

A Qualitative Study to Assess the Factor affecting Decision Making Process and Experience of Water Birth Among the Women Delivered at Cherish Hospital, Surat

Ms. Riya Patel Shukal¹, Ms. Kinjal Mistry²

¹Nursing Tutor, PP Savani University.

²Professor, PP Savani University.

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ABSTRACT

Introduction: Waterbirth is an alternative process for delivery. This process of delivery is safe and comforting. It is very effective procedure and it runs from 16th – 18th century. It started after 1970s -1980s and this attractive method started in India from 2007.

Aim of the study: The aim of the study was the factors affecting decision making process and experience of waterbirth among women.

Material and methods: A qualitative study with phenomenological research design was conducted on 10, women who delivered through water birth at Cherish hospital, Surat. The sample was selected through non probability sampling technique. Semi structured interview guide consists of three section such as sociodemographic data (09 items), obstetrical data (06 items) and interview questionnaires. The data were collected and analyzed by using thematic analysis.

Result: The result of the study derived three major themes included Perception, Motivation and experience of waterbirth among women who delivered at cherish hospital, Surat.

Conclusion: It concluded that health care counselling, Family support influenced in decision making process and the positive experience of women towards water birth delivery.

Keywords: Assess, Factors influencing, Decision making, Experience of water birth, among women. .

1. INTRODUCTION

Water birth is an alternative method of childbirth that involves immersion in warm water during labor, delivery, or both.¹⁸ The practice of laboring and giving birth in water has a long history across various cultures and continues in contemporary popularity as an alternative option for low-risk pregnancies.²⁴ Archaeological evidence documents the use of baths during labor and childbirth in ancient civilizations from Egypt to the Aztec empire.¹⁴ There are records in the 16th-18th centuries of European and American women choosing to birth with water assistance, aided by midwives and birthing stools for support.¹³

Although not a new concept historically, water birth has seen a resurgence of interest and practice in recent decades.¹⁸ In the modern medical era, the first clinical water births recorded in the literature took place in the Soviet Union in the early 1900s, followed by trials in France through the 1970s-1980s led by influential obstetrician Michel Odent.³⁷ Odent's theories related the attributes of heat, buoyancy, and hydrostatic pressure in water to reductions in birth stress, pain, and interventions.¹³ Based on his hospital's experiences implementing birthing pools and assessing outcomes from over 1,000 water births, Odent became an early advocate asserting the safety and benefits of the practice.¹² Research and clinical interest grew through the 1980s-1990s in Europe, Australia, and North America alongside the expansion of wholistic birthing centers catering more to mothers' preferences than the risk-averse medical establishment.²⁴ Professional guidelines evolved to support healthy women with uncomplicated pregnancies laboring and often giving birth in water under appropriate.⁴⁰

Contemporary water birth facilities and locations range from home settings to freestanding birth centers to specialized hospital wards. Women usually have options regarding immersion depth, mobility, and birthing positions along a spectrum from no water contact to full underwater delivery based on preferences and provider guidance.³⁵ Typical protocols involve maintaining water temperatures around 35-37°C to avoid overheating, having birth assistants monitor fetal heart rate with waterproof equipment, and establishing emergency plans for transferring care from tubs to beds if complications arise.⁴⁰

In terms of global access and uptake, estimates from the early 2010s suggest around 1-3% of hospital births in Western

Europe involve water immersion at some stage while precise data across countries remains limited.⁴ Among developed nations, the United Kingdom has comparably high utilization at over 12% of births occurring in water, potentially aided by progressive policies, training investments, and public advocacy campaigns.³⁴ Interest and availability of water birth options similarly appears to be gradually increasing across Central and South America as well as China and Russia but not necessarily accompanied by practice guidance or outcome monitoring.¹³ Access in the majority of less developed regions is still considered relatively rare or lacking in regulation.³⁵

India's cesarean or C-section rates have risen dramatically from around 3% in the 1990s to 10-25% of births across different states by the 2010s.²⁵ Cesarean rates crossing WHO-recommended upper thresholds of 10-15% indicate concerning overuse given lack of medical necessity for such surgical intervention in the large majority of procedures.⁵ Experts attribute the escalating reliance on cesareans in India's private healthcare sector to factors like schedules and convenience taking priority over allowing time for natural labor progression, financial incentives for surgical births, widespread perceptions that cesareans are safer, and lack of women's agency in making birthing decisions.²⁵ However, unnecessary cesareans that provide little clinical benefit create risks of short- and long-term complications for both mothers and babies while driving excess healthcare costs.³³

Global medical authorities thus urge promoting natural vaginal delivery whenever safely possible along with evaluating alternative options that can ease labor and support appropriate, healthy birthing.⁵ Water immersion presents one such alternative applied for centuries that aligns with principles prioritizing comfort and minimal interventions during the intrinsically uncertain process of labor.¹³ Professional guidelines endorse laboring in water as beneficial and low-risk for healthy women with close monitoring by trained providers.¹ Possible transition to water birth can be considered as labor progresses if women remain at low risk for complications.¹¹ While not yet extensively studied, water birthing specifically may convey neonatal transition benefits from the similar aquatic environment to the womb and merit further research.²²

OBJECTIVES OF THE PROBLEM

1. To assess the factors influencing decision making for water birth delivery among women.
2. To assess the experience of water birth technique during delivery among women.

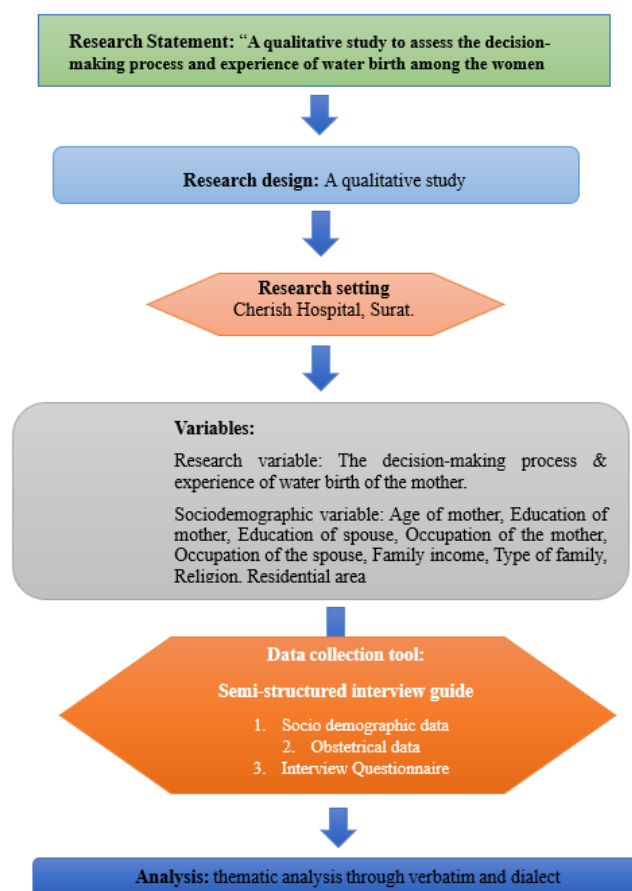


Figure 1. Schematic figure of research methodology

SECTION I: Finding related to analysis of demographic data of women who underwent for waterbirth.**Table 4.1.1. Frequency and percentage wise distribution of Age, Religion, Type of family and Residence.**
` (N=10)

SR. NO.	VARIABLE	FREQUENCY	PERCENTAGE
1.	AGE		
	18 to 23 years	00	0%
	24 to 29 years	04	40%
	30 to 35 years	06	60%
	Above 35 years	00	0%
2.	RELIGION		
	Hindu	09	90%
	Muslim	00	0%
	Christian	01	10%
	Others	00	0%
3.	TYPE OF FAMILY		
	Nuclear family	06	60%
	Joint family	04	40%
4.	RESIDENCE		
	Rural	03	30%
	Urban	07	70%

Data present in table 4.1.1 shows the frequency and percentage-wise distribution of Age of women, Religion, Type of family, and Residence.

Table 4.1.2. Frequency and percentage wise distribution of Education of Women, Education of Spouse, Occupation of women, Occupation of Spouse, Family monthly income.

` (N=10)

Sr. No.	Variables	Frequency	Percentage
1.	Education of the women		
	A. Primary education	00	0%
	B. Secondary education	00	0%
	C. Higher secondary education	00	0%
	D. Graduate or above	10	100%
2.	Education of the spouse		
	A. Primary education	00	0%
	B. Secondary education	00	0%
	C. Higher secondary education	00	0%
	D. Graduate or above	10	100%

3.	Occupation of the women		
	A. House wife	07	70%
	B. Working women	03	30%
4.	Occupation of the spouse		
	A. Job	08	80%
	B. Business	02	20%
	C. Other	00	0%
5.	Family monthly income		
	A. < 30,000/-	00	0%
	B. 31,000 – 50,000/-	03	30%
	C. 51,000 – 70,000/-	03	30%
	D. > 70,000/-	04	40%

Data presents in table 4.1.2 show the frequency and percentage wise distribution of Education of women, education of spouse, occupation of women, occupation of spouse, and family monthly income.

SECTION II: Finding related to analysis of obstetrical data of women who underwent for waterbirth.

Table 4.2.1. Frequency and percentage wise distribution of gravida, parity, gestational age at the time of delivery and status of previous delivery (if women is multipara)

(N=10)

Sr. No.	Obstetrical Data	Frequency	Percentage
1.	Gravida		
	A. Primigravida	08	80%
	B. Multigravida	02	20%
2.	Parity		
	A. Primi Para	08	80%
	B. Multi Para	02	20%
3.	Gestational age at the time of delivery		
	A. 36 Weeks	04	40%
	B. 37 Weeks	03	30%
	C. 38 Weeks	03	30%
4.	Status of previous delivery (if women is multipara)		
	A. Normal Delivery	02	20%
	B. Water birth	00	00
	A. News paper	02	20%

Data presents in the table 4.2.1 shows the frequency and percentage wise distribution of gravida, parity, gestational age at

the time of delivery and status of previous delivery.

Table 4.2.2. Frequency and percentage wise distribution of Previous knowledge regarding waterbirth delivery and Source of knowledge. (N=10)

SR. No.	Variables	Frequency	Percentage
1.	Do you have previous knowledge regarding water birth delivery		
	A. Yes	08	80%
	B. No	02	20%
2.	If yes then, source of knowledge		
	A. Family Friend		
	B. Social media	02	20%
	C. Healthcare personal	01	10%
	D. News paper	03	30%
		02	20%

Data presents in the table 4.2.1 shows the frequency and percentage wise distribution of do women have previous knowledge regarding waterbirth delivery and if yes, then source of knowledge.

TABLE 4.3.1 Thematic data analysis about Waterbirth Perception

Sr. No.	Theme	Subtheme	Coding
1.	Perception	Innovative approach	<p>Code 1: “I had many conceptions regarding the process as it is very new technique.”</p> <p>Code 3: “some how delivery without providing any injections or medications and it’s new technique & attractive too.”</p> <p>Code 4: “interesting about the delivery which is occurs in the pool or tub.”</p> <p>Code 8: “I started searching more and more about water birth and its application in real world especially in India because it’s new technique.”</p>
		Non medicated labour	<p>Code 2: “I don’t want to use any medications also the time of my antenatal period I didn’t took any medication I wants to do this complete process without medication administration which is my preconception.”</p>
		Natural Process	<p>Code 2: “I didn’t take any medicine throughout the process, is naturally.” “I had so much less pain because of warm water, eventually I had history of menstrual pain and i am dealing the pain with hot water bag so for me it’s really</p>

Sr. No.	Theme	Subtheme	Coding
			beneficial.” Code 5: “it’s natural process of the delivery which is not harmful for women and also for the baby” Code 6: “I firmly believe in nature and natural ways of curing and healing things” “, I believed that water birthing is a great option.”
		Painless and Relaxing	Code 3: “warm water can relax the body and pain too then some how delivery without providing any injections or medications and it’s attractive too.” Code 4: “Like it’s having lack of pain and relaxing procedure and interesting about the delivery which is occurs in the pool or tub.” Code 7: “In that only warm water was used so it was providing pain relief during the labour pain.” Code 9: “Positive conceptions is that in this delivery warm water is used so it will be more relaxing for my body and it has helped me to feel comfortable and relaxing in that stage also.” Code 10: “the warm water provided such comfort during labour and it is felt like hot water massage to full body.”
		Frightened experience	Code 1: “I feel like it may lead to some kind of genital infection I mean we never know, the water that they use during the process is clean or not or it may lead to infection in me or in my baby so I kind of feel sceptical about it.” Code 2: “I had fear if baby felt cold or well being of the baby. It may also concern about the hygiene of the water.” Code 5: “I scared because some of the cases baby may have respiratory distress.” Code 8: “I had the positive preconception but also some risk concerns.” “the water birth can also cause infection for the babies and it is not the guaranty that water is always sterile there may have many microorganisms. Among all these there might risk of water contamination by feces and vaginal discharge”

Table no. 4.3.1 represents the answers given by the participants about perception based on preconceived knowledge from

various sources regarding water birth delivery. The most of the women shown that positive perception like innovative approach, nonmedicated labour, natural process, painless & relaxing; however, they also exhibited frightened experience with positive aspects.

1. Perception:

- **Innovative Approach:** Participants expressed about water birth as an innovative and unique approach to childbirth. Delivery in the pool or tub attracted the participants to do waterbirth.
- **Non-Medicated Labor:** Some participants expressed a desire to avoid medication during labor, opting for a non-medicated approach to childbirth. Hence, their preference for a medication-free labor experience motivated to do waterbirth.
- **Natural Process:** Participants emphasized the natural aspect of water birth, with their beliefs in natural healing and natural childbirth methods, which reflect participants' trust in the natural process of water birth and its perceived benefits for both women and baby.
- **Painless and Relaxing Experience:** Participants described water birth as a painless and relaxing experience, the use of warm water helps to relieve pain and the absence of medication. Here, participants' positive perception with pain relief and relaxation during water birth, likening it to hot water therapy.
- **Frightened Experience:** Despite positive perceptions, some participants expressed concerns and fears about water birth, particularly regarding the risk of infection for themselves and their babies. They worried about the cleanliness of the water, potential risks of infection, and fears related to the baby's well-being during water birth.

Table 4.3.2 Thematic analysis of Factors Affecting Decision Making

Sr. No.	Theme	Subtheme	Coding
1.	Motivation	Health care counselling	<p>Code 1: “My consulted advised me to do Water Birthing, after that I tried searching about it online. At first, the thought of it was really fascinating to me. I observed that the lady who was giving birth through water birthing was calmly giving the birth.”</p> <p>Code 4: “when I visited to her hospital I asked Dimple mam about the water birth and she gave me the satisfactory information about the water birth.”</p> <p>Code 8: “its all because of dimple ma’am who explained me each and every thing and also clears all my doubts and concerns.”</p>
		Family influence	<p>Code 2: “I wants natural birth, then I found about waterbirth and my friend suggested this hospital to me.”</p> <p>Code 7: “My cousin sister provided guidance regarding waterbirth delivery then after she suggested for hospital visit.”</p> <p>Code 10: “my husband motivated me a lot to go for waterbirth that had also increased my interest is about water birth.”</p>
		Inspirational story	<p>Code 6: “There was a beautiful story from a small village woman who had gone for water birthing and there was</p>

Sr. No.	Theme	Subtheme	Coding
			<p>also mentioned the benefits of water birthing as compared to other methods like normal delivery and caesarean delivery. Which attracted me the most.”</p> <p>Code 8: “I was watching my favourite movie genre that is obviously south movies where in one movie I saw this water birthing process for the first time which increases my curiosity to search more about the same”</p> <p>Code 9: “I read one inspiring story related to water birth and that story has increased my interest is developed about water birth”</p>
		Article Impact	<p>Code 3: “I found about a article I think Immersion of water I guess I forgot but yes from that article my interest is developed about water birth”</p> <p>Code 5: “I read it from the news paper that Kalki Kochechlin also gone through with this process so I am the person who loves to watch Bollywood and this incident inspired me specially to do water birth.”</p> <p>Code 6: “I found very interesting article regarding the same and from there, I got to know about water birthing.”</p>

Table no. 4.3.2 represents the answers given by the participants i.e. motivation regarding water birth delivery. The motivating factor of the most of the women like Health care counselling, family influence, inspirational story and impactful article.

1. Motivation:

- **Health Care Consulting:** Participants cited healthcare providers' recommendations and consultations as a significant motivator for considering water birth.
- **Family Influence:** Family members, including spouses, friends, and relatives, played a role in motivating participants to explore water birth as a childbirth option. Their recommendations and guidance from family members along with health care counselling one of the important factors to influenced participants decisions to consider water birth and seek care at this hospital.
- **Inspirational Stories:** Participants were inspired by stories of women who had undergone water birth experiences. Their inspirational stories shared by movies, newspaper or articles in increasing participants' interest and curiosity about water birth and its perceived benefits.
- **Article Impact:** Participants were motivated to explore water birth after reading articles or news reports highlighting the experiences of celebrities or individuals who had chosen water birth.

Table 4.3.3 Thematic analysis for Experience of Waterbirth

Sr. No.	Theme	Subtheme	Coding
1.	Experience of labour	Enjoyable and mesmerising experience	Code 2: “It was great feeling I ever had. That I cannot describe in words but it was amazing.”

Sr. No.	Theme	Subtheme	Coding
			<p>Code 5: “It’s so joyful to me because of I had very less pain, and my husband also enjoy this journey with me for me the biggest supporter is Dr. Dimple she supported me every time”</p> <p>“It was so grateful to choose water birthing.”</p> <p>Code 7: “Before delivery everyone told me this is risky procedure but my family member and Dr. Dimple always supported me at that time.” “my husband was excited regarding water birth delivery.”</p> <p>Code 8: “the process was very soothing and relaxing with the help of Dr. Dimple as she conducted water birth very nicely, as soon as my labour pain started, she immersed me in warm water tub which was equal to my body temperature.”</p> <p>Code 9: “oh my god it’s so relaxing and comfortable when I were in the tub I’m feeling like massage to my Back and whole body even I had no complains of the pain and I delivered baby a baby Boy.”</p> <p>Code 10: “the experience is like everything was safe and hygienic as compare to hospital setting . Overall, it was a smooth and beautiful experience.”</p>
		Effortless	<p>Code 1: “The volume of water helped me to reduce pain & it induced the soothing effect up to great extent. It also made my contractions & relaxations easy to bear, the transition of my baby from my body to the water tub was pretty smooth as the environment inside the womb also consisted of fluid. The room was comfortable, the water was not too cold, not too hot. Overall I can say it was less painful experience.”</p>
		Painless and relaxing	<p>Code 2: “I had pain but I was in warm water tub it was feel so relaxing and I had support of Dr. Dimple and my husband.”</p> <p>Code 3: “uff it’s so relaxing when I were in the tub even I had no complains of the pain and I delivered baby very easily I thought he is my second child that’s why there was no pain.”</p> <p>Code 4: “when I sat on the tub I felt so</p>

Sr. No.	Theme	Subtheme	Coding
			<p>much relaxation compared to the previous pain and I also felt comfortable, my husband were also present in the room and he also become my strength.”</p> <p>Code 6: “the process was very soothing and relaxing with the help of Dr. Dimple as she conducted water birth very nicely”</p> <p>Code 7: “: I had pain but it was less pain because of it was warm water used that way I feel relaxed.”</p>
2.	Women’s Health Experience	Relex and become emotional	<p>Code 1: “the water was very relaxing to my muscles, I was able to interact with my new born and my husband & other close relative. I was fully conscious about my sense. Overall, it was very overwhelming experience.”</p> <p>Code 2: “I really enjoyed my birth and when baby delivered Dimple mam take the baby immediately and gave her to me. Then I feed the baby first.”</p> <p>Code 5: “I felt so relaxing there me and baby. I started to feed the baby immediate after birth.”</p> <p>Code 6: “I felt relaxed and warmth with my newborn. I didn’t feel any difficulty I was completely fine.”</p> <p>Code 7: “I felt better”</p> <p>Code 9: “I felt amazing” “I didn’t feel anything I were completely fine.”</p> <p>Code 10: “No I didn’t feel anything I were completely fine.”</p>
		Feel blessed	<p>Code 2: “the best part is everyone said to me that it’s difficult to feed the baby after birth but in my case, it was so easy to me also and I felt my baby also.”</p> <p>Code 3: “I felt amazing my family is now completed with a beautiful daughter a cute son and loving husband.”</p> <p>Code 4: “I felt completely relaxing because baby is now with me I can see her, I can smell her it’s completely fruitful procedure to me.”</p> <p>Code 8: “I felt like I gave birth to an angel I my self felt complete now.”</p>

Sr. No.	Theme	Subtheme	Coding
3.	Baby's Health Experience	Healthy	<p>Code 1: "My baby was fully fit healthy after the labour process; the sister noted the time of the birth she told me gender of the baby and later on she handed the baby to me. I started breast feeding after that. So, everything after that was alright."</p> <p>Code 2: "She is very fine after birth and she is also very healthy."</p> <p>Code 3: "He is also fine and healthy & yeah, he started feeding within sometimes after birth."</p> <p>Code 4: "She is completely fine and also she started breast feeding immediately. She didn't even feel any difficulty. She also passed the stool even after birth."</p> <p>Code 5: "He had no any difficulty but he didn't suck immediate after birth. I thought when we shifted in room later on he started sucking."</p> <p>Code 6: "She is also healthy and active."</p> <p>Code 7: "He was not in water for long time I think in a second Dimple mam took her out of the water and gave him to me for feeding. And he started feeding immediately."</p> <p>Code 8: "She is very healthy and super cute blessed to have daughter."</p> <p>Code 9: "He is also fine and healthy & yeah, he started feeding within 45 minutes after birth."</p> <p>Code 10: "she is completely fine & adorable."</p>

Table no. 4.3.3 presents thematic analysis of the experiences of labour during water birth, women's health experience and baby's health experience categorized into sub themes such as enjoyable and mesmerizing experience, effortless labour, and painless and relaxing experience for labour during water birth, for women's health experience subtheme includes relax and become emotional and feel blessed, baby's health experience including subtheme of Healthy.

1. Experienced of labour:

- Enjoyable and Mesmerizing Experience: Participants described their experience of labor during water birth as enjoyable, amazing, and grateful. They expressed feelings of joy, gratitude, and appreciation for the supportive environment provided by healthcare professionals and family members, particularly Dr. Dimple. Participants also highlighted the soothing and relaxing nature of water birth, emphasizing the comfort and safety they felt. Overall, they described their experience as smooth, beautiful, and hygienic, positive impact of water birth on their overall birthing experience.
- Effortless Labor: Participants also reported that labor during water birth was effortless and less painful compared to other methods. They described the supportive environment provided by warm water helped them relax and cope with contractions more easily. Participants appreciated the smooth transition of their babies from their bodies to the

water tub, emphasizing the comfort and ease of the birthing process. Overall, they described their labor experience as less painful and more comfortable due to the soothing effects of water immersion.

- **Painless and Relaxing Experience:** Participants described their labor as painless and relaxing during water birth, the comfort and relaxation to the warm water birth and support from healthcare providers and family members. They reported feeling significantly less pain and discomfort compared to previous experiences. Participants appreciated the supportive presence of their partners and healthcare providers, which further enhanced their sense of relaxation and comfort during labor. Overall, they described their experience as soothing, relaxing, and less painful due to the benefits of water birth.

2. Women's health experience:

- **Relax and Become Emotional:** Participants described feeling relaxed and emotionally overwhelmed during water birth. They emphasized the soothing effects of water on their muscles and the also get opportunity to interact with their newborns immediately. Participants reported feeling fully conscious. Overall, they described feeling relaxed, warm, and emotionally connected to their newborns, the positive impact of water birth on their well-being.
- **Feel Blessed:** Participants expressed feelings of gratitude and blessing following water birth. They appreciated the ease of feeding their babies after birth and the completeness they felt in their family. Participants described the presence of their newborns as a fruit of the birthing process, emphasizing the sense of completeness of family. Overall, they described feeling blessed and complete after water birth.

Interviewer's observation: The interviewer observed that, after the session all participants conveyed that they had the positive experience towards the water birth delivery.

2. DISCUSSION

The present study was conducted with the aim of to assess the factors influencing decision making process and experience of water birth among mother delivered at Cherish Hospital, Surat.

The analysis suggests that while there are both positive and negative perceptions surrounding water birth, many participants found the experience to be rewarding and beneficial for themselves and their babies. Motivations stemmed from a combination of medical advice, family support, media influence, and personal research. Overall, water birth was associated with positive experiences and favorable health outcomes for both mothers and babies in the analyzed data.

According to a study conducted by Cynthia D. Fair., et al in March 2020, which investigated decision-making process of women who plan for water birth in southeastern city, United States, it has same study design and sample selection techniques in the present study. Results state that majority were positive about their experience and indicated they felt empowered, even if they were unable to give birth in the water, and encouraged other women to consider waterbirth. Most indicated they wanted to have a waterbirth in the future. Whereas the present study women revealed that women had positive perception about waterbirth like innovative approach, natural birth, non-medicated labour, painless and relaxing also women were concerned about the hygienic and healthy child birth.

3. CONCLUSION

The conclusion of the following research study can be drawn from the findings that decision making process of mother depends upon healthcare counselling, family influence, Article impactful and the experience of waterbirth, all the women had positive experience regarding waterbirth technique, they didn't find any kind of difficulty during labour.they delivered healthy and active baby

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