



*Original Research Article*

**Awareness and Attitude of Pregnant Women towards Labor Analgesia in Babil Province**

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Accepted 28 December, 2015

**Abstract**

The aim of this study is to assess the awareness and attitude of pregnant women in Babil province toward painless labour and their willingness to get the service. A questionnaire form designed and given to pregnant women in Babil province attending the antenatal clinics in seven primary health care centers, 820 pregnant women responses to the questionnaire form taken for this study.

10.98% primiparas and 89.02% are multiparas. Mean age of respondents was 26.6±6.4. Most of the multipara respondents report their pain in the previous labor as very severe and sever. Most of the respondents have no any information about painless labour and 5.1% have little information, their source of information was 36.2% from friends and relatives, 20.3%, from TV. 62.3% have very high and high fear from next labour pain. Most of women will ask for the service of painless labour if it is available. 59.9% think labor can't be without pain. Most of the respondents don't know who will be responsible for relief of their labor pain.

Conclusion: This study showed poor general knowledge of pregnant women in Babil province about painless labor. It is recommended that information about painless labor should be given by the antenatal physician, obstetrician or a nurses in a collaborative with anesthesiologists to inform pregnant women about benefits, modalities and limitations of painless labor, Education of the labor room staff about the service and Public education by TV programs. The persistently low request of painless labor by pregnant women could thus be ascribed to a combination of poor pregnant women awareness and inadequate provision of resources so to start with is implementing standard infrastructure for labor room that can help provision of the service and it necessary taken into consideration by the ministry of health.

**Key words:** Awareness, Attitude, pregnant women, Labor, analgesia

**وعي وتوجيهات النساء الحوامل في محافظة بابل حول تسكين الام الوضع**

**الخلاصة**

تهدف هذه الدراسة الى تقييم وعي وتوجيهات النساء الحوامل تجاه الولادة بدون الم ومدى رغبتهن للحصول على هذه الخدمة, تم تنظيم استمارة استبانة وزعت على النساء الحوامل اللواتي راجعن عيادات رعاية الحوامل في سبعة مراكز صحية اولية في محافظة بابل أخذت استجابات 820 امرأة حامل لأستمارة الاستبانة في هذه الدراسة. 10.98% من المستطلعة آرائهن كن حوامل لأول مرة, 89.02% هن متعدّدات الحمل. معدل الاعمار كان 26.6±6.4. 62.3% من النساء متعدّدات الحمل قلن ان الالم في الولادة السابقة كان شديدا جدا وشديد. 59.9% منهن ليس لديهن معلومات حول الولادة

بدون أمو ٥.١% لديهم معلومات قليلة ومصدر هذه المعلومات من الاقارب والاصدقاء بنسبة ٣٦.٢% و ٢٠.٣% من التلفزيون . ٦٢.٣% لديهم خوف شديد جدا وشديد من الولادة المقبلة. ٦٤.٤% من النساء سيطلبن خدمة علاج آلام الولادة لو توفرت . ٥٩.٩% يعتقدن ان الولادة يجب ان يرافقها الألم. اغلب النساء المستطلعة ارائهن لا يعرفن من سيقوم بعلاج آلام الوضع لديهن . هذه الدراسة اظهرت ان هناك فقرا في المعرفة حول تسكين الام الولادة في محافظة بابل مما يستوجب ان تعطى معلومات حول هذا الموضوع للحوامل من قبل اطباء وحدات رعاية الحوامل واطباء النسائية والممرضات بالتنسيق مع أطباء التخدير لزيادة معرفة النساء الحوامل حول فوائد وانواع ومحددات تسكين آلام الوضع من الضروري تثقيف كوادر صالات الولادة حول هذه الخدمة والتثقيف المجتمعي من خلال برامج التلفزيون . ان استمرار انخفاض الطلب على تسكين الام الوضع من الممكن تفسيره لقلّة وعي النساء الحوامل مع انخفاض الموارد المقدمة لهذه الخدمة وان تطبيق المعايير القياسية في تصميم صالات الولادة من الممكن ان يساعد في توفير هذه الخدمة التي من الضروري ان يأخذ بالحسبان من قبل وزارة الصحة .

**الكلمات المفتاحية:** وعي, توجهات, النساء الحوامل, الولادة, تسكين الام.

## **Introduction**

**L**abor is a painful experience for most of the women. The labor pain results from some physiological-psychological causes. If the woman looks at the pain with a psychological view her feeling toward it would be changed[1]

Although most women report that labor is painful, most physicians have surprisingly little understanding of the nature of labor pain. Pain is a subjective experience involving a complex interaction of physiologic, psychosocial, cultural and environmental influences[2].

Labor pain is one of the most severe pains that women experience during their life. So a change can affect all dimensions of pregnant women and her family life. Pain relief management during labor has undergone various advancements since 1847, when Simpson found that chloroform could help relieve the pain women felt during labor. His findings were not received favorably on religious and medical grounds[3], Most women are very satisfied that they can benefit painless delivery methods while they are conscious and aware during delivery and labor[4,5].

Cultural values and learned behaviors influence perception and response to acute pain. Women's expectations about labor pain are often confirmed by their experience of childbirth [6,7].

Women in pain don't need an "indication" for pain relief in labor. • According to the

American Society of Anesthesiology (ASA) "in the absence of a medical contraindication, maternal request is a sufficient medical indication for pain relief during labor"[8].

In United Kingdom 90% of obstetric units offer 24-hour epidural service with a high level of acceptance. The benefits of a collaborative approach between anesthetist, obstetricians, midwives and nuns for providing information regarding epidural analgesia to pregnant females [9,10].

The modern era of childbirth analgesia began in 1847 when Dr J Y Simpson administered ether to a woman in childbirth, and later in the same year, chloroform • Queen Victoria was given chloroform by John Snow (1853) for the birth of her eight child Prince Leopold and this did much to popularize the use of pain relief in labour [11].

Babil province is a governorate in central Iraq. The area of the governorate is 5119 sq km, with population of 1,800,000. The provincial capital is the city of Hillah, which lies opposite the ancient city of Babylon , on the Euphrates river.

In Iraq the labour analgesia unit is not well established and most of the women not requesting it during or before labour.

## **Materials and Methods**

A descriptive, cross sectional study was performed at antenatal clinics at 7 primary health care centers in different parts of Babil province according to geographical distribution and density of residence: 4 in the center

of the province, one in north and two in the south.

from March 2015 to May 2015. Approval for the study was obtained from the Babil directorate of health. Information were collected by a questionnaire form designed by the researchers in Arabic language and distributed to pregnant women who are attending the antenatal care clinics, pregnant with history of two previous caesarian sections without experiencing labour pain excluded, illiterate women interviewed by the antenatal care providers with facility of reading the questionnaire form to the illiterate women by the attending doctor in the clinic and the form filled according to women's answers.

Sample size was according to the expected number of pregnant women attending the antenatal clinic during their usual schedule of visits, 820 questionnaire form were completed and returned. This study was designed to assess the pregnant women's awareness and attitude for pain relief during labor and how can this effect the application of the service in our population.

**Statistical Analysis:** The answers to the questions were structured in a statistical file and then analyzed using the SPSS software, version 20.0, for windows. For statistical analysis, the results were presented as mean  $\pm$  standard deviation (SD) for quantitative variables and were summarized by frequency (percentage) for categorical variables.

## **Results**

820 respondents included in this study table I shows the demographic characteristics of the participants in this study.

**Parity:** 90 (10.98%) primiparas and 730 (89.02%) multiparas. Any women with previous two cesarean sections excluded from the study. Mean number of previous deliveries was  $2.6 \pm 1.3$ .

**Occupation:** 79% of respondents are housewives, 17.2% of them are governmental employee, 3.4% are non-governmental employee and 0.4% are students.

**Residency:** 77.6% of the respondents are urban residents while 22.4% are rural.

**Socioeconomic status:** 5.2% of the respondents belong to the high family income, 82.7% belong to the middle family income and 12.1% are from low income.

**Age:** Mean age of the respondents was  $26.6 \pm 6.4$  minimum age 14 years and maximum age 45.

**Education:** 9% of the respondents are illiterate, 37.6% attended primary school, 29.5% attended secondary school, 23.2% college graduates, 0.7% postgraduate.

**multipara women response to question about the previous experience with labour pain were:**

27.2% report very severe pain, 40.5% severe pain, 27.8% medium level of pain, 4.5% little pain.

Women answers about if they think labour can go without pain 15 % said yes, 59.9% no and 26.1% they don't know.

**Information about painless labour:** 67.0% said no idea, 27.9% said little information, 5.1% have good information's

**Source of information from:** 36.2% from friends and relatives, 23.2% from internet, 20.3% from TV, 19.6% from my doctor, magazines and brochures 0.7%

**Fear from pain in the upcoming labour:** 33.8% very high, 28.5% high, 11.2% little and 4.3% no fear

**Are you ready to pay extra fee for the service?** 37.2% said yes, 35.5% may be and 27.3% no.

Will request painless labour during upcoming labour: 64.4% they will asked for it if it is available 22.4% maybe, 13.2% replied no.

When asking about the person who will give her the painless labour service they replied: 43.4% obstetrician, 20.5% anaesthesiologist, 26.3% they don't know, 5.7% birth attendants, 4% nurse.

**Preferred method of labor analgesia:** 35% injectable medications, 23% for hot water bath, 22.3% for inhalational

gases, 9.8% for epidural, 6.1% have no idea, 3.4% acupuncture.

**Table 1:**Demographic data of the respondents

<b>Age(mean±SD)</b>	<b>26.6±6.4</b>		
Occupation		<b>Number of respondents</b>	<b>%</b>
	House wife	648	79
	Governmental employee	141	17.2
	Non-governmental	28	3.4
	student	3	0.4
parity	Primiparas	90	10.98
	Multipara	730	89.02
Number of previous deliveries(mean±SD)	2.65±1.31		
residence	rural	184	22.4%
	urban	636	77.6%
income	High	43	5.2
	medium	678	82.7
	low	99	12.1
Education	illiterate	74	9
	Primary school	308	37.6
	Secondary school	242	29.5
	College	190	23.2
	postgraduate	6	0.7

**Table 2:** information about painless labour

Do you have information about painless labour	Frequency	%	Preferred tool to knew about painless labour	Frequency	%
no	549	67.0	Educational brochures	19	2.3
little information	229	27.9	movies	83	10.1
good information	42	5.1	nurse or doctor description	373	45.5
Total	820	100.0	internet	112	13.7
<b>Source of your information</b>			TV	195	23.8
friends and relatives	98	36.2	I don't knew	38	4.6
my doctor	53	19.6	Total	820	100.0
TV	55	20.3	<b>who will give you painless labour</b>		
internet	63	23.2	obstetrician	356	43.4
magazines	2	0.7	anaesthesiologist	168	20.5
Total	271	100.0	Birth attendant	47	5.7
			nurse	33	4.0
			I don't knew	216	26.3
			Total	820	100.0

**Table 3:** Awareness about painless labour

<b>Do you think labour can be without pain?</b>	<b>Frequency</b>	<b>%</b>	<b>What is your preferred method for pain relief?</b>	<b>Frequency</b>	<b>%</b>
yes	123	15.0	acupuncture	28	3.4
no	483	58.9	I don't knew	50	6.1
i don't knew	214	26.1	epidural	80	9.8
Total	820	100.0	N2O	183	22.3
<b>Do you will ask for painless labour</b>	Frequency	%	hot water bath	192	23.4
			I.V medications	287	35.0
			Total	820	100.0
			<b>are you ready to ask for the service of painless labour</b>	Frequency	%
no	108	13.2	no	224	27.3
maybe	184	22.4	may be	291	35.5
Yes	528	64.4	yes	305	37.2
Total	820	100.0	Total	820	100.0
<b>Do you have fear from labour pain</b>	Frequency	%	<b>are you ready to pay for painless labour</b>	Frequency	%
no	35	4.3	yes	305	37.2
little	92	11.2	may be	291	35.5
medium	182	22.2	no	224	27.3
high	234	28.5	Total	820	100.0
very high	277	33.8			
Total	820	100.0			

**Table 4:** Pain in the last labour

	<b>Frequency</b>	<b>%</b>
little	30	4.5
medium	186	27.8
sever	271	40.5
very sever	182	27.2
Total	669	100.0

## **Discussion**

Many published literature similar to this study in different parts of the world had been found, comparing the results in an aim to study the difference in the attitude and awareness between Iraqi women in Babil province and other parts of the world.

### **Information about painless labour:**

Majority of the women in this study don't have information about painless labour, only 5% said they have good information about the service, this is well understood as the painless labour facility is not available and not accessible for most of the pregnant women in Babil province, while Mugambe found that (56.3%) of the women in Eastern Cape Province, South Africa they knew about pain relief [12] this high percentage may be explained by the source of the information which is reported by the respondents to be the previous delivery, while in Nairobi [13] it was 56% and this result explained as participants were college or university graduates (86%) while in this study (23.7%) are college and postgraduate level of education another assessment may be needed to study awareness in selected population of pregnant women.

Other study show only (9.50%) women have knowledge about labor analgesia [14], findings from Ibadan (27.1%) [15] and Lagos (38.9%) [16] in the South West and Benin City (37.5%) [17] while in other African countries Kenya (56%) and South Africa (56.3%) [12,18] these findings indicate that in the 3<sup>rd</sup> world access to the health care information and patient education is limited, but were aware of the need to obstetric analgesia.

**The source of information:** women who have information about labour analgesia they chose answers about the source (36.2%) was from their friends and relatives, while 19% said their source of information is from their doctor these figures are comparable to the study done in Iran [19], high percentage was to the family members and friends also seen

in Calcutta [20], Udit Naithani [14] and Atiya Barakzai [21].

**The respondent's preferred education tool:** about the painless labour was (45.5%) for the doctor or nurse to be the source of the information and the second source preferred by the women was TV programs (23.8%).

### **who will manage your labour pain?**

(43.4%) said it is the obstetrician while the role of the anaesthesiologist is not well known to the respondents this is also seen by Baheti [22] which could be attributed to the limited role of anaesthesiologist in the public education about the anesthesiology in general and this also may be a result of the anaesthesiologist shortage in Iraq at present time.

These results indicate the beliefs of the population here about the health care providers and this reflect clearly the need to improve the antenatal mother education in the primary health care centers and the labor rooms as the most suitable and dependable source of information and may indicate the need to taught the obstetrician and nurses about the labour analgesia with an education program, this fact also mentioned by Taneja [23].

### **Awareness**

(58.9%) of the respondents are not aware about the painless labour and select option of labour can't go without pain while only (15%) were aware about the availability of medical procedures that can eliminate labour pain while Shidhaye's study show only 1.5% of the respondents are aware about delivery without suffering [24] this difference may be attributed to the sample demography as most of the respondents in Shidhaye's study are from rural areas and low socioeconomic class.

other studies from 3<sup>rd</sup> world have figures of (27.1%) Barakzai [25] Udit Naithani [14] show only 9.5% of the women were aware of the availability of pain relief during labor when the option of painless labor was offered for their current pregnancy 64.4% will request it. This figure is comparable to the

acceptance of the service and willingness to get it in the upcoming labour from Nigeria (57.6%)[15] and Lagos (65.3%) ,India 69% [26] but differ from Australia (80%)[27] the more developed country.

#### **Preferred methods of pain relief:**

35% of the respondents prefer injectable medications as the pharmacological approach to relieve labour pain this represent highest percentage and the other sequence was hot water bath, inhaled N<sub>2</sub>O, epidural, I have no idea and acupuncture in percentages (23.4%, 22.3%, 9.8%, 6.1% and 3.4%) respectively while in Iranian study[19] the highest percent was to regional anesthesia (40.9%), 32.3%, do not choose any technique gas anesthesia methods 19.4, 3.4% intravenous injections. this explain the ignorance of the pregnant women about modalities of labour pain treatment other than injectable medication as the other techniques are more effective in managing labour pain. The public attitude is strongly influencing the preferences of Trends in maternal analgesia and this is practiced in many developed countries like UK and Australia [28].

#### **Upcoming labour:**

62.3% of the respondents have high and very high fears about pain in the next labour while only 4.3% and 11.2% have no and little fears respectively about labour while Shidhaye found 5% of the pregnant have great fear from upcoming labour and 95% reports only mild to moderate fear [30].

this study attribute this figures to self or others experience of labour while in our study the experience of the multipara was painful and this is reflected in the high percentage of women fearful of the upcoming event.

67.7% expressed their perception of pain they experienced in the last labour as sever and very sever although these figures are high and indicate the women complaining from the labour pain but still the service not well established yet in Babil province the same figure seen by Kapadia 67% [29], although Melzack[30] showed higher

results 80% for pain and suffering women experienced in last labor our study still show the severity of pain experienced by pregnant women in high figures.

high percentage 64.4% of the respondents said they will ask for painless labour service if it is available , 13% will not ask for the service this result is comparable to many studies done in different parts of the world [12,15].

#### **Conclusion**

In comparison to results of awareness and attitude in different parts of the world this study results are comparable in many third world countries in that there is a high level of pain perception and about the need for the service with limited knowledge about modalities of the pain management , there wide gap between more developed countries and Iraq regarding awareness. This study showed poor general knowledge of pregnant women in Babil province about painless labor. It is recommended that information about painless labor should be given by the antenatal physician, obstetrician or a nurses in a collaborative with anesthesiologists to inform pregnant women about benefits, modalities and limitations of painless labor, Education of the labor room staff about the service and Public education by TV programs. The persistently low request of painless labor by pregnant women could thus be ascribed to a combination of poor pregnant women awareness and inadequate provision of resources so to start with is implementing standard infrastructure for labor room that can help provision of the service and it must take into consideration by the ministry of health .

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