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# Need of integrated care model for positive childbirth experience in Indian maternity care services

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## Abstract:

**BACKGROUND:** Integrated care (IC) models are an emerging trend in healthcare reforms worldwide, especially in the maternal healthcare system. This research focuses on the scope of an integrated model for intrapartum care of women and explores the experience of birth under two intrapartum care models—biomedical and midwifery models, respectively. The term positive childbirth experience (PCE) is a concept defined by the World Health Organization (WHO) in the recommendations on intrapartum care for a PCE.

**MATERIALS AND METHOD:** This study is convinced to employ a qualitative approach to explore how birth is experienced by women under maternity healthcare services in Kerala. A semi-structured interview was conducted to tap into the lived reality of birthing of sixteen first-time mothers (primipara) aged between 20 and 30 years under these two models. Furthermore, five participants have been specifically interviewed after their vaginal birth after a C-section (VBAC) experience. To achieve a systematic cross-case thematic analysis, systematic text condensation (STC) has been employed as a data analysis method.

**RESULTS:** Four main categories were identified through the analysis as follows: (1) information and knowledge, (2) confidence, (3) quality of care, and (4) health-promoting perspective. These central themes evolved from 11 subthemes.

**CONCLUSION:** The data analysis reveals both negative and positive experiences under two care models. It emphasizes the urgent need to reframe the biomedical-focused care model and adopt an integrated approach that aligns with the global intrapartum care model proposed by the World Health Organization (WHO) in 2018 and the definition of IC mentioned in the paper.

## Keywords:

Integrated care model, intrapartum care, positive childbirth experience

## Introduction

Integrated care (IC) models are an emerging trend in healthcare reforms worldwide, especially in the maternal healthcare system. This research focuses on the scope of an integrated model for intrapartum care of women and explores the experience of birth under two intrapartum care models—biomedical and midwifery models, respectively. Hospital-based integrated maternity practices, in which midwives and obstetricians work together

to manage women in childbirth, have increasingly become a solution for quality, safe, and efficient health care.<sup>[1-3]</sup>

The term positive childbirth experience (PCE) is a concept defined by the World Health Organization (WHO) in the recommendations on intrapartum care for a PCE.<sup>[4]</sup> It defines PCE as “one that fulfills or exceeds a woman’s prior personal and sociocultural beliefs and expectations, including giving birth to a healthy baby in a clinically and psychologically safe environment with continuity of practical and emotional support from a birth companion(s)

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and kind, technically competent clinical staff.”<sup>[4]</sup> WHO’s global model identifies that increasing medicalization of childbirth processes tends to undermine the woman’s own capability to give birth and negatively impacts her childbirth experience.<sup>[5]</sup>

India, being a developing country there are plenty of unexplored areas of basic research, especially in the field of well-being, quality of life, and psychology in general. There is a dearth of literature in the area of experience related to childbirth, which limits the scope for action research. Although there have been numerous studies on PCE and its associated components, factors contributing to the PCE of Indian mothers living in a collectivistic culture have not gotten enough academic attention. Understanding a woman’s requirements, values, preferences, and anticipations during regular childbirth is beneficial for healthcare practitioners, to offer excellent care to expectant mothers.<sup>[6]</sup> There is a dearth of literature on PCE and a lack of models based on psychological dimensions to support the intrapartum care systems in India to achieve the objectives of WHO recommendations. Like PCEs, many of the concepts that are core to pregnancy, childbirth, and maternity care are psychological, yet the contribution to the knowledge base of practices for an Indian population from psychologist is not as comprehensive as might be expected.

As birth is a biopsychosocial event, an integrated birth model has a major role in ensuring the quality of care during the birthing process. Identifying the important components of PCEs of low-risk Indian mothers with respect to the intrapartum care they received during their birth may demand the need for an integrated model of PCE. This study explores a model that combines existing maternity care approaches into an integrated organizational framework, aiming to introduce a novel birth concept centered on psychological mechanisms (i.e. PCE) within public maternity care practices in the country. Hence, this research explores the need for an integrated model for intrapartum care in health services by exploring the real-life birthing encounters of mothers in two distinct settings, each adhering to distinct intrapartum care models—namely biomedical model of care and midwifery model of care, respectively.

Integrated health services delivery is an approach to strengthen people-centered health systems through the promotion of the comprehensive delivery of quality services across the life course, designed according to the multidimensional needs of the population and the individual and delivered by a coordinated multidisciplinary team of providers working across settings and levels of care. It should be effectively managed to ensure optimal outcomes and the

appropriate use of resources based on the best available evidence, with feedback loops to continuously improve performance, to tackle upstream causes of ill health, and to promote well-being through intersectoral and multisectoral actions.<sup>[5]</sup>

The data used for the specific study are gathered from Kerala, a state of India, with a high human development index. The state has set a standard for the rest of the states of India by maintaining low infant and maternal mortality rates (MMRs) and higher literacy rates. Kerala has the lowest MMR in the country (2017–19). Though Kerala could stand on the top list of the best-performing states in health compared with other states of India, there are several gaps in the existing literature agreeing on the fact that there is a growing recognition of PCE as an important birth outcome internationally.

The present research states the importance of developing an integrated model based on the global model of intrapartum care proposed by the WHO in 2018. The model of PCE unites physiological and psychological aspects of childbirth, which extends the kind of labor support that focuses more on maternal well-being, mental health, and measures that ensure PCE.

The research focuses on the need for an integrated intrapartum care model in maternal health, exploring birth experiences under different care models and emphasizing the significance of PCE as defined by the WHO. Integrated maternity practices combining midwives and obstetricians are seen as a solution for quality care.<sup>[3,7]</sup> However, there is a lack of literature on PCE in the context of Indian mothers, particularly in a collectivistic culture. The study seeks to address this gap by investigating the components of PCE among low-risk Indian mothers and proposing a demand to develop an integrated birth model centered on psychological mechanisms within public maternity care. The importance of such a model aligns with WHO recommendations and aims to improve maternal well-being and mental health. The study underscores the need for an integrated model to ensure PCEs and quality care, especially for low-risk Indian mothers, through examining birthing experiences in distinct settings and intrapartum care models.

## Material and Methods

### Study design and setting

The researcher has adopted a qualitative research design using systematic text condensation (STC) to explore how birth is experienced by women under maternity healthcare services in Kerala. There are two models that provide care for the birthing women, biomedical and midwifery models, respectively; the researcher

considered closely the experience of women who got the chance to undergo both care facilities.

### Study participants and sampling

The study was conducted in Kerala, a state of India. Kerala has very good records in health status and a 94% literacy rate compared with other states of India. There is a free-standing natural birth center run by midwives along with public and private hospitals, which follow the biomedical model of care as maternity care facilities. The participants had a C-section in their first childbirth under the biomedical model and a vaginal birth after C-section (VBAC) under the midwifery model of care. They are in the age group of 28 to 40 years, from middle- and upper-class socioeconomic background, and have an education from graduation to postgraduation. VBAC is a process in which a woman births a baby vaginally after having had a previous cesarean birth. VBAC has become a popular option for women who want to avoid having multiple cesarean sections, as it can decrease the risk of complications and shorten recovery time. The decision to pursue VBAC can be influenced by the model of maternity care being used. The midwifery model may be more supportive of VBAC as a safe and viable option, while the biomedical model may view VBAC as a higher-risk option and may be more likely to recommend repeat cesarean section. The decision to pursue VBAC should be based on the individual woman's preferences and medical needs and should be made in consultation with a healthcare provider who is supportive of the woman's autonomy and involvement in decision-making. The main data represent the participants who chose VBAC for their second birth. Furthermore, semi-structured interviews were conducted to tap into the lived reality of birthing of sixteen first-time mothers (primipara) aged between 20 and 30 years under these two models separately for cross-case analysis. To achieve a systematic cross-case thematic analysis, STC has been employed as a data analysis method.

### Data collection

The participants were a sensitive population in the context of the coronavirus disease 2019 (COVID-19) pandemic. In-depth interviews were taken with each participant who had a VBAC for their second birth. Semi-structured interviews were conducted with first-time mothers from each model of care. The initial encounter with participants was physical, but there were instances where the interview continued via video calls and phone calls. The sampling for interviews was purposive sampling. The participants were recruited by approaching the midwifery center as this is the only center as far as the researcher's knowledge, which provides an option for VBAC by licensed and recognized professionals in the state. The participants from biomedical models of care

were recruited with the help of nurses working in private and government hospitals, respectively. Each participant was approached individually, and informed consent was accessed. The interview schedules were validated by experts such as obstetrician, midwife, and psychologist before conducting the interview.

### Data analysis

STC as elaborated by Malterud (2012) was employed for data analysis. The method represents a pragmatic approach, although inspired by phenomenological ideas, and has been proven valuable for analyzing small samples.<sup>[8]</sup> The phenomenon under study is birth, but the focus is on the experience of birthing, specifically the positive aspect of the experience. STC holds an explorative ambition to present vital examples from peoples' life worlds, not to cover the full range of potential available phenomenon and helpful method for cross-case analysis with a four-stage procedure. To gain comprehensive understanding of the stages involved in the STC process, refer to figure 1, which succinctly illustrates these stages.

### Ethical considerations

This study was approved by the Research Conduct and Ethics Committee (RCEC) of Christ (deemed to be) University, Bengaluru (reference number CU: RCEC/00138/7/20). The participants were briefed on the research, and informed consent was obtained before conducting the interview. The data were anonymized for ensuring confidentiality and privacy of the participants. All ethical standards were taken into account at each stage of the research.

## Results

Four main categories were identified through the analysis as follows: (1) information and

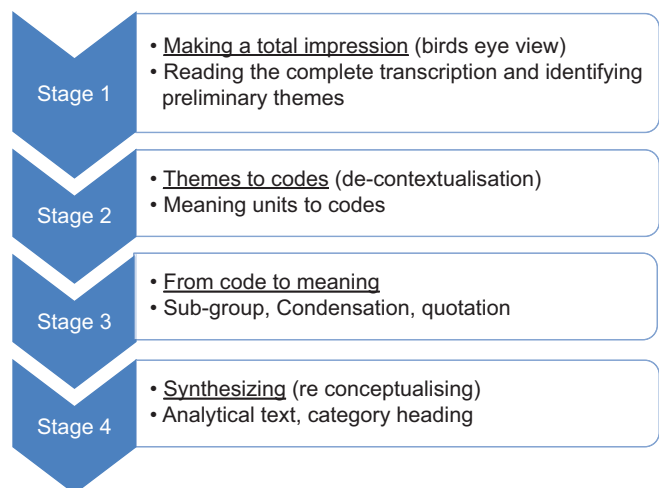


Figure 1: Systematic text condensation (STC) stages

knowledge, (2) confidence, (3) quality of care, and (4) health-promoting perspective. These central themes evolved from 11 subthemes [Refer Table 1]. These subthemes have their roots in condensed meaning units from the codes of the text. The significant components of the PCE of the participants, which emerged during the analysis through systematic text condensation, can be narrated into a coherent story grounded in data.<sup>[8]</sup> Primarily, the participants identified a significant lack of major information on birth and pregnancy, which caused a knowledge gap in their initial encounter with birth under the medical model. When they decided to opt for a VBAC after getting to know the possibility of the same, none of the obstetrics whom they had previously approached for maternity care service agreed with their suggestion. The search for an institution and expert in birth who would support the participants in exploring the possibility of VBAC made them reach out to the only legally free-standing birth center in Kerala that follows the midwifery model of care. The center provides Lamaze birth education classes for birthing couples and expects the partners to assist with the birth along with midwives. Table 1 provides a concise overview of the categories, coding and condensed meaning units. Elaboration on each of the categorical themes

and their corresponding subthemes is provided in the subsequent paragraphs.

The main findings are described as follows.

Category 1: Empowerment

Education by providing information on evidence-based practices in birthing and postpartum and information on the rights of birthing women has contributed to empowering the participants to face the challenges of their choice and go through the VBAC decision. The subthemes under the main category are awareness and information and knowledge.

(1a) Awareness

The availability of information increases the level of awareness of one’s state and conditions, especially in the healthcare system. The participants believe that awareness on the rights of a pregnant or birthing woman and the choices she has during birthing was absent during their initial birthing experience. They followed the gynecologist blindly without questioning their power position as an expert. They identified their information gaps related to childbirth and pregnancy only once they could attend Lamaze classes during antenatal care with midwives for their VBAC.

**Table 1: Text condensation and coding**

Category (theme)	Coding (subtheme)	Condensed meaning unit	
Empowerment	Awareness	Lack of awareness during the initial birth	
	Information and Knowledge	Empowerment through information and education on birthing and postpartum	
Confidence	Self-efficacy	Improving self-efficacy by helping to have a plan on how to have birth	
	Self-control	Belief on the ability to give birth by their own Self is seen as an agency of maintaining control	
	Emotional support	Feeling of support with the presence of partner as birthing companion Respecting the wishes and choices	
Quality of care	Control over decisions	Control of the birthing women’s choices and outcome Control as professional’s or institution’s position of power Provision for informed consent	
	Decision-making process	Encouragement for informed decision-making The choices in positions of birthing	
	Relationship-based care in interventions and healing	Continuity of care Difference in recovery from two births Informed choices on interventions Cord clamping Skin-to-skin contacts Breastfeeding initiatives and initial bonding with the newborn	
	Subjective feelings	Feeling of joy Feeling of achievement	
	Health-promoting perspective	Attitude of birthing couple	Desire for a vaginal birth Constructive attitude to childbirth
		Attitude of service providers	Openness to evidence-based practices Upgrading the knowledge base of professional practices to meet the need of the time
Birthing environment		Birth plan Birthing room Presence of partner during birth	

### (2a) Information and knowledge

Here, the theme information stands for information related to pregnancy and birth. Knowledge production is the by-product of processing the information one can access. The participants, after their VBAC experience, consider childbirth as not a disease condition to get cured of but a natural process and phase of life, which has to be faced with evidence-based information and knowledge regarding the entire process of pregnancy and childbirth. The possibility of getting information and knowledge was narrow at their initial birth since they blindly followed their doctors, considering them as experts in the field. The established hierarchy within the patient and doctor relationship decreased the need for providing information to the one who faces the expert.

### Category 2: Confidence

The improvement in participants' confidence level—that they can fulfill the chosen course of their action—is reflected throughout the interview when they were talking about their VBAC experience. They were anxious in the first encounter with birth. They were not educated on the procedures of birth; they were only told to get admitted on their due date, followed by giving them the first intervention, administering intravenous (IV) fluids, where they were inducing birth without the consent of the birthing women. The purpose of administering IV was unknown to the participants. This lack of agency lessens their confidence level at their first birth, resulting in the belief that they could not give birth without the intervention from the doctors. The facilitated self-efficacy and self-control during the VBAC contributed to their confidence level and ability to exert control over their motivation for a natural birth and birthing process and environment.

### (2a) Self-Efficacy

The participants had a chance to have a clear-cut plan for their birthing without uncertainty during their VBAC. This has contributed to their belief that they can do what they want to meet the demands of childbirth and a VBAC.

### (2b) Self-Control

Their belief in their ability to give birth on their own has contributed to a sense of self-control in the event of birthing, which was believed to be a high-risk event in their first birth. They could see themselves as an agency of maintaining control via active participation in all events and collaboration with midwives during VBAC.

### (2c) Support

The support mechanisms in their two births were different, so the experience has its difference. When they compare the experiences of support mechanisms in their two births, they describe the first birth as weakly supported. The study participants had received strong support from their partners who were actively participating and assisting the birthing women and midwives during VBAC. This has helped the participants to have a feeling of safety. The participants shared that they were respected for their wishes and choices.

### Category 3: Quality of Care

The participants' experience of the overall quality of care varied in the two models. It represents how well the desired health outcomes were achieved during birth.

### (3a) Control over the decision

During VBAC in midwifery care, the birthing women felt control over their choices and outcome, states the participants. The control exerted from the institution or professionals' positions of power was minimal during VBAC compared with their initial birthing experience. Each decision on intervention was with informed consent during VBAC, which was totally lacking, during the initial birth they remember.

### (3b) Decision-making process

Encouragement for informed decision-making is evident in the experience of participants in the midwifery model of care during VBAC. At the same time, they were submissive and passive in the decision-making procedures of their previous birth. This submissiveness has a root in the fear cultured in the health services when facing a so-called expert. Per the views shared by the participants, the expert is seen as someone who has all the power to decide solely in the name of saving a life in emergencies. Women had the provision to take any comfortable positions during their birth in VBAC. The choices in positions of birthing were well respected and encouraged. Therefore, there was a chance of shared decision-making during the VBAC.

### (3c) Relationship-based care in interventions and healing

The relationship with the care seeker, the relationship with service providers, and the relationship with environmental factors are very much encompassed in experiences of VBAC of the participants. The participants have received continuity of care in VBAC, where the participants were supported by familiar caregivers during birth who were provided care during the antenatal period. The midwives actively

presented and provided care during the 10 days of the postpartum phase. The aspect of care extended toward 6 months postpartum. They were supported during the initiation of breastfeeding. The participants could return to their midwives whenever they face a challenge during their 6 months postpartum. They mention a difference in recovery from two births. The recovery from VBAC was comparatively easy. They had difficulty in recovery during the first birth. The uncomfortable and unfavorable health condition has hampered healing during the first birth. When there was a need for interventions, the scope for an informed choice was absent during their initial birth experience, and they were frightened and pressured to make decisions on the interventions, which they did not even get time to think about. Umbilical cord clamping was an essential event during the VBAC experience. The birthing partner had the opportunity to clamp the umbilical cord of the newborn after 10 minutes once the blood flow from the placenta had stopped. Clamping the cord after cord pulsation stopped was not an event during the hospital birth, where the cord was clamped within minutes after the birth had taken place. Parents had a chance to experience skin-to-skin contact soon after the newborn's birth during VBAC. The participants differently explored breastfeeding initiatives and initial bonding with the newborn during VBAC.

#### (3d) Subjective feelings

The participants had a sense of achievement after the VBAC. The feeling of joy they experienced soon after the birth was outpouring in participants' narrative of their birth event.

#### Category 4: Health-promoting perspective:

The perspective focuses on improving the quality of pregnancy experiences through enhancing health-promotive behavior by becoming aware of evidence-based practices that can contribute to the overall health of the baby and mother during pregnancy and childbirth.

#### (4a) The attitude of the couple toward birth

It is understood from the data analysis that the couples were ready to learn evidence-based practices and were open and flexible to incorporate what they found suitable for a healthy pregnancy and positive birth experience. They had a very constructive approach toward birthing, which paved the roots for their willingness to try out VBAC despite facing severe criticism and negative opinions from their significant others and forefront health service providers such as the obstetrics and gynecology department.

#### (4b) The attitude of service providers

The service providers who supported the decision to go for a VBAC were trained midwives and their birthing centers. They have a holistic approach toward birthing as opposed to the medicalized technocratic approach of the biomedical model.

## Discussion

Birth is just as much a psychological journey as a physical one.<sup>[9]</sup> The psychological aspects of physiological birth can be extracted from the women's experiences. Pregnancy and birth are a complex psychological phenomenon and explore multiple changes in women's psychological functioning, and from a psychosocial aspect, it could be considered a specific highly emotional state, which may be a potent stressor, in both normal and psychologically complicated courses of pregnancy.<sup>[10]</sup> The concept of PCE was informed by the evidence that "most women want a physiological labor and birth, and to have a sense of personal achievement and control through their involvement in decision-making, even when medical interventions are needed or wanted."<sup>[11]</sup> The story that emerges after data analysis is that the experience of the participants during the first birth, which was a C-section, was not positive (though there are studies that show that the positive experience could be achievable even with medical intervention), and they were disappointed because they felt the entire medical intervention was not convincing or out of a mutual decision. The exploration of the experience of women who had VBAC yielded the emergence of five major themes with eleven subthemes during data analysis, which are concurrent with the shreds of evidence already published in the literature. The story coming up in the data analysis is an attempt to compare two different experiences of birth undergone by single individuals. It does not compare two maternity care models. Instead, two different experiences emerged as main themes during data analysis. The participants believe that the awareness they achieved when getting the chance to learn information and be exposed to new knowledge empowered them to face the second birth. The choice of VBAC was a challenge they opted for, which frontline service providers, such as obstetricians, did not support. The second birth contributed to their self-efficacy and self-control. They felt like they were well supported throughout the journey of pregnancy and childbirth, which contributed to their overall improvement in confidence to face the challenge. The quality of care they received is much better in terms of the better decision-making process, effective relationship-based care in intervention and healing, and overall quality contributed to subjective feelings such as the feeling of joy and achievement. Another important theme that contributed to the PCE is the

health-promoting perspective reflected in the attitude of service providers and birthing couples.

The antenatal education that is offered ensures that mothers are well prepared to achieve successful childbirth by following the established procedure of the institution.<sup>[12]</sup> It is evident from the findings that the participants did not receive care that provided them with the needed information or awareness in their first birth. Individualized emotional support empowers first-time mothers during their first birth and increases their chances for a positive birth experience, even if the birth is protracted or with medical complications.<sup>[13]</sup> The need for establishing programs for childbirth education classes for nulliparous pregnant women to empower them with sufficient knowledge and engage them to practice relaxation techniques, which will, in turn, reduce their pregnancy-specific anxiety, especially that of childbirth anxiety, has already been identified by a study on Effectiveness of Childbirth Education of Nulliparous Women's Knowledge of Childbirth Preparation, Pregnancy Anxiety and Pregnancy Outcomes among Kerala population.<sup>[14]</sup> The capacity to feel in control, the strength of the body, satisfaction, and reassurance rose with a sense of empowerment in the women, and as a result, they were better able to handle any discomfort that did arise.<sup>[13]</sup>

Women who report feeling confident throughout birth have a stronger sense of control, feel more knowledgeable when making decisions, and see their childbirth as less painful and happier and confidence is associated with positive birth experiences.<sup>[15,16]</sup> The participants in this study report the experience and difference in the experience of the level of confidence. Self-efficacy, self-control, and the support are the major components that resulted in feeling of confidence in the participants. There is evidence for psychological dimensions such as self-esteem, self-efficacy, feeling of control, and subjective feelings, which contribute to experiencing birth positively.<sup>[17]</sup>

Kerala has a medical-led maternity care system in which public or private sector hospitals have strict protocols for interventions. According to the National Family Health Survey 2015–16, one-third (36%) of births were delivered by cesarean section. Emergency cesarean sections formed about 36% of them, accounting for about 13% of all births.<sup>[18]</sup> The rates of cesarean sections have surpassed the WHO's benchmark of 15%,<sup>[19]</sup> posing a significant public health issue.<sup>[20]</sup> The obstetric outcome has unfortunately been focused on medical complications more than women's experience, even at normal births. In the present times, an urgent requirement exists to decrease the prevalence of avoidable cesarean sections in our

nation, owing to the rising frequency of cesarean deliveries and preferences for invasive birthing methods.<sup>[21]</sup> Implementing education for mothers about the benefits of vaginal childbirth and drawbacks of C-sections, particularly targeting first-time mothers, can potentially lower elective cesarean section rates by shaping childbirth preferences and reducing avoidable surgeries.<sup>[22]</sup> Studies have shown the importance of offering personalized, holistic care addressing biological, emotional, and family issues, based on scientific evidence while respecting the mother's central role,<sup>[23]</sup> and women's positive and negative recollections of their birth experiences are related more to feelings and exertion of choice and control than to specific details of the birth experience.<sup>[24]</sup> The interventionist approach is not adequately sensitive to the woman's (and her family's) personal needs, values, and preferences and can weaken her own capability during childbirth and negatively impact her childbirth experience.<sup>[25]</sup> Free-standing midwifery birthing centers have little space in the maternity healthcare services in Kerala. Women-centered practice models such as midwifery model of care are available for a minority of women, and these women are more likely to be highly educated and from wealthier elite groups. Recently, the National Health Mission (NHM) of India identified a lack of trained service providers or over-medicalization of the delivery process as two major reasons for poor intrapartum care in India and NHM addressed this issue by introducing midwifery-led care units at public healthcare facilities by publishing guidelines on midwifery services in India in 2018. The guidelines recognize that midwifery care will be a cost-effective and cost-efficient model to provide quality care and reduce over-medicalization, which includes the introduction of midwifery model of care and its education, regulation, human resources, career progression, support structures, operational models, monitoring, and research priorities.<sup>[7]</sup> The initiative of NHM can bring out a transformative movement in strengthening maternal mental health and contribute to the pursuit of the third sustainable development goal—the need to equalize the importance of PCE and the well-being of women to reduce maternal deaths.

### Limitation and recommendation

There is a monopoly of biomedical model over maternity services; integration of the services may result in feasibility in strategies to operationalize the goal to achieve PCE. The notable strength of this study lay in its thorough investigation of the actual birthing encounters of mothers, aiming to comprehend the favorable memories women have of childbirth. This aligns with the provision of individualized, all-encompassing care that attends to biological, emotional, and familial aspects, grounded in scientific knowledge while

honoring the central role of the mother. Among the study's constraints was the data gathering during the pandemic when postpartum mothers are considered a vulnerable group, conducted through a single approach and focusing exclusively on mothers who voluntarily participated in the study and excluding the healthcare professionals in the field. Further studies are needed to encompass the examination of healthcare professionals' viewpoints regarding women-centered integrated models.

### Conclusion and Implication

The necessity for an integrated model of intrapartum care in health care is examined in this study. The main contention of this study is that intrapartum care in Kerala, a state of India, with a high human development index, neglects to address the significance of a psychologically safe environment during birth and that the absence of a psychological approach to ensure a PCE is one of the drawbacks of the currently dominant model of intrapartum care. The themes that emerged from the data analysis indicate aspects of negative and positive experiences under two models of care. As the predominant model of care is biomedical, there is an urgent need to reframe the practice to ensure a psychologically safe environment for birthing. The second point is that an integrated model is required, based on the global intrapartum care model suggested by the WHO in 2018 and in accordance with the definition of IC already mentioned in the paper. Reframing the current institutionalized biomedical model can be achieved by integrating the midwifery model into the existing care practices as suggested by NHM in their guideline for introducing midwifery-led care units at public healthcare facilities. This new integrated model for PCE has the scope to combine psychological and physiological elements, as it is evident from the data analysis that the midwifery model ensures care in a way that is psychologically safe for the birthing women.

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Nil.

### Conflicts of interest

There are no conflicts of interest.

### References

1. Angelini DJ, O'Brien B, Singer J, Coustan DR. Midwifery and obstetrics. Twenty years of collaborative academic practice. *Obstet Gynecol Clin North Am* 2012;39:335-46.
2. Beasley S, Ford N, Tracy SK, Welsh AW. Collaboration in maternity care is achievable and practical. *Aust N Z J Obstet Gynaecol* 2012;52:576-81.
3. Shamian J. Interprofessional collaboration, the only way to save every woman and every child. *Lancet* 2014;384:e41-2. doi: 10.1016/S0140-6736(14)60858-8.
4. World Health Organization. Intrapartum care for a positive childbirth experience. 2018.
5. World Health Organization (WHO/OMS). Integrated care models: An overview. Health Services Delivery Programme. 2016. p. 31.
6. Iravani M, Zarean E, Janghorbani M, Bahrami M. Women's needs and expectations during normal labor and delivery. *J Educ Health Promot* 2015;4:6.
7. MoHFW. Guidelines on MIDWIFERY SERVICES IN INDIA. Government of India. 2018. p. 64. Available from: [https://nhm.gov.in/New\\_Updates\\_2018/NHM\\_Components/RMNCHA/MH/Guidelines/Guidelines\\_on\\_Midwifery\\_Services\\_in\\_India.pdf](https://nhm.gov.in/New_Updates_2018/NHM_Components/RMNCHA/MH/Guidelines/Guidelines_on_Midwifery_Services_in_India.pdf)
8. Malterud K. Systematic text condensation: A strategy for qualitative analysis. *Scand J Public Health* 2012;40:795-805.
9. Olza I, Leahy-Warren P, Benyamini Y, Kazmierczak M, Karlsdottir SI, Spyridou A, *et al.* Women's psychological experiences of physiological childbirth: A meta-synthesis. *BMJ Open* 2018;8:e020347. doi: 10.1136/bmjopen-2017-020347.
10. Bjelica A, Cetkovic N, Trninic-Pjevic A, Mladenovic-Segedi L. The phenomenon of pregnancy-A psychological view. *Ginek Pol* 2018;89:102-6.
11. Oladapo OT, Tunçalp Ö, Bonet M, Lawrie TA, Portela A, Downe S, *et al.* WHO model of intrapartum care for a positive childbirth experience: Transforming care of women and babies for improved health and wellbeing. *BJOG* 2018;125:918-22.
12. Renkert S, Nutbeam D. Opportunities to improve maternal health literacy through antenatal education: An exploratory study. *Health Promot Int* 2001;16:381-8.
13. Nilsson L, Thorsell T, Hertfelt Wahn E, Ekström A. Factors influencing positive birth experiences of first-time mothers. *Nurs Res Pract* 2013;2013:1-6.
14. Kalayil Madhavanprabhakaran G, Sheila D'Souza M, Nairy K. Effectiveness of childbirth education on nulliparous women's knowledge of childbirth preparation, pregnancy anxiety and pregnancy outcomes. *Nurs Midwifery Stud* 2016;6(1): 1-10.
15. Lowe NK. Maternal confidence in coping with labor. A self-efficacy concept. *J Obstet Gynecol Neonatal Nurs* 1991;20:457-63.
16. Crowe K, von Baeyer C. Predictors of a positive childbirth experience. *Birth* 1989;16:59-63.
17. Baker SR, Choi PYL, Henshaw CA, Tree J. 'I Felt as though I'd been in Jail': Women's experiences of maternity care during labour, delivery and the immediate postpartum. *Fem Psychol* 2005;15:315-42.
18. Nair MR, Varma RP. Availability, distribution and utilisation of health care services in Kerala. Thiruvananthapuram; 2021. Available from: <https://spb.kerala.gov.in/sites/default/files/inline-file/AvailDistribUtilisationHSKerala.pdf>.
19. Betran AP, Ye J, Moller AB, Souza JP, Zhang J. Trends and projections of caesarean section rates: Global and regional estimates. *BMJ Glob Health* 2021;6:e005671. doi: 10.1136/bmjgh-2021-005671.
20. Roy N, Mishra P, Mishra V, Chattu V, Varandani S, Batham S. Changing scenario of C-section delivery in India: Understanding



- the maternal health concern and its associated predictors. *J Family Med Prim Care* 2021;10:4182-8.
21. Saraf TS, Bagga RV. Cesarean section or normal vaginal delivery: A cross-sectional study of attitude of medical students. *J Educ Health Promot* 2022;11:357.
  22. Safari-Moradabadi A, Alavi A, Pormehr-Yabandeh A, Eftekhaari T, Dadipoor S. Factors involved in selecting the birth type among primiparous women. *J Educ Health Promot* 2018;7:55.
  23. Conesa Ferrer MB, Canteras Jordana M, Ballesteros Meseguer C, Carrillo García C, Martínez Roche ME. Comparative study analysing women's childbirth satisfaction and obstetric outcomes across two different models of maternity care. *BMJ Open* 2016;6:e011362. doi: 10.1136/bmjopen-2016-011362.
  24. Loomis C, Cook K. The impact of choice and control on women's childbirth experiences. *J Perinat Educ* 2012;21:158-68.
  25. Renfrew MJ, McFadden A, Bastos MH, Campbell J, Channon AA, Cheung NF, *et al.* Midwifery and quality care: Findings from a new evidence-informed framework for maternal and newborn care. *Lancet* 2014;384:1129-45.