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#### **Review Article**

# Midwifery model based birthing centers in India- recent innovation in maternity care

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#### Abstract

The birth centre, a relatively recent innovation in maternity care, is becoming an increasingly popular choice for childbirth. It is a health care facility focused on providing care through the midwifery and wellness model. The birth centre model is associated with higher rates of spontaneous vaginal birth and lower rates of assisted vaginal and caesarean deliveries when compared to hospital care. This approach leads to fewer intrapartum interventions and more positive maternal outcomes.

Birth centres prioritize and respect a pregnant person's right to make informed decisions about their health care and their baby's care, based on their values and beliefs. They emphasize listening to the individual, respecting their choices, and accommodating their preferences. Birth centres also welcome the person's family, as they define it, to participate in pregnancy, childbirth, and the postpartum period. With growing awareness of natal rights, more women are demanding natural birthing experiences, and birth centres have emerged as a response to rising caesarean section rates, promoting Respectful Maternity Care.

In recent decades, India has seen the rise of many birth centres based on the midwifery model of care, supported by collaborative efforts from other health professionals. These centres promote natural deliveries, prioritize women's satisfaction and involvement in their birthing choices, and encourage family participation in the process.

Keywords: Birthing centre, Midwifery model, Recent innovation.

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#### 1. Introduction

A generation ago, caesarean sections (C-sections) were rare, and vaginal delivery was almost always the first option for childbirth. However, the past decade has seen a surge in caesarean deliveries in hospitals. The reasons for this alarming rise are varied. Some women opt for a seemingly less stressful birthing process, while others harbour fears about vaginal births. In many cases, obstetricians and hospitals have been accused of coercing women into surgical births due to convenience or profit motives. Often, patients are pushed toward a C-section citing medical reasons that may not always be accurate. Consequently, C-sections have become far more common than necessary.

Globally, concerns have been raised about this trend, and expectant mothers have begun questioning the logic of

undergoing unnecessary surgery when natural birth remains a viable option. In April 2015, the World Health Organization (WHO) issued a statement on C-section rates, emphasizing that caesarean rates above 10% at a population level are not associated with reductions in maternal and new-born mortality.<sup>2</sup>

In India, the rise in C-section deliveries has been particularly stark. Since 2008-09, the number of caesarean births in both public and private hospitals has doubled. A report published in The Print highlighted a dramatic increase of over 300% in C-sections at public hospitals and 400% at private hospitals over the last decade. According to data from the Union Ministry of Health and Family Welfare's Health Management Information System (HMIS), 14% of all births in 2018-19 were via C-section. This equates to approximately

\*Corresponding author: Jissa Donel Email: doneljis@gmail.com 1.9 million out of 13 million births in public hospitals alone.<sup>3-</sup>

In response, WHO recently released guidelines on nonclinical interventions to reduce unnecessary caesarean sections. Central to these guidelines is the need to ensure that a pregnant woman's voice is heard, her choices respected, and her needs prioritized. Birth centres offer an alternative to hospital-based childbirth. These facilities focus on care provided through the midwifery and wellness model. Freestanding and independent of hospitals, birth centres are an integral part of the health care system. They emphasize principles such as prevention, sensitivity, safety, costeffectiveness, and appropriate medical intervention. While midwifery and physiologic birth practices can occur in other settings, these principles define the exclusive model of care in birth centres.<sup>6,7</sup>

#### 1.1. Definition of birth centers

Although birth centres exist across the globe, the definition of this is not standardized. With a broad definition, birth centres are locations for birth. As described in the literature, a birth centre can be a discrete floor, a set of rooms within the hospital environment, or a freestanding facility devoted solely to low-risk perinatal care. Nearly all birth centres identify as a place of birth for low-risk women that is integrated within the health care network.<sup>8-10</sup>

The federal definition of a freestanding birth centre is "a health facility that is not a hospital or physician's office, where childbirth is planned to occur away from the pregnant woman's residence that is licensed or otherwise approved by the state to provide prenatal Labour and delivery or postpartum care and other ambulatory services that are included in the plan." The American Association of Birth Centres (AABC) further defines a free standing birth centre as "a home-like facility existing within a health care system with a program of care designed in the wellness model of pregnancy and birth."

## 1.2. Midwife led units (MLU's) v/s birth centers-significance of midwives

Midwife-led units (MLUs) are a prime example of how the midwifery model of care is being integrated into health systems to revolutionize maternal health. MLUs represent a relatively new care model in which midwives are the primary healthcare professionals for low-risk pregnancies, replacing traditional obstetrician-led medical teams. These units also create an environment where midwives can practice with greater professional autonomy, realizing their full potential in a way that traditional obstetric settings often do not allow.

#### 1.3. Types of Midwife-Led Units

MLUs are categorized into two types, both often referred to as "birth centres" in the literature:

Alongside Midwifery Units (AMUs): These units are either located within the same building or on the same site as a hospital obstetric unit. In case of complications, women can be transferred for emergency obstetric care by walking, wheelchair, or rolling bed. AMUs offer a hybrid model that combines the home-like care of midwifery with the clinical safety of hospital facilities. This approach provides bio psychosocial safety in a welcoming and supportive environment characteristic of the midwifery model of care.

Freestanding Midwifery Units (FMUs): These units are geographically separate from hospital obstetric units. Transfers for complications require ambulances or other vehicles. Research from the United States shows that freestanding birth centres provide outcomes for low-risk pregnancies that are equivalent to or better than those of hospital-based care. <sup>10</sup>

## 1.4. The role of midwives in natural birthing centers

Across the globe, midwives play a pivotal role in natural birthing centres. In India, most birthing centres follow the Midwifery Model of Care, a holistic approach that emphasizes respect for the mother's preferences, focuses on natural births, and provides continuity of care for both mother and baby. This model is gaining popularity among empowered women seeking to take control of their childbirth experiences and actively participate in the decision- making process during pregnancy, labour, birth, postpartum care, and post-birth wellness.

Midwifery-led care is an evidence-based, high-certainty strategy for improving maternity outcomes. Midwives around the world are working collectively to transform how maternity care is organized and delivered, leading to significant improvements in women's experiences and outcomes during childbirth. Maternity care encompasses all aspects of healthcare provided to women during pregnancy, childbirth, and the postpartum period.

Significant advancements are still needed to enhance maternal and newborn survival, reduce high rates of maternal and neonatal morbidity, curb over-medicalization, and ensure dignity and respect during pregnancy and childbirth. Recognizing the critical role of midwifery, the World Health Organization (WHO) declared 2020 the "Year of the Nurse and Midwife," underscoring the importance of investing in midwifery models of care. These models are essential to achieving global health goals like Universal Healthcare by 2030.

Globally, there are an estimated 1.1 million documented midwives, though many others who provide vital care to women and families remain uncounted due to data limitations. This lack of comprehensive enumeration makes it challenging to fully appreciate the reach and impact of midwifery models of care. However, existing evidence overwhelmingly supports the benefits of maternity care led by midwives as the primary

care providers. Such care yields positive outcomes for mothers and babies with no associated adverse effects.<sup>11</sup>

### 1.5. Evidence supporting midwifery care

Midwifery care for women with low-risk pregnancies is linked to several benefits such as it increased maternal satisfaction, reduced rates of unnecessary medical interventions and Addressing Inequities and Improving Health Outcomes.

Midwives often serve some of the most socially and economically vulnerable women in challenging settings, extending care beyond childbirth. Quality midwifery services improve over 50 health-related outcomes. These outcomes align closely with the Sustainable Development Goals (SDGs) and play a critical role in the realization of Universal Healthcare. It enhanced initiation and continuation rates of Breastfeeding, Early Childhood Development: Support for better early-life outcomes, As a Response to Over-Medicalization of Childbirth, Women-centred care, Choice and control for expectant mothers, Continuity of care, ensuring a seamless experience throughout pregnancy, labour, and postpartum, and Counter the culture of overmedicalization prevalent in specialized hospitals, where technological interventions and patriarchal healthcare practices often dominate. Grassroots advocacy by midwives-spurred by observed mistreatment and lack of evidence-based care in traditional obstetric settings—has fuelled the adoption of MLUs, reshaping hospital maternity practice.

## 2. Characteristics of Birth Centres 12-15

### 2.1. Midwifery model of care

Birth centre sarerootedin the Midwifery Model of Care, which differs significantly from the obstetric approach. Key features include:

Holistic and Wellness-Based: Focused on promoting health and encouraging individual responsibility for care, Midwives listen to women and respect their unique preferences.

Personalized Support: Midwives believe child birth is a natural process, empowering women and their families to create meaningful birth experiences.

Collaborative Care: Includes midwives, nurses, obstetricians, paediatricians, and other specialists, ensuring comprehensive care while preserving the mother's autonomy.

Midwives provide constant support during labour, respecting the mother's preferences for birthing positions whether standing, squatting, in a tub, or on a bed. Women are free to vocalize or express their energy during labour, with midwives and partners offering physical and emotional assistance. This contrasts sharply with conventional hospital care, where women are often left alone or subjected to impersonal protocols. The midwifery model of care fosters

confidence in natural childbirth, often eliminating the need for interventions like epidurals or Pitocin.

After birth, midwives continue supporting mothers through Breastfeeding guidance, Recovery techniques and gentle exercises, postpartum emotional support, including advice on family planning and early parenthood challenges.

## 2.2. Integrated part of the health system

Although independently operated, birth centres are integral to the healthcare system, adhering to principles such as prevention, safety, and cost-effectiveness. They offer:

**Continuity of care:** Referral or seamless transfer to hospitals when medical intervention is necessary. In some cases, midwives hold hospital privileges, ensuring uninterrupted care during transfers.

**Collaborative approach**: Midwives remain with mothers during transfers, acting as advocates and emotional support systems.

## 2.3. Focus on natural physiologic birth and demedicalization

Birth centres prioritize natural, physiological childbirth while minimizing unnecessary medical interventions. Mothers are encouraged to Eat, move freely, and use water tubs as desired & to push in positions they find comfortable, with midwives supporting and observing for any signs that may require medical attention. This approach acknowledges the mother as the best authority on her body and ensures her needs guide the birthing process.

## 2.4. Respectful maternity care and women's choices

Birth centres champion a woman's right to informed decisionmaking. Women's values and beliefs about their health and their baby's health are respected at every stage. The mother is the ultimate decision-maker, shaping her birth experience according to her preferences.

#### 2.5. Family-centered care

Family-centred care is a cornerstone of birth centres. Family members, as defined by the woman, are welcome and encouraged to participate actively in birth centres prioritize individualized care, natural birthing methods, and respect for women's autonomy. They serve as a vital, integrated element of the healthcare system while offering a family-centreed, holistic alternative to conventional obstetric care. By fostering trust, choice, and support, birth centres empower women and their families, leading to better outcomes for mothers and babies.

## 3. Advantages of giving birth at a birth centres 12-15

## 3.1. Comfortable and personalized environment

Birth centres provide a home-like atmosphere with features such as soft lighting, queen/double beds, and comfortable

furniture like rocking chairs and couches, facilities like showers, Jacuzzi tubs, and sometimes even kitchens and personalization of the room with pictures, candles, and music for a calming experience.

#### 3.2. Enhanced privacy

Birth centres guarantee private rooms for expectant mothers, unlike hospitals where semi-private rooms are often the norm unless insurance covers a private option.

## 3.2.1. Greater freedom during labour

Mothers are encouraged to move around, wear what they like, and eat light meals or snacks (except during the pushing phase). Unlike hospitals, where movement is often restricted due to continuous electronic fetal monitoring and food/drink limitations, birth centres offer a more flexible environment.

## 3.2.2. Family-centered care

Families can stay together throughout labour, delivery, and postpartum care. New-born procedures such as the first bath, vitamin K shots, and check-ups, are carried out in the same room without separating the mother and baby. Friends and family can remain present unless otherwise requested.

## 3.2.3. Shorter stay and cost efficiency

Families typically leave the birth centre 4–8 hours after birth compared to the 24–48 hours required at hospitals, reducing overall recovery time and expenses.

#### 3.2.4. Lower risk of C-section

Birth centre savoidun necessary interventions, reducing the rate of caesarean sections to approximately 6% compared to nearly 26% for low-risk women in hospitals. If a C-section is medically required, mothers are transferred to a hospital.

## 3.2.5. Immediate skin-to-skin contact

Skin-to-skin bonding is a core philosophy in birth centres, encouraging emotional connections and oxytocin release for both mother and baby. The "breast crawl" technique helps new born naturally latch onto the breast, promoting early breastfeeding success and forming essential neural connections for future feeding.

#### 3.2.6. Reduced medical interventions

Birth centres focus on the natural progression of Labour without unnecessary interventions such as Pitocin, epidurals, or continuous fetal monitoring, unless medically required. Instead, non-invasive positioning techniques are used to assist labour. Avoiding Pitocin prevents strong contractions that can decrease oxygen flow to the baby and reduce the likelihood of cesarean sections.

## 4. Services Provided at Birth Centres<sup>12-15</sup>

Preconception care: Counselling for couples planning to conceive, including discussions on lifestyle, diet, and

emotional health. Avoidance of unnecessary tests and a focus on natural conception.

Prenatal yoga: Strengthens physical, emotional, and mental preparation for childbirth. Techniques include relaxation, breathing, and pelvic floor strengthening.

Lamaze classes: Educational sessions to empower expectant parents with knowledge about pregnancy, childbirth, and parenting.

Prenatal check-ups: Routine visits to monitor the health and well-being of mother and baby.

Natural birthing: Support for the natural progression of Labour without unnecessary interventions, Focus on freedom of movement, upright birthing positions, delayed cord lamping, and baby-led breast feeding initiation.

Water births: Uses water to ease Labour and reduce pain, Promotes gentle transitions for the baby from the womb to the world, enhancing oxygen supply and reducing stress.

Vaginal birth after caesarean (VBAC): Encourages and supports low-risk mothers to attempt natural delivery post-caesarean.

Lactation support and counselling: Helps mothers overcome challenges in breastfeeding with personalized support and guidance.

Postpartum care: Immediate care post-birth, with discharge within 8 hours and follow-up visits to ensure recovery and proper care.

Referral services: Seamless transitions to hospitals or specialists if complications arise.

## 5. Global and Indian Scenario with Related to Acceptance of Birth Centres

## 5.1. Global perspectives on MLUs

In 1925, midwifery began in the U.S. with Mary Breckinridge, a nurse-midwife who founded the Frontier Nursing Service (FNS) in Kentucky. The first school for nurse-midwife certification opened in Manhattan, NY, the same year. Midwives collaborate with obstetricians under a scope of practice that includes diagnosing, treating, and prescribing. They embrace holistic care, addressing spiritual, emotional, and physical well-being with minimal medical interventions. In Japan and Europe, midwives attend 70% of births, compared to 8% in the U.S. (Lake & Epstein, 2008). Between 2004 and 2013, births in freestanding U.S. birth centres grew by 75.8% that promotes natural births with fewer interventions, improved maternal outcomes, and reduced healthcare costs. The midwifery model promotes natural, respectful maternal care, reducing interventions and improving outcomes. In India, midwife-led birthing centres gained traction in the 2010s to address gaps in highly medicalized maternity care.<sup>15</sup>

#### 5.2. Indian context

The traditional Indian approach to childbirth was community-based, involving midwives or experienced family members. Over the decades, with the rise of institutionalized medicine, especially in urban areas, medicalized childbirth became the norm, often resulting in a high rate of interventions such as C-sections and the use of pain management medications.

However, 8 countries globally began emphasizing natural births in safer environments and recognizing the benefits of midwifery-led care, India began witnessing the rise of birthing centres. While this concept has existed internationally for decades, its introduction to India is relatively new. It started gaining momentum around the early 2000s, particularly in cities with an increasingly educated population and a rising demand for personalized healthcare.

#### 5.3. Pioneering efforts and early centers in India

Birth Village (Kochi): One of the first successful midwife-led birthing centres in India, Birth Village in Kochi, Kerala, was established in 2010. The centre is known for promoting natural birth, minimizing medical intervention, and ensuring holistic maternal and infant care.

The Sanctum (Hyderabad): This midwifery-led centre, which opened in 2011, played a crucial role in demonstrating the value of birthing centres in India. The model emphasizes respectful maternity care, empowering women, and reducing unnecessary medical interventions.

Birth India Network: Formed in 2011 as a non-profit, this organization helped bridge the gap between expecting women and skilled birth attendants. The network aimed to spread awareness of birthing centres and support the philosophy of natural childbirth, as opposed to medicalized methods. While birth centres faced resistance initially—due to the strong medicalization of childbirth in India and concerns over safety—gradual acceptance has occurred in more urbanized and progressive communities.

## 5.4. Factors contributing to this acceptance include

Higher awareness and education: With more people getting access to educational materials about the benefits of natural childbirth and midwifery care, birthing centres became an attractive alternative for women who wanted more control and a family-friendly environment during delivery.

Fewer interventions: Birthing centres emphasize less invasive care, which has gained traction in regions that question over-medicalization in hospitals. Women have started questioning the rising rates of C-sections and other interventions commonly seen in obstetrician-led hospitals.

Focus on quality care and safety: Many birthing centres operate under rigorous standards, employing highly skilled and trained midwives and practitioners. While medical supervision is ensured for emergencies, the philosophy

remains centred around physiological childbirth without unnecessary interventions. The increasing number of successful and safe births in these centres is enhancing their credibility.

Celebrity endorsement: Some celebrity endorsements or personal choices for home or natural births at these centres helped shift public perceptions to ward birth centres. Famous figures and individuals opting for such models of care have sparked conversations about more personalized maternity care options.

Government support: Although government support for birthing centres remains sparse, efforts to shift towards less intervention is t models of care in certain state governments and regions are gaining ground. In some parts of India, birthing centres are starting to be integrated into public healthcare discussions, with organizations advocating for better regulatory frameworks.

### 6. Researches Related to Birth Centres

A 2015 qualitative study conducted at a Swiss hospital examined women and providers' perceptions of a proposed MLU, and the results were generally positive. Women who had previously delivered in the hospital's obstetrician-led unit were particularly interested in the normalization of childbirth that midwife-led care provided, as well as the continuity of care throughout their pregnancy and childbirth process .The midwives and obstetricians interviewed were also in favour of developing an MLU as an opportunity to bring about positive change.

The effects of MLUs in improving health outcomes has predominately based on research in high-income countries, such as England, Australia, Switzerland, Ireland, and Japan and are viewed as way to promote women's choice of place of birth and reduce unnecessary intervention in childbirth. A more limited body of research from low- and middle- income countries such as South Africa and Malawi have documented midwifery units as a means to assure women access to respectful, high-quality care although the model is not standardized. There is a critical need to

Examine MLUs in low-and middle-income countries where 99% of global maternal and neonatal deaths continue to occur. Notably, the global shift from home to facility-based care, that drove the relative success of Millennium Development Goal 5, had the unintended consequence of increasing unnecessary and costly interventions beyond

The amount needed to reduce mortality. MLUs offer a middle path by reducing the likelihood of potentially harmful interventions while providing access to higher level emergency obstetric care, a fitting option for women who enter childbirth at low risk of complications and for health systems aiming to improve the quality, costandex periences of maternity care. It is thought that AMUs can help meet the growing demand for facility-based birth and might be

particularly beneficial in settings where universal access to higher level facility-based care is limited.

A prospective cohort study of women receiving care in 79 midwifery-led birth centres in 33 US states from 2007 to 2010wasconducted.Resultsshowedthatoutof 15,574 women who planned and were eligible for birth centre birth at the onset of labour, 84% gave birth at the birth centre. Four percent were transferred to a hospital prior to birth centre admission, and 12% were transferred in Labour after admission. Regardless of where they gave birth, 93% of women had a spontaneous vaginal birth, 1% an assisted vaginal birth, and 6% a caesarean birth. Of women giving birth in the birth centre, 2.4% required transfer postpartum, whereas 2.6% of new borns were transferred after birth. Most transfers were non emergent, with 1.9% of mothers or new borns requiring emergent transfer during Labourer after birth. There were no maternal deaths. The intra partum fetal mortality rate for women admitted to the birth centre in Labour was 0.47/1000. The neonatal mortality rate was 0.40/1000 excluding anomalies. This study demonstrates the safety of the midwifery-led birth centre model of collaborative care, as well as continued low obstetric intervention rates, similar to previous studies of birth centre care. These findings are particularly remarkable in an era characterized by increases in obstetric intervention and caesarean birth nationwide. These studies demonstrated that birth centres could provide maternity care to low-risk pregnant women, who make up approximately 85% of pregnant women in the United States safely, effectively, with less resource utilization, and with a resultant high level of patient satisfaction. An integrative review of studies of birth centres published in English since 1980 was conducted.

Twenty-three quantitative sources and 9 qualitative sources describing maternal outcomes of birth centre care were reviewed and synthesized. Results showed that Outcomes for women receiving birth care were positive.

Spontaneous vaginal birth rates and perennial integrity were higher for women beginning care in a birth centre compared to women in hospital care. Rates of caesarean birth were also lower for women planning birth centre care. Transfer rates are difficult to compare across studies, but antepartum transfer rates ranged from 13% to 27.2%. Intra partum transfer at estranged from 11.6% to 37.4%, and from 11.6% to 16.5% in studies published from 2011 to 2013. Nulliparous women had higher rates of transfer than multiparous women few severe maternal

Outcomes and no maternal deaths were reported in any studies. Women were satisfied with the comprehensive, personalized care that they received from birth centres. Quantitative studies reviewed included more than 84,300 women. The heterogeneity of the studies and variations of practice limit generalization of findings. However, even with multisite studies enrolling a variety of birth centres and practice changes over time, the consistency of positive

outcomes supports this model of care. Policy makers in the United States should consider supporting the birth centre model as a means of improving maternal outcomes.

#### 7. Discussion

In India, the emergence of birthing centres reflects a growing shift toward natural childbirth, promoting maternal autonomy and reducing unnecessary medical interventions. While hospitals with obstetric care have been the standard, birthing centres offer an alternative model based on midwifery care and holistic healthcare practices. This model promotes physiologic birth, minimal medical intervention, and familycentred care. While still in the early stages, the establishment and growth of birthing centres in India signal a positive shift toward a more woman-centric model of maternity care. Although their reach remains concentrated in urban areas, the increasing demand for holistic and personalized birth experiences coupled with rising healthcare awareness is pushing the acceptance of birth centres in the country. With continued advocacy, education and development of supporting policies, birthing centres in India are poised to change the face of maternity care by offering safe, natural, and family-centred Childbirth alternatives.

#### 8. Conclusion

The emergence of birthing centres in India marks a significant shift in maternal healthcare. Birthing centres, which offer midwife-led, personalized, and often holistic care in a non-hospital setting, are increasingly being view edasan alternative to traditional hospital childbirth. Birthing centres in India have the potential to become a game-changer by addressing both maternal health gaps and the rising demand for compassionate, quality care. With proper investment, training, and integration into the broader healthcare system, they can redefine the maternity landscape.

#### 9. Source of Funding

None.

## 10. Conflict of Interest

None.

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