, examining fundus, and observing PV bleeding (Figure 3).

When respondents were asked to rate the level of support from coworkers, almost everyone (99%) rated support from their MTRN colleagues as good or very good. More than 80% also considered RNs' and doctors' support as good or very good. However, nearly half (49%) rated support from the midwives as very poor to average.

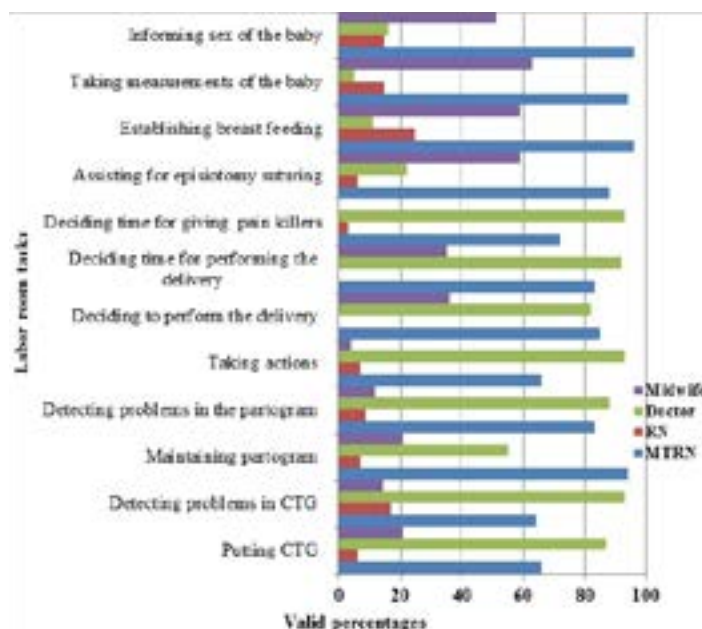


Figure 2. Overlapping tasks with two professional groups: MTRN and midwife; MTRN and doctor (n=186)
MTRN: Midwifery Trained Registered Nurse; CTG: Cardiotocography.

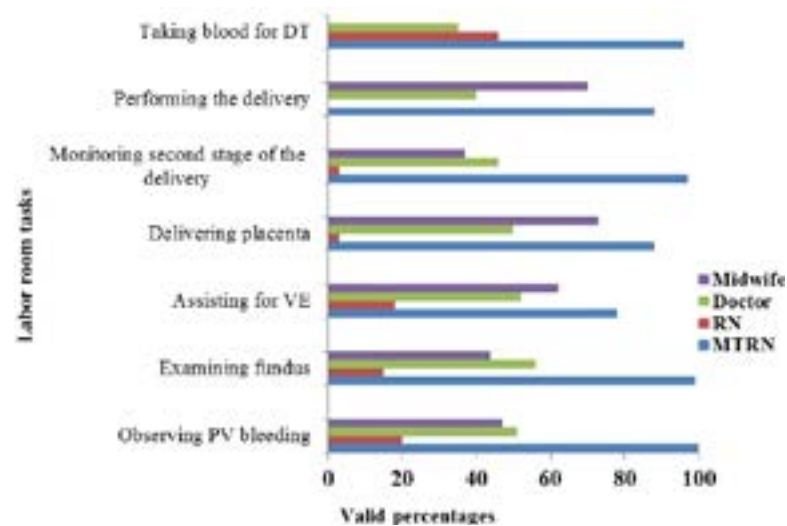


Figure 3. Overlapping tasks with three professional groups: MTRN and Midwife; MTRN and Doctor; MTRN and RN (n=186)

DT: Direct Test; VE: Vaginal Examination; PV: Per Vaginal; MTRN: Midwifery Trained Registered Nurse; RN: Registered Nurse.

Discussion

To understand MTRNs perceptions about their role in the Labor Unit within the maternity care team, we gathered quantitative data related to MTRNs' views about their responsibility for tasks during the care of women and babies in the LR. Of the 39 tasks presented to them, MTRNs were clear about some tasks as their primary responsibility. These tasks were specific and narrow in scope. For example, they included preparing syntocinon (oxytocin) infusion, administering syntocinon, and adjusting drop rate. But for most other tasks, MTRNs were not as clear about the responsibilities as they perceived overlap with other professionals in the maternity care team. The most overlapping reported tasks were with the midwife and the doctor, either alone or in combination. For example, MTRNs perceived establishing breastfeeding and assisting during episiotomy suturing as a task overlapping with the midwife. Deciding time for performing the delivery, deciding to perform the delivery, and detecting problems in the portogram significantly overlapped with the doctor's responsibilities. Importantly, performing the delivery and observing PV bleeding tasks overlapped with both midwife and doctor tasks.

These findings are consistent with many studies findings conducted in different parts of the world. In Morocco, a similar overlap can be seen between obstetricians' and midwives' scopes of practice. Subsequently, midwives sometimes perform activities within the scope of medical practice leading to conflicting situations [17]. Many studies have reported that overlapping tasks and responsibilities create conflict among professionals on

the health care team [18-22]. Conversely, some studies have shown that overlaps in the role of different health professionals can be beneficial because they may help ease the workload of other team members and can be used to improve cost efficiency [20, 23].

Of all the overlapped tasks in this study, role confusion is most prominent during childbirth because there is considerable overlap in the scope of practice of doctors and nurses [24]. Some tasks, such as deciding and performing the delivery and detecting problems in the portogram, are directly related to the outcome of the delivery and the well-being of the baby and the mother. Similar overlap in performing tasks and responsibilities for them is observed in many settings. In the United States, where professional midwives, certified nurse-midwives, and obstetricians may all have the skills and legal status to care for women at the time of birth, they can potentially compete for professional dominance [25].

In Sri Lanka, overlapping tasks often create conflicting situations between midwives and the midwifery trained RNs, mainly when conducting the birth. Most of the role confusion was around tasks related to the delivery. In the past, midwives prevented MTRNs from delivering in some of these hospital settings leading to conflicts [7]. In this study, MTRNs reported the lowest level of collaboration from the midwives. Most of the conflict around delivery could be tied to the midwives' historical but archaic beliefs about the delivery being their primary role and the resistance to others' playing a part in taking over that role. In the hospital setting, they may compete for professional dominance when it comes to

tasks directly related to the delivery. Midwives position is less well-demarcated and potentially threatened by MTRNs and RNs.

Although different professionals should collaborate in multi-professional teams to provide optimal maternity care, not all professional groups collaborate effectively [26, 27]. One of the reasons for poor interprofessional collaboration is related to ill-defined professional boundaries [1, 10], indeterminate tasks, and responsibilities [28]. Evidence shows that role ambiguity leads to territorial disputes, role conflicts, and ineffective collaboration [12, 26, 29], eventually threatening the safety of the patients [30].

This study shows that MTRNs did not have a clear understanding of their responsibilities in the labor room. For example, monitoring patients for bleeding after delivery was assumed to be the primary responsibility of different groups of professionals. However, nearly half of MTRNs considered it their primary responsibility and or that of the doctor and the midwife. When there is disagreement about who is primarily responsible for monitoring for such an adverse outcome of pregnancy, there is a risk of being overlooked or missed in a busy clinical setting. Being transparent and aware of one's scope of practice helps prevent such misses and facilitates care providers' ability to work independently [31]. Understanding other professionals' roles on the team is essential for interprofessional collaboration, delegation, and good teamwork in busy clinical settings [32]. The findings of this study indicate that the MTRN did not recognize many areas of primary responsibility for others, and there was a tendency to perceive most tasks as being their responsibility. This finding correlates with the results reported in the FGDs with MTRNs. They did not understand the scope of practice of other professionals [7]. They may be unaware of other professionals' tasks and roles because there have not been any efforts to understand or demarcate areas of primary and secondary responsibility for each team member.

The roles and responsibilities of the health care professionals who provide maternity care require clarification to minimize inter-professional conflicts [22]. Some studies suggest that role conflicts in the workplace can be resolved by providing clear job descriptions and also enhance interprofessional collaboration [33, 34]. Thus, clarifying the MTRNs scope of practice, as it is one of the least demarcated professions' roles in the national framework, will be a first step in improving interprofessional collaboration among maternity care teams.

A few significant limitations of this study should be considered. The generalizability of the results is limited since only five tertiary care hospitals in the Western Province were included in the study. Midwifery Trained RNs working in the Western Province may not represent MTRNs elsewhere; hence, the findings do not necessarily reflect MTRNs' perceptions throughout the country. Also, another weakness of this study is overlooking other professional groups' perceptions and demarcating their roles in the maternity care teams. Involving the other professionals and their perceptions may add more insights into the organization of tasks and delegation of responsibilities in professional hierarchies and relationships in this setting. As one of the first studies to involve MTRNs and conducted within the constraints of hospital institutional gate keeping restricting access to staff, this was beyond the scope of this study.

This study provides insights into the extent of role confusion among MTRNs and the perceived overlap of primary responsibility for many tasks undertaken in maternity care settings. MTRNs' role within the maternity health care team is argumentative.

There is potential for poor collaboration and conflict between MTRNs and midwives, specifically on tasks related to the delivery and monitoring of the mother after the delivery. Areas of task overlap when it involves MTRNs and midwives may involve concerns about preserving professional identity authority and upholding societal perceptions about a traditional domiciliary role. The study findings suggest a need for clear professional role descriptions for MTRNs and a better understanding of other professionals' roles to minimize conflicts and improve collaboration among professional groups on the maternity care team. Furthermore, well-defined professional expectations for MTRNs will allow them to carry out their responsibilities competently, confidently, and collaboratively. MTRNs' training programs should be targeted and focused on developing skills necessary to fulfill their specific roles and responsibilities and demarcate their professional identity. However, further systemic changes in healthcare workers' training and socialization may also improve overall interprofessional collaboration in maternity care delivery in Sri Lanka.

Ethical Considerations

Compliance with ethical guidelines

Before the start of the study, the Ethics Review Committee, Faculty of Medical Sciences at the University of

Sri Jayewardenepura, reviewed and approved the protocol and data collecting instruments (No-33/14).

Funding

Financial support was provided by the World Class University Project of the University of Sri Jayewardenepura (Grant No-Ph.D./13/2012).

Authors' contributions

Study conceptualization and reviewing the final edition: All authors; Data collection and writing the original draft: Sunethra Jayathilake; Data analysis: Vathsala Jayasuriya-Illesinghe and Sunethra Jayathilake.

Conflict of interest

The authors declared no conflicts of interest.

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