



## Effect of Painless Delivery on the Mental Well-Being of the Mother

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### Declaration

#### Authors' Contribution

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### ABSTRACT

**Background:** Childbirth is a pivotal life event with profound emotional, psychological, and physical significance. Intense labour pain, however, can overshadow this experience and cause lasting emotional distress. Epidural analgesia, or painless delivery, has transformed obstetric care by alleviating pain and helping mothers remain calm and emotionally stable. Despite global recognition of its psychological benefits, use in Pakistan is limited due to cultural norms, misconceptions, financial constraints, and inadequate healthcare infrastructure. Maternal mental wellbeing is critical for postpartum recovery and mother-infant bonding, making the impact of painless delivery an important area of study. **Objective:** This study examines the effect of painless delivery on maternal psychological wellbeing, focusing on anxiety, fear, satisfaction, and emotional recovery. It also explores cultural beliefs, misconceptions, and systemic barriers influencing acceptance in Pakistan. **Methods:** The study was carried out in six months in the obstetrics department at the PUMHS Hospital, Nawabshah as a cross sectional study. Three hundred mothers between 20-40 years of age who recently gave birth within six months were selected through purposive sampling. Data on demographics, psychological states, childbirth experiences, perceptions of painless delivery, and barriers to its use were gathered to use organized questionnaires and in-depth interviews. Quantitative and qualitative analysis were used, descriptive statistics of findings and comparison of differences between painless and traditional deliveries were used. **Results:** Mothers who experienced epidural analgesia were less anxious and experienced less fear and were more emotionally stable, and recollected more positive experiences of birth. Women who gave birth without painkillers reported severe pain, dread, and emotional depletion. Although improvements were identified, safety myths, lack of fluent staffing, financial and cultural preconceptions that maternal strength correlates with pain tolerance curtailed acceptance. **Conclusion:** Without causing pain, it leads to better psychological health of the mother; it decreases fear during the labour, gives better confidence and helps in emotional recovery. Awareness-raising, making delivery methods more affordable, employing more trained personnel, and debunking of cultural misunderstandings would all help foster maternal mental health through safe use of painless delivery.

### INTRODUCTION

Childbirth is an utterly complicated life phenomenon that involves such strong physical experiences, as well as the equally strong emotional responses (Olza et al., 2020; Power, Williams, and Brown, 2022; McKelvin, Thomson, and Downe, 2021). Women usually go into labour with an anticipated and anxious atmosphere. Childbirth is a universally accepted fact as a natural process occurring in the human body, but the differences in the experience of labour pain are numerous between individuals (Massov, 2021). Labour pain can be overwhelming and can last too long in the life of many women to an extent that it surpasses coping power, causes immense fear, and leaves

lasting psychological scars (Isaacs and Andipatin, 2020; Olsen, Forgaard, Nordsletta, Sommerseth, and Røseth, 2022; McCoyd, Curran, and Munch, 2020). This distress can not only disrupt labour course but also disrupt the initial bonding of a mother to her new child as well as her overall postnatal health (Oyetunji and Chandra, 2020; Jelicalic-Veselinovic and Ciroviic and Ćirović and Jakovljevic and Raičević and Subotica, 2022; Molgora and Accordina, 2020; Lee and Huang, 2022).

Recent research on epidural analgesia also referred to as painless delivery has introduced the unprecedented improvement in obstetric care by offering safe and effective pain reduction in labour (Lee and Huang, 2022;

Ashagrie, Fentie, and Kassahun, 2020; Callahan, Lee, Aleshi, and George, 2023; Halliday, Nelson, and Kearns, 2022). In contrast to general anesthesia, epidural analgesia gives women the opportunity to stay awake, connected, and part of the delivery process (Ring, Landau, and Delgado, 2021; Weng, Chou, and Liaw, 2023). It lightens the physical load of suffering and gives women emotional room to be present and be in control. The studies within Europe, North America, and certain areas of East Asia have been consistently demonstrating that epidural analgesia is known to generate less traumatic birth recollections, reduced postpartum anxiety, and greater satisfaction with the birth process (Du, Bo, Xu, and Liu, 2022; Ghanbari-Homaie, Jenani, Faraji-Gavvani, Hosenzadeh, and Rezaei, 2024; Waldum et al., 2020; Handelzalts, Levy, Kr

In spite of all these advantages, painless delivery is not extensively practiced in Pakistan. There is low awareness, particularly among rural and underserved communities where mothers have been relying on informal channels to get information on childbirth (Ghiasi, 2021; Kassim, 2021). This is largely caused by cultural beliefs. Most women are informed that pain in labour is an essential ordeal of strength or that pain will yield blessings (Mathur, Morris, & McNamara, 2020; Esan, Adugbo, Fawole, and Akingbade, 2023). There are several myths, including the belief that the individual might develop paralysis, back pain that is incurable, or this may complicate the newborn. Besides, the presence of painless pregnancy delivery largely relies on resources in the form of trained anesthesiologists and well-equipped labour units which are not in a perfect distribution between the public and the privately owned institutions.

Mothers and maternal well-being often do not focus on the emotional aspect of childbirth (Wigert et al., 2020). Although maternal mortality and neonatal outcomes are thought to be the primary healthcare priority groups, it is becoming increasingly accepted that the mental state also counts. Psychological conditions that may induce postpartum depression, anxiety disorders, and negative self-perceptions encompass traumatic or excessively painful labour (Jarašiunaitė-Fedosejeva, Kniežaitė, Sakalauskienė, Ayers, Bogaerts, and Riklikienė, 2024). On the other hand, a positive and supportive labour environment has the potential to increase maternal confidence, early attachment, and healthier postpartum care (Kazemi, Beigi, and Najafabadi, 2023).

There is a need to understand the role of painless delivery in maternal psychological wellbeing in Pakistani context since the affordability, accessibility, and acceptability of epidural analgesia is determined by numerous factors, including sociocultural and systemic ones. The given study aims to cover a research gap, including the psychological consequences related to painless delivery, as well as the context in which women make this choice or do not. The study, through the experiences, fears, and expectations of women, will contribute to a deeper insight into how maternal mental health in Pakistan can be influenced by labour pain management.

## METHODOLOGY

This descriptive study was a cross-sectional study meant to explore thoroughly the psychological encounter of

women after delivery, specifically comparing the results of painless (epidural) delivery to the traditional delivery. The research design involved a six-month period carried out on the People University of the medical and health sciences Hospital in Nawabshah which is a large tertiary care hospital. The PUMHSW Institutional Review Board provided its ethical approval, and the procedures were conducted in accordance to the ethical standards which were established to keep participants safe, maintain their privacy, and allow them to make informed consent. The population in the study was mothers aged between 20 and 40 years, who had given birth within six months before the study, and had a different representation of socioeconomic backgrounds. Purposive sampling was utilized to allow inclusion of women who have made painless deliveries and those who experienced traditional deliveries in order to make valuable comparative studies. Normal women who were physically fit and without severe obstetric complications and whose medical record was not complete were included and those with severe obstetric complications excluded as it was done to ensure data integrity. The data were collected through the mixed-methods approach: structured questionnaires were used to identify demographic details, awareness levels, attitudes, and psychological variables whereas in-depth interviews helped to get a picture of the lived experiences of participants and emotional reactions. Anxiety, emotional exhaustion, perceived control, satisfaction with childbirth and postpartum mood were evaluated as measures of psychological wellbeing. The interviews were carried out within a privatized environment to maintain confidentiality and prompt anyone to give honest answers. Descriptive statistics were used to analyze quantitative data, and comparative analyses were used to determine differences between the two groups of delivery. Pearson correlation coefficient was also used to evaluate the correlation between painless delivery and psychological outcome which would give an indication of correlation between analgesic use and maternal mental wellbeing.

## RESULTS

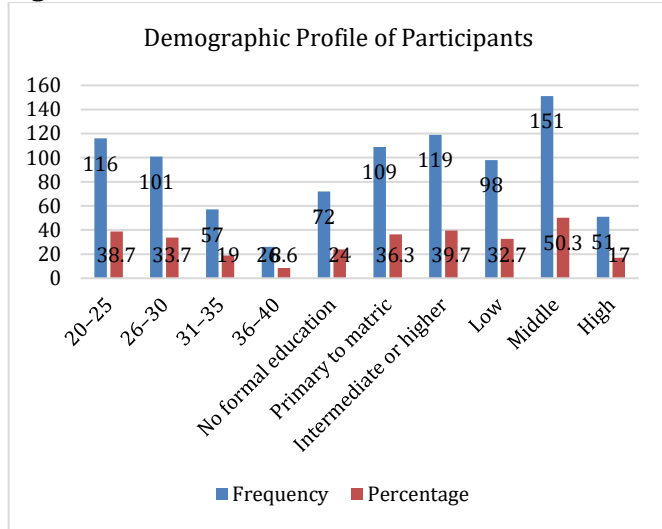
The number of mothers involved in the study was 300. They were mostly within the 20 and 30 age bracket (38.7% and 33.7% respectively). They attended different educational backgrounds and socioeconomic statuses, with 36.3 percent having their education up to matric and 39.7 percent having education to intermediate or higher levels. Fifty percent of the respondents were in the middle socioeconomic levels with 32.7 in the low plus 17 percent in the high socioeconomic levels (Table 1). This racial diversity allowed the in-depth insight into the knowledge, attitudes and experiences about the methods of childbirth.

**Table 1**  
*Demographic Profile of Participants*

Variable	Category	Frequency	Percentage
Age	20-25	116	38.7
	26-30	101	33.7
	31-35	57	19.0
	36-40	26	8.6
Education	No formal education	72	24.0
	Primary to matric	109	36.3

Socioeconomic status	Intermediate or higher	119	39.7
	Low	98	32.7
	Middle	151	50.3
	High	51	17.0

Figure 1



Epidural analgesia awareness was low; a minority of participants stated that they were aware of it before labor. Among the aware persons, information was received mainly through friends or relatives and not through the health care givers. Near-myths about the epidural analgesia safety were widespread, such as the fears of spinal injuries and the permanent impairment of mobility.

The mothers who had a painless delivery showed fewer cases of anxiety and emotional exhaustion, more perceived control, higher satisfaction with childbirth, and more consistent postpartum mood than their counterparts who delivered using traditional methods. However, on the contrary, traditional delivery was often accompanied by intense pain, affective exhaustion, and a risk of complications (Table 2).

Table 2  
Psychological Wellbeing Indicators by Delivery Method

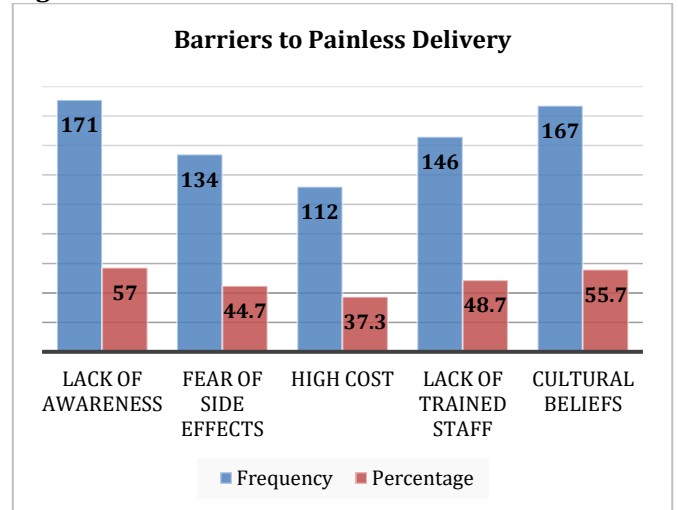
Indicator	Painless Delivery	Traditional Delivery
Anxiety after labour	Low	High
Emotional exhaustion	Low	High
Sense of control	High	Low
Satisfaction with childbirth	High	Low
Postpartum mood	Stable	Unstable

Several obstacles hindered the acceptance of painless delivery, including lack of awareness (57.0%), fear of side effects (44.7%), high cost (37.3%), insufficient trained staff (48.7%), and cultural beliefs favoring natural pain during childbirth (55.7%) (Table 3).

Table 3  
Barriers to Painless Delivery

Barrier	Frequency	Percentage
Lack of awareness	171	57.0
Fear of side effects	134	44.7
High cost	112	37.3
Lack of trained staff	146	48.7
Cultural beliefs	167	55.7

Figure 2



The correlation (Pearson) revealed significant positive correlation between painless delivery and better psychological outcomes ( $r = 0.49$ ;  $p < 0.001$ ), which indicates that epidural analgesia can have a significant contribution to maternal psychological outcomes in the course and postpartum periods.

DISCUSSION

The results of this research bring out the strong psychological advantages of painless birth among mothers. Any women who had epidural analgesics experienced less fear going into labour, a greater amount of control during the birthing process and they also looked back at their experiences more positively. These psychological benefits are in tandem with studies carried out internationally to highlight emotional benefits of labour pain relief.

One of the salient consequences is the difference in women who gave birth traditionally and those who delivered using painkillers. The conventional birth tended to leave the mother emotionally and physically exhausted and in a number of situations, the delivery was remembered as traumatic. Emotional burden of uncontrolled pain can add to premature postpartum anxiety and increase the chances of a more difficult transition to motherhood.

The research also determines various obstacles that hinder the use of painless delivery. Among the greatest influences are cultural beliefs. Most women also assume that the process of childbirth is an unavoidable aspect of child-rearing and some feel compelled by their families to shun medical interventions as perceived by family elders. The fear of complications especially paralysis and chronic back pain is also contributing even though these are very rare where epidurals are done correctly.

Availability is further limited by the untrained anesthesiologists in rural and semi urban hospitals. Women may not even be able to access the necessary services though they are ready to decide to deliver painlessly. Another relevant factor is the presence of financial barriers as not all families can afford the epidural analgesia, particularly, outside of the setting where it is subsidized.

One of the challenges that stems out of this study as a critical implication is the requirement of better antenatal education. Women are informed about the available pain relief methods, earlier in the course of pregnancy, and when information is factual, they can make better decisions. Health professionals need to thus integrate the discussions concerning epidural analgesia, its safety profile, its benefits into the standard prenatal counseling.

### LIMITATIONS

The research was based on purposive sampling that could reduce the possibility of generalization. The psychological results were self-reported, and they could be biased or have been affected by individual biases or memory

differences. The study took place at one institution, which makes it less applicable on national level.

### CONCLUSION

Painless birth has a considerable impact on emotional health of mothers in the form of lowering fear, developing stronger sense of control, increasing postpartum childbirth satisfaction, and showing better postpartum adaptation. Greater awareness, education of healthcare workers and expanded access to epidural services are critical to the increased acceptance in Pakistan. The cultural misconceptions and the cost can also be tackled to allow more women to reap the benefits of this valuable medical development.

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