Review Article

Journal of Nurse Midwifery and Maternal Health
Volume 5 Number 3, September – December 2019
DOI: http://dx.doi.org/10.21088/jnmmh.2454.7506.5319.7

Midwifery Model of Care-opportunities and Challenges in the Indian Context

Lekha Viswanath

Author Affiliation: Professor and Head, Department of Obstetrics and Gynecologic Nursing, Himalayan College of Nursing, Swami Rama Himalayan University, Jolly Grant, Doiwala, Dehradun, Uttarakhand 248016, India.

How to cite this article:
Lekha Viswanath. Midwifery Model of Care-opportunities and Challenges in the Indian Context. J Nurse Midwifery Matern Health. 2019;5(3):129–136.

Abstract

Midwifery is a profession which is close to women's life. Midwifery model of care considers pregnancy and birth as normal physiologic events in a women's life and uses a more positive approach to childbirth. Midwives work with women in promotions of reproductive health, family planning, preconception care, antenatal care, care during labour and postnatal care including newborn care. Considering the impact midwifery model care can create in improving birth outcomes along with providing a positive birth experience Government of India has started steps for the implementation of midwifery practice initiative. This article discusses about the background and need for midwifery care, framework for midwifery practice and education including competencies of midwives and opportunities and challenges for midwifery practice in India.

Keywords: Midwife; Midwifery practice; Midwifery education; Opportunities and challenges.

Introduction

The health status of a society is reflected as well as influenced by maternal and child health. Hence promoting maternal health is considered central to health promotion. Despite the fact that countries across the globe have been investing in the promotion of maternal child health for decades, maternal child health issues are still a global health concern, especially in developing countries. Maternal mortality ratio is still unacceptably high in many parts or the world.

About 2,95,000 women died during and following pregnancy and childbirth in 2017. Majority of these deaths occurred in low-resource settings. Sub-Saharan Africa and Southern Asia accounted for approximately 86% (2,54,000) of the estimated global maternal deaths in 2017. Sub-Saharan Africa alone accounted for roughly two-thirds (1,96,000) of maternal deaths, while Southern Asia accounted

Reprint Request: Lekha Viswanath, Professor and Head, Department of Obstetrics and Gynecologic Nursing, Himalayan College of Nursing, Swami Rama Himalayan University, Jolly Grant, Doiwala, Dehradun, Uttarakhand 248016, India.

E-mail: lekhaviswanath3@gmail.com

© *Red Flower Publication Pvt. Ltd.*

for nearly one-fifth (58,000). A wide gap is observed between the MMR of high and low income countries. The MMR in low income countries in 2017 is 462 per 100,000 live births versus 11 per 100,000 live births in high income countries. Maternal death occurs during complications of pregnancy, labour or postnatal period. Severe bleeding (mostly bleeding after childbirth), infections (usually after childbirth), high blood pressure during pregnancy (pre-eclampsia and eclampsia), complications from delivery and unsafe abortion accounts for 75% of maternal deaths. Infections such as malaria, chronic conditions like cardiac disease and diabetes accounts for remaining proportion of maternal deaths.[1]

The disparity in the maternal death between high and low income countries can be attributed to availability of health care resources resources. Poverty, distance to health facilities, lack of information about facilities available, cultural beliefs and practices etc. may prevent women in low income countries from availing health care. Inadequate or poor quality of services may also affect the maternal outcomes. Most of the maternal death and complications are preventable if the risk factors and complications are identified at the earliest and treated. This can be made possible if the women get care of a skilled birth professional during pregnancy, labour and postnatal period. WHO recommends one skilled birth attendant for every 175 pregnant women for improving the maternal outcome.[2] A skilled birth attendant (SBA) is a midwife, physician, obstetrician, nurse or other health care professional who provides essential and emergency health care services to women and their new-borns during pregnancy, childbirth and the postpartum period. There is a global shortage of skilled birth professionals. In addition to the shortage there is inequitable distribution also exist among urban and rural areas. The competency of the professionals and resources available are also another area of concern.

So improving the maternal outcomes necessitates improving number, distribution and quality of birth professionals. The countries where the midwifery services are strengthened have shown significant improvement in the maternal outcomes. In addition to improving birth outcomes, midwifery care is associated with more positive birth experiences. Considering the role midwife can play improving the birth outcomes many countries started investing on midwives including improving their competencies. Investment in high-quality midwives was key to the reduction of maternal mortality incountries like Tunisia and Thailand. Countries like Afganistan, Bangladesh, Ethiopia, Rwanda are also commited to the increasing number of trained midwives as part of the 2010 Global Strategy for Women's and Children's Health.[3]

India had made a significant improvement in the maternal and child health outcome through the various interventionsimplemented under the umbrella programme National Health Mission (NHM) which was launched in 2013 subsuming two existing health programmes then, the National Rural Health Mission and National Urban Health Mission. The Maternal Mortality Ratio (MMR) of India has reduced from 301 maternal deaths per 100,000 live births in 2001–03 as per the Registrar General of India, Sample Registration System (RGI, SRS) to 130 maternal deaths per 100,000 live births in 2014–16 (RGI, SRS).[4] As per the SRS 2015–17 the MMR is 122 per 100,000 live birth. Now the government is working for the national health policy target to attain a maternal mortality ratio of 100 by 2020 and Sustainable Development Goal (SDG) target of less than 70 by 2030.[5]

Lack of trained service providers or over medicalization of the delivery process are now recognised as the two major reasons for poor intrapartum care. The Rural Health Statistics of 2016 indicate that, against the requirement of 5,510 obstetricians at Community Health Centres across the country, only 1,859 are in place (34%).[5] National Family Health Survey (NFHS-4) reports that C-Section rates in India have increased from 8.2% in 2006 to 17.2% in 2016. Births in a private health facility delivered by caesarean section increased from 27.7 in 2006 to 40.9 in 2016.[6]

Disrespect and abuse during birth is recognised as another issue which effect the birth experience of women. Midwifery-led care can address these issues by promoting quality care through provision of women-centric care and promoting natural birth and this model of care is well supported by global evidence. The government of India initiated steps for the implementation of midwifery care through midwifery units in public sector. The guidelines for Midwifery services in India, published in 2018 provide strategic framework for practice, education and quality assurance of midwifery services in India.[5]

Midwifery practice and maternal-neonatal health outcomes

Midwifery is a profession which works for the promotion of maternal and child health from

time immemorial. From a 'woman who helped a woman in labour' it has now evolved into a practice profession. But the role of midwife evolved differently in different countries according to culture, tradition and local needs. Midwifery covers care of women during pregnancy, labour, and the postpartum period, as well as care of the newborn. It focuses on promoting health and preventing health problems in pregnancy, the detection of abnormal conditions, the obtaining of medical assistance when necessary, and providing emergency care in the absence of medical help. Midwifery care has a significant contribution to make in the improvement of maternal-child care. But the the concept of midwifery is not consistent with respect to implementation of its services in different countries and health care settings. The midwifery service is delivered by a mixed workforce and many of them provide only some element of midwifery care.

Lancet series on midwifery, 2014, agreed upon a definition of midwifery that describesthe characteristics of care that childbearing women, infants, and families need in allcountries. In this series the practice of midwifery is defined as the "skilled, knowledgeable and compassionate care for childbearing women, new-born infants and families across the continuum throughout pre-pregnancy, pregnancy, birth, postpartum and the early weeks of life. Core characteristics include optimising normal biological, psychological, social and cultural processes of reproduction and early life; timely prevention and management of complications; consultation with and referral to other services; respect for women's individual circumstances and views; and working in partnership with women to strengthen women's own capabilities to care for themselves and their families."[7]

Research evidences indicates that midwife-led continuity models of care are associated with benefits for mothers and newborns, such as reduction in the use of epidural anaesthesia, fewer episiotomies and instrumental births, and increased spontaneous vaginal births and increased breastfeeding. Women were less likely to experience preterm birth or lose the baby before 24 weeks gestation.[8] Analysis of 461 systematic reviews shows that 56 outcomes, including survival, health, well-being of women and infants, and efficient use of resources can be improved by practices that lie within the scope of midwifery.[7] Reduced maternal mortality and morbidity, fewer maternal infections, less anaemia, less pain, reduced risk of pre-eclampsia and eclampsia, reduced post-partum haemorrhage, reduced perineal trauma, increased likelihood of spontaneous vaginal birth, less augmentation of labour, reduced pharmacological analgesic use (excluding regional analgesia or epidural) during pregnancy, childbirth, and in the postnatal period, reduced use of regional analgesia or epidural, fewer instrumental births, fewer caesarean sections, fewer episiotomies, less perineal suturing, less use of therapeutic uterotonics, fewer blood transfusions, less use of uterine massage, fewer pregnancies beyond 41 weeks, improved satisfaction with pain relief, reduced anxiety during first stage of labour, improved feeling of control during childbirth, improved satisfaction with childbirth experience, less likely to develop post-partum depression, shorter stays on labour ward, increased initiation and duration of breastfeeding, reduction in smoking in late pregnancy, increased maternal post-partum weight loss, increased birth spacing, increased contraceptive use, reduced preterm birth, reduced low birth weight, reduced small for gestational age babies, fewer neural tube defects, fewer babies with low 5 min APGAR scores, increased average birth weight, decreased number of admissions to neonatal intensive care units, reduced mother-to-child transmission of HIV, reduced risk of neonatal infection, hypothermia and jaundice, improved mother-baby interaction, increased immunisation uptake and shorter hospital stay for babies were observed in various studies which evaluated the maternity care coming within the scope of midwifery practice.[1,9]

Framework of practice for Midwives

International Confederation of Midwives (ICM) is an accredited non-governmental organization which functions to strengthen midwifery practice through its affiliated midwifery associations throughout the world. It is a coalition of about 139-member midwifery associations representing 119 countries across the world and functions with the vision of a world where every childbearing woman has access to a midwife's care for herself and her newborn.[10] ICM has given the following elaborate definition of midwife in 2005 which was revised in 2011 and 2017.[11]

A midwife is a person who has successfully completed a midwifery education programme that is duly recognized in the country where it is located and that is based on the International Confederation of Midwives (ICM) Essential Competencies for Basic Midwifery Practice and the framework of the ICM Global Standards for Midwifery Education;

who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title 'midwife' and who demonstrates competency in the practice of midwifery.

The midwife is recognised as a responsible and accountable professional who works in partnership with women to give the necessary support, care and advice during pregnancy, labour and the postpartum period, to conduct births on the midwife's own responsibility and to provide care for the newborn and the infant. This care includes preventative measures, the promotion of normal birth, the detection of complications in mother and child, the accessing of medical care or other appropriate assistance and the carrying out of emergency measures. The midwife has an important task in health counselling and education, not only for the woman, but also within the family and the community. This work should involve antenatal education and preparation for parenthood and may extend to women's health, sexual or reproductive health and child care. A midwife may practise in any setting including the home, community, hospitals, clinics or health units.

The first part of the definition guides the educational preparation, competencies and registration of midwives. The second and third paragraph of the definition covers the specific roles and function a midwife should assume in the promotion of maternal and neonatal health. The fourth and last part mentions the area of practice of a midwife. ICM recognises midwives as the professionals of choice for childbearing women in all areas of the world. The midwifery model of care advocates care based on respect for human dignity, compassion and the promotion of human rights for all persons. Philosophy and model of midwifery care given by ICM provides a framework of practice for midwives.[8]

ICM Philosophy of Midwifery Care

- Pregnancy and childbearing are usually normal physiological processes.
- Pregnancy and childbearing is a profound experience, which carries significant meaning to the woman, her family, and the community.
- Midwives are the most appropriate care providers to attend childbearing women.
- Midwifery care promotes, protects and supports women's human, reproductive and sexual health and rights, and respects ethnic and cultural diversity. It is based on the ethical principles of justice, equity, and respect for human dignity.
- Midwifery care is holistic and continuous in nature, grounded in an understanding of the social, emotional, cultural, spiritual, psychological and physical experiences of women.
- Midwifery care is emancipatory as it protects and enhances the health and social status of women, and builds women's self confidence in their ability to cope with childbirth.
- Midwifery care takes place in partnership with women, recognising the right to self-determination, and is respectful, personalised, continuous and non-authoritarian.
- Ethical and competent midwifery care is informed and guided by formal and continuous education, scientific research and application of evidence.

ICM Model of Midwifery Care

- Midwives promote and protect women's and newborns' health and rights.
- Midwives respect and have confidence in women and in their capabilities in childbirth.
- Midwives promote and advocate for non-intervention in normal childbirth.
- Midwives provide women with appropriate information and advice in a way that promotes participation and enhances informed decision-making.
- Midwives offer respectful, anticipatory and flexible care, which encompasses the needs of the woman, her newborn, family and community, and begins with primary attention to the nature of the relationship between the woman seeking midwifery care and the midwife.
- Midwives empower women to assume responsibility for their health and for the health of their families.
- Midwives practice in collaboration and consultation with other health professionals to serve the needs of the woman, her newborn, family and community
- Midwives maintain their competence and

ensure their practice is evidence-based.

- Midwives use technology appropriately and effect referral in a timely manner when problems arise.
- Midwives are individually and collectively responsible for the development of midwifery care, educating the new generation of midwives and colleagues in the concept of lifelong learning

Framework for Midwifery Education

The International Confederation of Midwives (ICM) Essential Competencies for Midwifery Practice outline the minimum set of knowledge, skills and professional behaviours required by an individual to use the designation of midwife as defined by ICM when entering midwifery practice. The competencies are presented in a framework of four categories that sets out those competencies considered to be essential and that "represent those that should be an expected outcome of midwifery pre-service education". The categories of competencies according to ICM competencies for midwifery practice 2019 update are general competencies, competencies specific to pre-pregnancy and antenatal care, competencies specific to care during labour and birth and competencies specific to the ongoing care of women and newborns. Specific competencies given under each category is accompanied by a list of indicators that outline the necessary knowledge, skills and behaviours required to achieve the performance measure of the competency.[12]

Category 1: General Competencies: Competencies in this category are about the midwife's autonomy and accountabilities as a health professional, the relationships with women and other care providers and care activities that apply to all aspects of midwifery practice. All general competencies are intended to be used during any aspect of midwifery care whereas competencies in categories 2, 3, and 4 are each specific to a part of the reproductive process and must be viewed as subsets of the general competencies, not stand-alone subsets. Educational and/or training providers should ensure that the general competencies are interwoven in any curriculum. Assessment of the competencies in categories 2, 3, and 4 must include assessment of the competencies in category 1.

Category 2: Competencies specific to pre-pregnancy and antenatal care: Competencies in this category are about health assessment of the woman and fetus, promotion of health and well-being, detection of complications during pregnancy and careof women with an unintended pregnancy.

Category 3: Competencies specific to care during labour and birth: Competencies in this category are about assessment and care of women during labour thatfacilitates physiological processes and a safe birth, the immediate care of the newborn infant, and detection and management of complications in mother or infant.

Category 4: Competencies specific to the ongoing care of women and newborns: Competencies in this category address the continuing health assessment of mother and infant, health education, support for breastfeeding, detection of complications, and provision of family planning services.

ICM essential competencies for midwifery practice 2019

1. *General competencies*

1(a). Assume responsibility for own decisions and actions as an autonomous practitioner

1(b). Assume responsibility for self-care and self-development as a midwife

1(c). Appropriately delegate aspects of care and provide supervision

1(d). Use research to inform practice

1(e). Uphold fundamental human rights of individuals when providing midwifery care

1(f). Adhere to jurisdictional laws, regulatory requirements, and codes of conduct for midwifery practice

1(g). Facilitate women to make individual choices about care

1(h). Demonstrate effective interpersonal communication with women and families, health care teams, and community groups

1(i). Facilitate normal birth processes in institutional and community settings, including women's homes

1(j). Assess the health status, screen for health risks, and promote general health & well-being of women & infants

1(k). Prevent and treat common health problems related to reproduction and early life

1(l). Recognise abnormalities and complications

and institute appropriate treatment and referral

1(m). Care for women who experience physical and sexual violence and abuse

2. *Competencies specific to pre-pregnancy and antenatal care*

2(a). Provide pre-pregnancy care

2(b). Determine health status of woman

2(c). Assess fetal well-being

2(d). Monitor the progression of pregnancy

2(e). Promote and support health behaviours that improve wellbeing

2(f). Provide anticipatory guidance related to pregnancy, birth, breastfeeding, parenthood, and change in the family

2(g). Detect, stabilse, manage, and refer women with complicated pregnancies

2(h). Assist the woman and her family to plan for an appropriate place of birth

2(i). Provide care to women with unintended or mistimed pregnancy

3. *Competencies specific to care during labour and birth*

3(a). Promote physiologic labour and birth

3(b). Manage a safe spontaneous vaginal birth; prevent, detect and stabilise complications

3(c). Provide care of the newborn immediately after birth

4. *Competencies specific to the ongoing care of women and newborns*

4(a). Provide postnatal care for the healthy woman

4(b). Provide care to healthy newborn infant

4(c). Promote and support breastfeeding

4(d). Detect, treat, and stabilise postnatal complications in woman and refer as necessary

4(e). Detect, stabilise, and manage health problems in newborn infant and refer if necessary

4(f). Provide family planning services

The competencies framed by ICM can be used as a framework to guide midwifery education. Midwifery educators are responsible for revising the curricula and designing learning activities activitiesthat will enable midwifery students to learn the knowledge and developthe skills and behaviours that are integrated within each competency.

Opportunities for Midwifery Service Initiative in India

Traditional midwives or birth attendants were the back born of midwifery care in India for centuries as in many other countries. They were trained by the elders in their community to learn skill for assisting women in labour. The practices of those traditional midwives varied and often it was associated with many myths and malpractices. Later, thye were given training to conduct safe deliveries and designated as trained dais to assist birth in rural areas where health care facilities were inadequate. With the strengthening of health care system deliveries became institutionalised and gradually proportion of birth attended by doctors and nurses increased. Now obstetrical model of care is followed in delivering maternity care services in India.

The progressive changes in the delivery of maternal health services has contributed to improvement in many of the maternal child health indicators. But it also resulted in over medicalization of birth. The proportion of birth by caesarean section, episiotomies, epidural analgesia and other pharmacological agents are on the raise. India is paced as the the leading example among a growing number of countries where there is simultaneous overuse and underuse of interventions.[7] In addition to this, disrespect and abuse are also prevalent. A cross-sectional study conducted among rural women of a northern state of India revealed that the frequency of any abusive behavior was 28.8%. The reported abuses were non-dignified care including verbal abuse and derogatory insults related to the woman's sexual behavior (19.3%); physical abuse (13.4%); neglect or abandonment (8.5%); non-confidential care (5.6%); and feeling humiliation due to lack of cleanliness bordering on filth (4.9%).[13] Bivariate analysis using Chi-square tests showed statistically significant associations between abuse and provider type, facility type, and presence of complications during delivery.

Midwifery service initiative aims a for paradigm shift in maternity care providing a more positive birth experience to women. It will shift the focus of maternity care from an illness perspective wellness perspective and give women a more positive birth experience. The midwifery care initiative is an opportunity for the nurse-midwives to widen the scope of their practice. The present obstetrical model

of care limits independent use of midwifery skill by nurses which in turn has resulted in decreasing competencies of nurse-midwives. The midwifery care initiative provides opportunity for improving the competencies of midwives as the programme necessitate the training to be competency based. Nurse practitioners in midwifery will be in a better position for implementing evidence based practice and conducting more need based research. Thus it is also an opportunity for improving the quality of maternity services, providing positive birth experince and improved maternal and newborn outcomes.

Challenges for Midwifery Service Initiative in India

The introduction and re-introduction of midwifery service will have to face many challenges in the Indian context which need to be addressed for the successful implementation and sustenance of the programme.

Stigma associated with the term 'midwife': The concept of midwife is associated with the image of local dais and birth attendants, not only among public but also among medical health professionals. They are considered to be with persons with inadequate training and competencies to meet the needs of labouring women. Addressing the stigma associated with the term midwife will be a challenge to be addressed for the better acceptance of the services. Mass campaign initiatives to communicate the educational background, competencies, extended roles and advantages of midwifery model of care may help to promote initial acceptance. But after the implementation of services the public image and opinion will be largely influenced by the quality of services they receive and the birth experiences they get. So delivering high quality and compassionate care to meet the unique needs of women is extremely important.

Resistance from the medical professionals: Maternity care services in India is led by obstetricians and it is predominantly an obstetrical model of care. Though India has a relatively large number of midwives they attend fewer than one in six births[7] which usually happens in the remote rural areas. Moreover, the competency of the presently working nurse midwife varies. Resistance from the medical professionals may arise possibly because of lack of trust in the competency of nurse midwives as well as concern of intruding into their territory of practice. Philosophy of care also is different in obstetric and midwifery model of care.

Public attitude, awareness and misconceptions regardingbirth: As India is a land of diversity so is the attitude towards childbirth. It is influenced by religion, culture, education, socioeconomic status, area of residence and many more factors. For many women pregnancy and birth are routines of life, for some women its priority of religion, another category may view it's as completion of family at the earliest and for another category it's a beautiful period in their life which they want to live to the fullest. Registration for antenatal care is considered as handing over the responsibility of their health and birth to health care professionals. They are used to a system where doctors make decision regarding their birth. The nurse practitioners in midwifery should be equipped to meet the diverse needs of all categories of women. Addressing the misconceptions and stigma associated with and labour pain will also need to be addressed.

Trend towards medicalization of birth: National Family Health Survey (NFHS-4) reports that C-Section rates in India have increased from 8.2% in 2006 to 17.2% in 2016. There are nine States in the country that currently have State C-Section rates of over 30%. The State of Telangana has experienced an extreme shift to over-medicalisation with a 58% C-Section rate in public facilities and a 75% C-Section rate in private facilities.[4] This data shows the intensity of the problem. Medicalization of birth has gained acceptance to the level that evenwomen started demanding for caesarean birth because of fear of labour pain. Creating a positive attitude towards normal birth should be a priority action from the part of nurse-midwives.

Translating 'midwifery' into practice and defining and redefining roles: The attitude and acceptance of the midwifery practice among public as well as other health care providers will be greatly influenced by the role assumed and quality of care delivered by the midwifery practitioners. Assuming the roles coming under the scope of practice of midwifery is also important for the success of the initiative.

Role change from an interdependent professional to a practitioner: Nurse-midwives practicing in India were assuming an interdependent or dependent role with the medical professionals. There are less likely to use critical thinking skills in clinical decision making. Nurse midwifery practitioner places the challenge for role shift from interdependent professional to a practitioner which is of vital importance in the new role performance.

Competency of midwifery professionals: Though India has a large number of registered nurse midwivestheir competencies varies as they are not trained consistently as per international standards throughout the country. The competencies of the existing professionals are influenced by the institutions they are trained, practices and facilities of the parent institution, area they work and their attitude towards continuing learning. The current 18 months training envisaged by the Government of India is expected to fill this gap and ensure the competency of nurse practitioners in midwifery.

Conclusion

Midwifery practice initiative is a promising action from the government of India for the promotion of maternal and child health. It opens a wider arena for practice for the nurse midwives. It's also an opportunity for broadening the scope of practice of midwifery. Creating acceptance of the midwifery model of care among public as well as health care providers is extremely important for the success of the programme. The practitioners need to ensure their competency and update their knowledge and skill by continuing learning for the better performance of their roles. Demonstrate evidence based practices, delivering high quality care and communicating the best practices are necessary to the success of the initiative.

Reference

1. Trends in maternal mortality: 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Geneva: World Health Organization; 2019. http://documents.worldbank.org/curated/en/793971568908763231/pdf/
2. https://www.who.int/pmnch/topics/maternal/knowledge_summaries_14_midwives/en/
3. https://www.who.int/pmnch/topics/part_publications/KS14_Standalone_low.pdf?ua=1
4. https://nhm.gov.in/New_Updates_2018/NHM_Components/RMNCHA/MH/Guidelines/Guidelines_on_Midwifery_Services_in_India.pdf
5. https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=794&lid=168
6. http://rchiips.org/nfhs/pdf/NFHS4/India.pdf
7. Renfrew MJ, McFadden A, Bastos MH, et al. Midwifery and quality care: Findings from a new evidence-informed framework for maternal and newborn care. Lancet. 2014;384(9948):1129–45.
8. https://www.internationalmidwives.org/assets/files/definitions-files/2018/06/eng-philosophy-and-model-of-midwifery-care.pdf
9. Homer, CS, Friberg, IK, Dias, MA et al. The projected effect of scaling up midwifery. Lancet. 2014;384:1146–57.
10. https://www.internationalmidwives.org/
11. https://www.internationalmidwives.org/assets/files/definitions-files/2018/06/eng-definition_of_the_midwife-2017.pdf
12. https://www.internationalmidwives.org/assets/files/general-files/2019/10/icm-competencies-en-print-october-2019_final_18-oct-5db05248843e8.pdf
13. Bhattacharya S, Sundari Ravindran TK. Silent voices: institutional disrespect and abuse during delivery among women of Varanasi district, northern India. BMC Pregnancy Childbirth. 2018 Aug 20;18(1):338.