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### RESEARCH ARTICLE

## KNOWLEDGE AND ATTITUDE OF SAUDI WOMEN TOWARD PAINLESS LABOR, AND MISCONCEPTION ABOUT THE RISKS AND COMPLICATIONS.

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#### Abstract

**Objective:** This study aimed to assess the knowledge and attitude of Saudi women toward painless labor, and misconception about the risks and complications.

**Method:** A cross-sectional study included 386 Saudi woman, was selected randomly. the study conducted using a questionnaire consisted of three sections; the first section was regarding demographic data, while the second section was to assess the women knowledge toward painless labor, and the third section was to assess the women attitude toward painless labor.

**Results:** 36.7 % availed epidural analgesia in their previous deliveries. 95% heard about the epidural analgesia to reduce the pain of labor. 50.1% have positive attitude towards epidural analgesia. 60.9% did not discuss available birth options with the doctor. 53.9% preferred natural childbirth as method of birth. 32.1% will never use any of the anesthetics in their next births.

**Conclusion:** There was a good level of knowledge and positive attitude towards the epidural analgesia among Saudi women, but there was low prevalence of epidural analgesia using among Saudi women.

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#### Introduction:-

Most women have expressed the most painful pain during vaginal delivery. Those who experienced have described the pain of labor with terms such as distressing, overwhelming, horrible, traumatic or excruciating during the first stage of labor and even worse during the second stage despite its short duration. (1)

Nowadays, the concept of painless labor is a hot topic with a variation on different biological, social, and ethnic characteristics in modern medicine.(2)

There are various methods to painless labor, pharmacological and non- pharmacological treatments protocols are used to relieve labor pain such as opioids, epidural analgesia, hypnosis, or acupuncture.(2)

However, the most effective method for pain less vaginal delivery is Epidural Analgesia, which is a technique of injecting a combination of local anesthetic and opioid analgesic into the lumbar epidural space.(3) It was first used in 1949, it became the gold standard after its popularity in the early 80s, and since then it's the only method that provides complete analgesia without maternal or fetal sedation. (1)

To achieve the best pregnancy outcome in proper pain management, depends on women’s understanding of the nature of labor pain.(1)

Previous studies in developing countries have shown that the issue regarding labor analgesia revolves around awareness, acceptability and availability of analgesia for labor, while Issues in high-income countries are focused on the choice of methods and complications,(4)

In this study, the aim is to assess the knowledge and attitude of Saudi women toward painless labor, and misconception about the risks and complications.

**Population & Sample of the Study:-**

The study population includes all Saudi women. A sample of (386) women was selected randomly, the next table shows their properties according to their personal data.

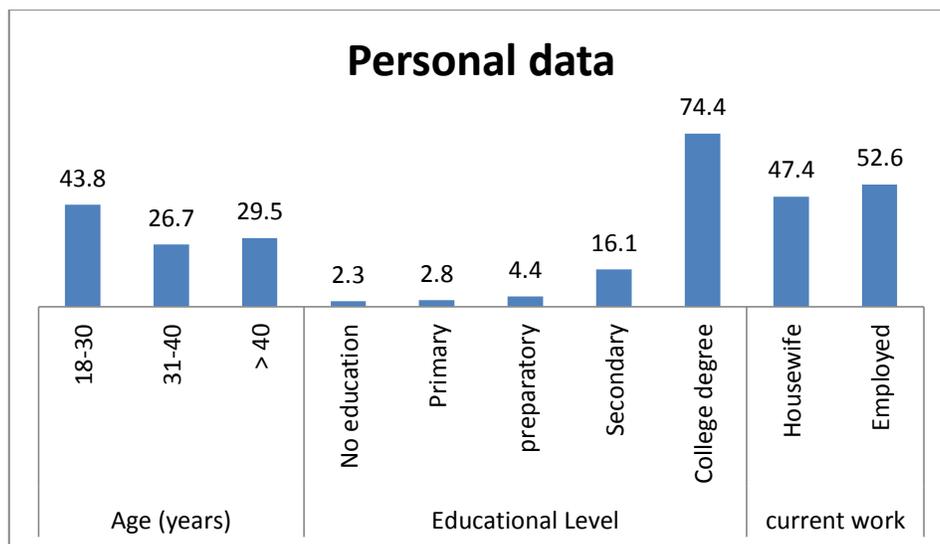
**Table 1:-** Distribution of the sample study to the demographic data.

Variable		N	%	P-value
Age (years)	18-30	169	43.8	0.000*
	31-40	103	26.7	
	> 40	114	29.5	
Educational Level	No education	9	2.3	0.000*
	Primary	11	2.8	
	preparatory	17	4.4	
	Secondary	62	16.1	
	College degree	287	74.4	
current work	Housewife	183	47.4	0.309
	Employed	203	52.6	

Chi-squared test: \*Significant at 0.01

It is clear from the previous table that almost 44% of the participants were between (18-30) years, almost 27% of them were between (31-40) years old, and almost 30% of them were more than (40) years old.

And their distribution according to educational level, almost 74% of them were college degree, almost 16% of them were secondary, almost 4% of them were preparatory, and almost 3% of them were primary. And their distribution according to current work, almost 53% of them were employed, while almost 47% of them were Housewife. The next figure concludes all the previous results.



**Figure 1:-** Distribution of the sample study to the demographic data.

**The study tool:-**

The questionnaire was the study tool, it was prepared by the researcher with the help of specialists and experts in this field, and the questionnaire includes a part of questions on socio-demographic data as age, educational level, and current work.

While the second section consisted of (19) questions to assess the knowledge and attitude of Saudi women toward painless labor, and misconception about the risks and complications.

**Statistical methods:-**

The statistical analysis program (SPSS v.22) was been used in the study in data entry and analysis, with the use of necessary statistical methods to achieve the objectives of the study. The following statistical methods were used:

1. Frequencies.
2. Percentages.
3. Graphs.
4. Chi-square test.

**Results:-**

The following table shows the participants' distribution according to the number of pregnancies and the number of births, noting that almost 69% of Saudi women have been pregnant more than once, almost 16% once pregnant, while almost 16% have never had pregnancy.

Almost 66% have already given birth more than once, almost 18% have already given birth only once, and almost 16% have never given birth.

**Table 2:-** shows the participants' distribution according to the number of pregnancies and the number of births.

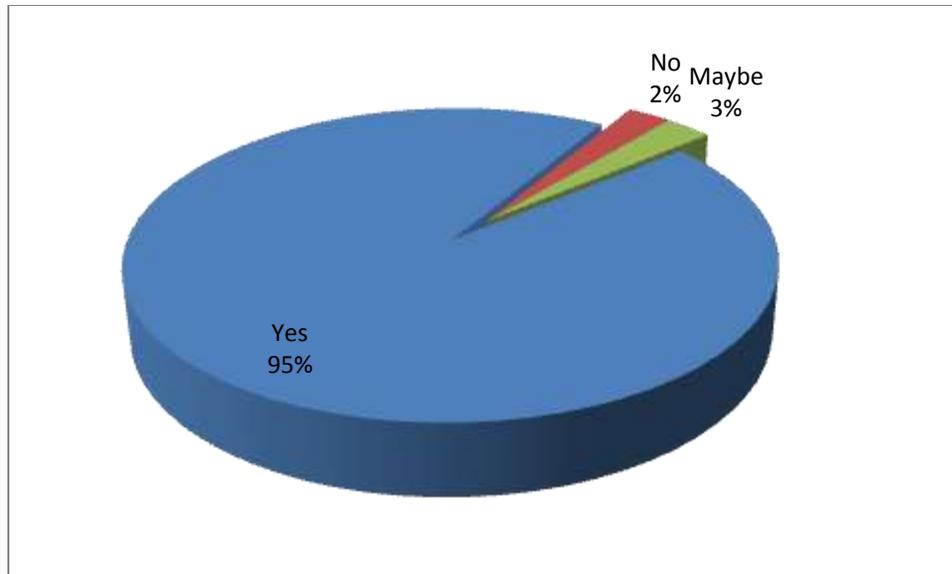
		N	%	P-value
Number of pregnancies	Once	60	15.5	0.000*
	More than once	266	68.9	
	I have never so	60	15.5	
Number of births	Once	68	17.6	0.000*
	More than once	256	66.3	
	I have never so	62	16.1	
Total		386	100.0	

The following table shows the participants' distribution according to whether they were anesthetized in their previous births, noting that almost 31% of them were anesthetized in their previous births, while almost 69% were not anesthetized in their previous births.

**Table 3:-** shows the participants' distribution according to whether they were anesthetized in their previous births.

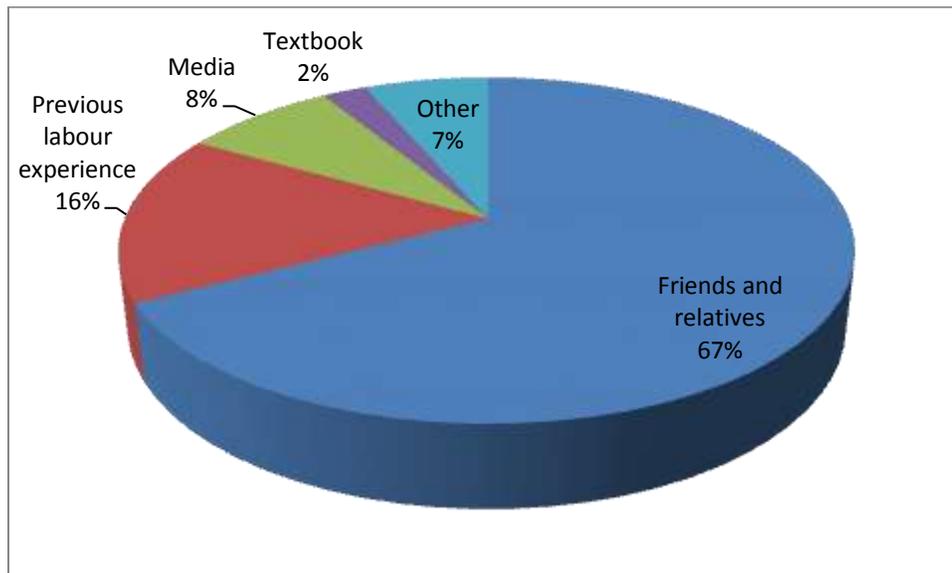
The answer	N	%
Yes	119	36.7
No	205	63.3
Total	324	100.0

The following diagram shows the participants' distribution according to their hearing about the epidural analgesia. The vast majority of Saudi women (95%) have heard about epidural analgesia.



**Figure 2:-** shows the participants’ distribution according to their hearing about epidural analgesia.

The following diagram shows the participants’ distribution according to the source of their information about epidural analgesia, where we note that almost 67% of them heard about epidural analgesia through friends and relatives, and almost 16% of them know about epidural analgesia through previous labour experience, and almost 8% of them heard about epidural analgesia Through the media, and almost 2% through books.



**Figure 3:-** shows the participants’ distribution according to the source of their information about epidural analgesia.

The following table shows the participants’ distribution according to whether they recommend pregnant women with epidural analgesia, noting that almost 50% of them advise women with epidural analgesia, while almost 50% do not recommend it.

**Table 4:-** shows the participants' distribution according to whether they recommend pregnant women with epidural analgesia.

The answer	N	%
Yes	183	50.1
No	182	49.9
Total	365	100.0

The following table shows the participants' distribution according to whether the doctor discussed the available birth options. Where we note that almost 61% of women did not have their doctor to discuss ways of birth available to them, while almost 39% of women by the doctor to discuss ways of birth available to them.

**Table 5:-** shows the participants' distribution according to whether the doctor discussed the available birth options.

The answer	N	%
Yes	151	39.1
No	235	60.9
Total	386	100.0

The following table shows the participants' distribution according to preferred mode of delivery for them, where we note that almost 54% of them prefer baby's delivery, almost 35% prefer to epidural analgesia, 7% prefer elective cs, almost 6% prefer epidural, almost 4% prefer breathing exercises.

**Table 6:-** shows the participants' distribution according to preferred mode of delivery for them,

The answer	N	%
epidural analgesia	136	35.3
Elective cs	28	7.3
Breathing exercise	14	3.6
natural childbirth	208	53.9
Total	386	100.0

The following table shows the participants' distribution according to their expectation of pain from childbirth using the epidural analgesia, where almost 41% of them expect mild pain, almost 27% expect moderate pain, almost 9% expect severe pain, while almost 24% expect no pain.

**Table 7:-** shows the participants' distribution according to their expectation of pain from childbirth using the epidural analgesia.

The answer	N	%
No pain	92	23.8
Mild	157	40.7
Moderate	103	26.7
Severe	34	8.8
Total	386	100.0

The following table shows the participants' distribution according to their view on the need to use anesthesia in childbirth, where almost 62% of them believe that anesthesia should be used in childbirth to relieve pain, almost 20% believe that anesthesia should be used in childbirth to relieve stress, and almost 17% That anesthesia should be used in childbirth to enjoy the experience, and almost 2% believe that anesthesia should be used in childbirth to increase confidence.

**Table 8:-** shows the participants' distribution according to their view on the need to use anesthesia in childbirth.

The answer	N	%
To relieve pain	238	61.7
To relieve stress	76	19.7
To feel confident	6	1.6
To enjoy the experience	66	17.1
Total	386	100.0

The following table shows the participants' distribution according to their point of view about the need not to use anesthesia in childbirth, where we note that almost 42% of them believe that you should not use anesthesia in childbirth because birth is a natural process, and almost 25% of them believe that you should not use anesthesia in childbirth because anesthesia will cause complications, and almost 21% believe that anesthesia should not be used in

childbirth because anesthesia will make labor longer, and almost 13% believe that anesthesia should not be used in childbirth because anesthesia will affect the baby.

**Table 9:-** shows the participants' distribution according to their point of view about the need not to use anesthesia in childbirth.

The answer	N	%
Labor is a natural process	161	41.7
It will make labor longer	79	20.5
Will cause complications	96	24.9
It will affect the baby	50	13.0
Total	386	100.0

The following table shows the participants' distribution according to their view on the expected effect of the use of anesthesia on the child, where we note that almost 11% of them expect that anesthesia affect the baby's breathing, and almost 6% expect that anesthesia affects bonding, and almost 2% expect That anesthesia affects breastfeeding, while almost 64% expect that there is no effect from the use of anesthesia on the child.

**Table 10:-** shows the participants' distribution according to their view on the expected effect of the use of anesthesia on the child

The answer	N	%
It will affect the baby's breathing	42	10.9
It will affect bonding	22	5.7
It will affect breast feeding	9	2.3
Other	67	17.4
There is no effect	246	63.7
Total	386	100.0

The following table shows the participants' distribution according to their view on the expected effect of the use of anesthesia on childbirth, where 30% believe that it will lead to future health problems for women, almost 28% believe it will reduce mothers ability to push, almost 22% It will stop contractions.

**Table 11:-** shows the participants' distribution according to their view on the expected effect of the use of anesthesia on childbirth.

The answer	N	%
It will stop contractions	84	21.8
Make the labor unnatural	10	2.6
Prolong the duration of birth	44	11.4
Affect the mothers ability to push	108	28.0
Increase the chances of the using peat	19	4.9
Increase Caesarean section	7	1.8
Will lead to future health problems for women	114	29.5
Total	386	100.0

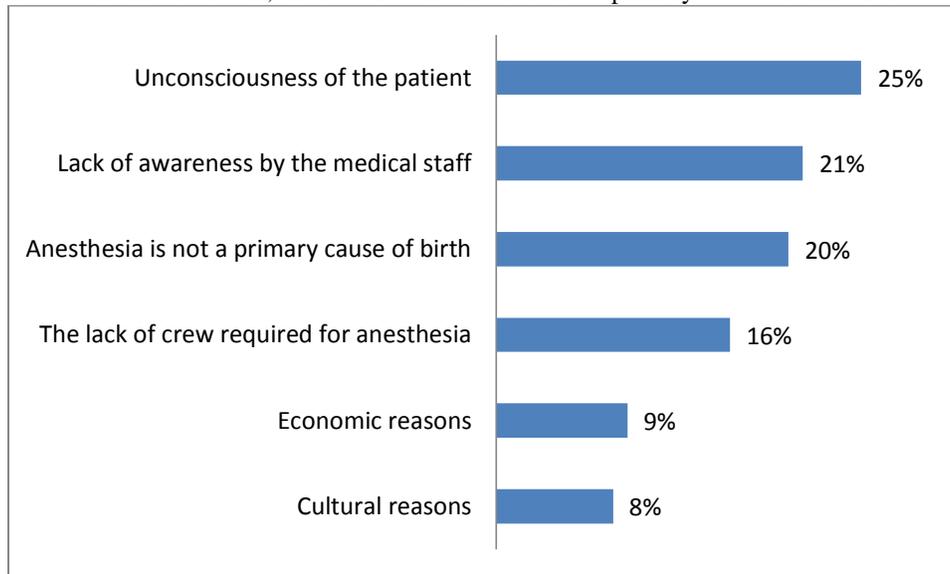
The following table shows the participants' distribution according to their view on the concerns of anesthesia related to women's health. 49% believe that it causes backache, almost 19% believe that it causes a headache, almost 14% believe that it causes numbness, almost 12% believe that it may be a bad experience, and almost 6% have fears of waking up during operation.

**Table 12:-** shows the participants' distribution according to their view on the concerns of anesthesia related to women's health

The answer	N	%
Concern about headache	72	18.7
Concern about backache	190	49.2
Concern about numbness	55	14.2
Relative bad experience	45	11.7
Don't want to awaked during operation	24	6.2

Total	386	100.0
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The following chart shows the most important reasons preventing women from taking anesthesia during childbirth from the point of view of Saudi women. The most important reasons are the lack of awareness of the patient, the lack of awareness of the medical staff, the fact that anesthesia is not a primary cause of childbirth.



**Figure 3:-** shows the most important reasons preventing women from taking anesthesia during childbirth from the point of view of Saudi women.

The following table shows the participants’ distribution according to their view of the maximum benefit of anesthesia during childbirth. We note that almost 52% of the respondents believe that the benefit of anesthesia during childbirth will be achieved if the woman has a previous experience of childbirth, while almost 48% believe that the benefit of anesthesia during childbirth will be realized if this is the first birth of a woman.

**Table13:-** shows the participants’ distribution according to their view of the maximum benefit of anesthesia during childbirth

The answer	N	%
If this is the first birth of a woman	184	47.7
If the woman has a previous experience of childbirth	202	52.3
Total	386	100.0

The following table shows the participants’ distribution according to the fears that prevent them from using anesthesia in their future births, where we note that almost 35% believe that there will be no effect or benefit from the use of anesthesia in their future births, while almost 32% prefer the experience of natural delivery as it is, almost 10% believe that The use of anesthesia in childbirth will increase the chances of Caesarean deliveries in the future.

**Table 14:-** shows the participants’ distribution according to the fears that prevent them from using anesthesia in their future births.

The answer	N	%
wanted to experience natural childbirth	123	31.9
against the will of God	28	7.3
it would harm the baby	27	7.0
will love their baby more	4	1.0
Will increase the chances of cesarean deliveries in the future	37	9.6
mothed do not work.	135	35.0
refusal by family.	32	8.3
Total	386	100.0

The following table shows the participants' distribution according to whether they plan to use any of the anesthetics in their next births, noting that almost 38% of them plan to use any of the anesthetics in their future births, while almost 32% do not plan for it.

**Table15:-** shows the participants' distribution according to whether they plan to use any of the anesthetics in their next births.

The answer	N	%
Yes	146	37.8
No	124	32.1
Perhaps	116	30.1
Total	386	100.0

The following table shows the participants' distribution according to decision-making authority on the use of anesthesia in childbirth, noting that almost 46% of Saudi women make the decision about anesthesia in childbirth with the help of the husband, almost 26% with the help of the family, almost 10% with the help of Girlfriends and almost 18% Other.

**Table 16:-** shows the participants' distribution according to decision-making authority on the use of anesthesia in childbirth

The answer	N	%
Husband	177	45.9
Family	102	26.4
Girlfriends	37	9.6
Other	70	18.1
Total	386	100.0

### Discussion:-

The knowledge and attitudes regarding labour pain and labour pain relief among pregnant women are not known clearly, especially in developing countries. For the majority of women, the childbirth is a painful experience (5). The deficiency of awareness and misunderstanding regarding safety, acceptability and availability of pain relief options are considered to be the major causes why women do not receive adequate pain relief in many low and middle income countries (6). Therefore this study aimed to assess the knowledge and attitude of Saudi women toward painless labor, and misconception about the risks and complications.

The present study included 386 women, the majority of them had undergone more than one previous delivery, almost 36.7 % of the participants availed epidural analgesia in their previous deliveries. While, In a study in Karachi only 19% availed epidural analgesia, due to fears and misconceptions regarding the epidural analgesia (7). And in a study conducted in Nigeria among 124 mothers, only 4% could remember using any way of pain relief in their previous pregnancy, this low rate of pain relief using is attributed to fear of side effects on baby or self while some were not even sure of its benefits (8). Also, in Uganda among multiparous women about 88% did not have labour analgesia in their previous deliveries, due to many views and beliefs that's expressed by the women regarding labour analgesia, also religion and culture play a role in made the decisions regarding labour analgesia (9).

At the present study the mothers showed a good level of knowledge about the epidural analgesia. Whereas, 95% of mothers at this study heard about the epidural analgesia to reduce the pain of labor. Minhas found that 76% of mothers were aware of epidural analgesia as a method of labor pain relieving (7).

Friends and relatives were the most common source of information regarding epidural analgesia to reduce the pain of labor, followed by previous labour experience, then the media, and books reported by 67%, 16%, 8%, and 2% respectively. This finding like Minhas et al. finding whose found that 64% had heard about epidural analgesia from friends or relatives (7). Also, Nabukenya et al. whose found that among those who had knowledge of labour analgesia, the most common source of information was friends and relatives. Few got information from the previous labour, even fewer from media and literature (9).

About half of participated women at the present study have positive attitude towards epidural analgesia. This percentage is much lower than what was found by Thakur et al. whose reported that 96.7 % of expectant mothers had positive attitude towards epidural analgesia (10).

The obstetrician should explain to the woman during follow-up during pregnancy, the available birth options, and ways to reduce labor pains. But, It is striking that the majority of women in this study did not discuss available birth options with the doctor. This findings like Mugambe et al. findings in South Africa that women who had been pregnant before, in general were not told what to expect during labour (16). Hodnett found that a woman's satisfaction regarding labour depends on the quality of her relationship with her caregivers and included good rapport, communication and information, and the freedom with which she can express about her feelings (17).

There are many ways to relieve pain of labour. The pharmacological ways known are epidural analgesia, parenteral opioids, paracervical block and nitrous oxide. Some of the non-pharmacological ways are transcutaneous electrical nerve stimulation, breathing exercises, acupressure, sterile water injections, acupuncture, immersion bath, hydrotherapy, audio-analgesia, hypnosis, aromatherapy, labour support, relaxation and massage. The suitable labour pain relief method should be effective and safe, and should not overlap with labour or the parturient mobility (5,11).

The natural childbirth was the most preferred method of birth among women in this study by 53.9%. This high proportion of mothers who prefer normal childbirth without pain relief is due to the common belief among women that Labor is a natural process. Dehghanpisheh et al. found that almost 32% preferred the natural childbirth as a method of birth (12).

All the medication which used by woman during labor enters the bloodstream of child as well through the umbilical cord. This includes anesthetics and pain-relieving drugs that delivered through epidurals. But anesthetics do not have a stronger effect on the baby than other painkillers that might be considered for use during childbirth. Regarding the side effect of neuraxial labor analgesia on mothers, includes pruritus and hypotension, maternal hyperthermia, nausea and vomiting, epidural analgesia also associated with a longer labor and increased rates of operative vaginal delivery (13-15). In the current study, women showed good level of knowledge regarding the side effects of analgesics during childbirth, on the baby and mother, where most mothers reported that pain relief during childbirth had no effect on the baby's health. They showed a variety of responses about the side effects of maternal pain during childbirth.

### **Conclusion:-**

This study demonstrated that there was a good level of knowledge about the epidural analgesia among Saudi women. However, there was low prevalence of epidural analgesia using among Saudi mothers. Generally, there was positive attitude among Saudi women towards epidural analgesia. But, natural childbirth still the preferred method of birth.

### **Recommendation:-**

1. Conduct awareness campaigns among women, clarify the effectiveness of the epidural analgesia in reducing labor pains.
2. Doctors should clarify to pregnant women during follow-up, all available delivery methods, and all available ways to reduce labor pains.
3. Distribution of leaflets to pregnant women in various health facilities, including different delivery methods, available ways of reducing labor pains, and their potential effects on both mother and infant.

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