Models of maternity care: a continuity of midwifery care

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ABSTRACT

Pregnancy and birth are significant life events for women and their families and midwife supports a woman throughout pregnancy, birth and the postnatal period. So, the demand for services that are family friendly, women focused, safe and accessible is increasing. Evidence has shown that midwifery care is associated with lower cost, higher satisfaction rates among women, and less intervention. Because pregnancy and childbirth involve every part of feelings, physical and practical needs, hopes, religious and spiritual beliefs can all affect pregnancy and birth. So, model of maternity care addresses all these aspects to help give birth safely, naturally and confidently. The aim of this review is how midwives working in different model care constructed their midwifery role in order to maintain a positive work-life balance. Evidence from high income countries found such models to be a cost-efficient way to improve health outcomes, reducing medical interventions and increasing satisfaction with care.

Keywords: Child birth, Effective Maternity care, Maternity care, Models of care, Trends in maternal mortality

INTRODUCTION

The first care providers for parturient women is midwives, in this entire world. According to International confederation of midwives, “midwife is a person who has accomplished midwifery training approved in their residential country which is in accordance with the qualifications of the midwifery profession and global standards of this confederation in midwifery training”.

Childbirth represents the most painful event in women’s lifetime. Worldwide around 140 million births occur each year. The majority of vaginal births among pregnant women with no risk factor for complications, either for themselves or their babies. But the complications occur during labour are the risk of death increases and morbidity for both mother and child. Maternal deaths also consideration part of pregnancy-related life-threatening conditions are recognised to complications that arise during labour, childbirth or the immediate postpartum period, often as result of obstructed labour, haemorrhage or sepsis. Around half of all stillbirths of neonatal deaths result from complications during labour and childbirth. The load of perinatal and maternal deaths is strangely higher in middle- and low-income countries. So, improving the quality care approximately the birth time mostly in middle- and low-income countries has been recognized as the utmost impactful strategy for reducing maternal and new-born deaths and still births, proportion with antenatal or postpartum care policies.

The aim of this review article is to use effective model for maternity care and use research related to health services is to inform decisions made by services user, policy makers and health care providers.

Maternity care is one area of health services that needs strong evidence to support the way it is organised. So before selecting place of birth and a care provider, it is important to know the two main models in maternity care education and practice, termed as the midwifery model and the medical model (Figure 1).
It is based on the statement that pregnancies, labour and birth process that outcome is healthy for mothers and babies. Its efforts on exploiting the wellness of a woman and baby and recognise and treating early on medical problems, attending to the emotional, social, and spiritual aspects of pregnancy and birth.

**Strict medical model of care**

It is emphases on preventing, diagnosing, and managing the complications that can occur during pregnancy, labour, and birth. Prevention models tend to focus the use of testing, coupled with the use of medical or surgical interventions to prevent a poor outcome.\(^5\)

**Importance of maternity care models**

Maternity care models are needed because maternal health is an important aspect for the any country development in terms of increasing equity and reducing death. The wellbeing and survival of mothers is not only essential in their own right but are also central to solving large broader, developmental economic, and social challenges. In India maternal mortality rate was remarkably high in 1990 with 556 women dying during child birth per 10000 live births. Approximately, 1.38 lakh women were dying every year on account of complications related to pregnancy and child birth.

“Trends in maternal mortality: 1990 to 2015”, the target for MMR was 139 per 1,00,000 live births by the year 2015 taking a baseline of 556 per 100,000 live births in 1990. The MMR in India has declined by 68.7% and has come down from 556 in 1990 to 174 in 2015 (25 years), an average annual decline of 4.6%.\(^6\) And so many complications occur during pregnancy, child birth and post-partum period such as high blood pressure, gestational diabetes, anti-partum haemorrhage, post-partum haemorrhage, postpartum depression, infections etc. The sociologist Barbara Katz-Rothman was the first to define the difference between the medical model and midwifery model of care in 1979. The Midwives care model is basically different approach to pregnancy and childbirth than current obstetrics. The care of midwifery is exclusively nurturing, hands-on care before, during, and after birth. The midwives care model is based on the circumstances that pregnancy and birth are normal life events.

**The midwife’s model of care includes**

- To provide the individualized counselling, prenatal care and education continuous direct help during labor and delivery, and postpartum.
- To monitor the physical, psychological and social well-being of the mother throughout the pregnancy cycle.
- To identifying and referring women who require obstetrical attention and minimize technological interventions.\(^7\)

The data shows that globally, about 800 women die from pregnancy- or childbirth-related complications daily while majority occur in the first 24 hours and almost 75% of neonatal deaths occur within the first seven days of delivery. Unfortunately, in 2010, this alarming trend of mortality persists, as 287,000 women lost their lives to pregnancy and childbirth related causes. So maternity care models are helpful in childbirth and post-natal interventions which have a beneficial impact on maternal and new-born outcomes. These models will be helpful in treatment of complications and disease; attention to hygienic care; birth spacing; immunization; and maternal nutrition and advice and support of exclusive breastfeeding.\(^8\) Furthermore, exclusive breastfeeding comprises antibodies that help fight against bacteria and viruses and it plays a vital role in providing immunity to neonate.\(^9,11\) Studies also show that adapting alternative and complimentary therapies would be more beneficial in caring mothers during perinatal period, but midwives are not using in current scenario.\(^12\)

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**Figure 1: Two models in maternity care.**

- **Classic midwifery model**
- **Strict medical model of care**

**Figure 2: Different models used in maternity care.**

There are several models which used in effective maternity care (Figure 2).
Midwifery model of care

A midwifery model of care should include characteristics such as proceeding towards midwifery philosophy, professional contribution of the midwife for providing constant care, presence of midwives with special knowledge, attitudes, and skills for provision of high-quality care before childbirth until six weeks after delivery, and passing natural labor without intervention.

Midwife-led continuity of care models

Midwife-led continuity of care models emphasize continued care throughout the entire pregnancy period and labor and are presented as team midwifery models. The aim of this model is providing care to healthy women with low risk pregnancies in hospitals or the society. A study suggests that analysed the relation between the midwife-led model and maternal and neonatal health outcomes.

Traditional birth attendant, midwife, midwife and care model

This model encompasses the birth of a premature baby, all types of fetal and fetal embryonic mortalities, limits usage of topical anaesthesia as well as interventions such as amniotomy, episiotomy, labor with fewer instruments, and chance of spontaneous vaginal labor. This model has been a successful solution and empowerment of women and gives them the right to choose the method of delivery.

Midwifery teamwork or caseload midwifery

In this model the care provided will be based on the hospital’s instructions and protocols. In case further support is needed. It provides information for development and improvement of these models of care to ensure that sustainability and quality of care is provided to women and their families.

In this woman are taken care of at home by a midwife, who is supported by a small group of midwives throughout the entire period of pregnancy, labor, and the first six weeks after delivery.

One-to-one midwifery model

In this model, most midwifery cares are provided by one midwife, who is also available at the time of labor and pregnancy. One-to-one midwifery is not solo practice. An important principle of the organization of the practice is to enable individual midwives to take time off and to provide supportive structures for the midwives. It provides a continuous and personal relationship between each woman and her midwife. The organization of care and the outcomes are relevant to midwifery policy in all industrialized countries.

Traditional model of general practitioner attached community midwives

In this model, midwives work alongside general practitioners. The workload of a midwife includes taking care of families who have registered with physicians and are sometimes distributed in a wide area geographically. If required, the family doctor and not the midwife, refers the mother to a gynaecologist. Obstetric nurses (who are different from midwives or midwives) provide pregnancy care and the care immediately following labor, not at the level of decision-making, where labor is tackled by a physician.

Centring parenting mother infant dyad care model

Ideally in this model, the care during pregnancy is provided to a group of women continually. Group prenatal care involves 10 sessions throughout the entire pregnancy period. After labor, taking care of the healthy baby and tackling health problems for one year after labor is the function of this lot of midwives.

Midwifery model of care under supervision of obstetric

In the models under supervision of specialists, the philosophy of the midwifery is not clear in practice or during labor and there is no familiar midwife. The scope of activity of the midwife is determined by responsible given to women with risk factors is the same as to the women who is really suffering from the disease. In the biomedical or physician centred model midwives perform a routine job under the supervision and guidance of a specialist.

Biomedical model

American College of obstetricians and gynaecologists mostly supports this care model. In this model labor is not normal and natural process. That why this model is widely used in North America where specialists are the primary care providers during the pregnancy period for most women.

According to this model a gynaecologist should be present during labour and nurses provide care during and after labour.

Role of midwives at birth centre (Figure 3).
What to expect from a caregiver who provides the midwives model of care

- Personal attention
- Respectful treatment
- Appropriate monitoring
- Plenty of information
- Natural techniques for comfort
- Confidence in body
- A care provider who stay with women.

CONCLUSION

This review of article shows that birth centre midwives working in different model of care are able to provide their role of midwifery through balanced work life, autonomy of practices and reasonable guidelines of practices and continuity care. There is immense need of midwifery-based care to the mothers and family to uplift the status of maternity care and to promote safe normal birth practices. Midwifery model of care would help to fulfill the purpose.

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Figure 3: Role of midwives at birth centre.

DISCUSSION

Authors found in India or in rest of world that pregnant women wish a kind of choices when it comes to models of maternity care before, during and after labour. Their choice is deeply governed by childbirth safety issues as well as least governed by the physical ambiances for childbirth.

Their choice can be varying but shall be determinate, in part or full, by clinical risk assessment. Despite making significant progress in the direction of improving the maternal health, so many countries in Asia as well as Africa persist in to face high maternal mortality rates and very unsuccessful to obtain the target of decreasing the MMR up to 3/4 by the upcoming years, under millennium development Goal-5. The recent report by the World Bank, UNICEF, WHO, and UNDP have words that a major limit in approaching better quality maternal health care services at nominal prices in these countries.16

In addition, use of maternal health care services in India and across the world is directly or indirectly related with women’s demographic as well as socioeconomic status. So many studies from various countries have noticed the role of socioeconomic disadvantage, mainly at low-income levels as being a major limit in approaching better quality maternal health care.17,18