

**ASSESSMENT OF SAUDI WOMEN AWARENESS ABOUT PAIN
RELIEF AGENTS IN LABOR IN AL-HASA CITY OF SAUDI ARABIA****Dr. Amal Khaleel Abu Alhommos^{1*} and Malak AlDossary¹**

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Article Received on
07 Feb. 2018,

Revised on 28 Feb. 2018,
Accepted on 20 March 2018,

DOI: 10.20959/wjpr20187-11681

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ABSTRACT

The awareness and attitudes towards labor pain and labor pain relief agents in women are not clearly known. The physiological nature of the pain in labor makes it an experience most women will want to avoid it; effective pain management during the labor process is associated with a safe birth experience for the mother and the baby. Our study objective is to assess the women awareness, preferences and utilization of pain relief agents in labor in Al-Hassa city. Our study design is a cross-sectional study conducted in Al-Hassa city of Saudi Arabia. The 351 women conducted in this study from 19 December 2015 to 27 January 2016. By exclusion of unmarried women, the sample size of the study was 291 women. The Saudi women reported a good level of awareness regarding most of the items on the

questionnaire. The 44.1% reported that they hearing about pain relief agents in labor for first time before pregnancy, the information recourse about pain relief agent's preference from health care providers was 35.4% and the highest percentage as adviser who encourage married women to use certain pain relief agents was the physicians 42.8%. As conclusion according to our study results, showed a moderate level of Saudi women awareness about pain relief agents in the labor. Saudi women reported that they seek about their knowledge mainly from health care providers and from their experience. For further researches, we recommended to perform same study for different area in Saudi Arabia to determine the most cost-effective method.

KEYWORDS: Awareness, labor, pain relief agents and women.

1. INTRODUCTION

Natural labor pain is an experience in women life. Therefore, effective pain management during the labor is associated with a safe birth for the mother and the baby. Labor pain presented due to the stimulation of the sympathetic nervous system leading to hypertension and reduced uteroplacental blood flow. During labor, the woman may also hyperventilate, leading to leftward shift of the maternal oxygen–hemoglobin dissociation curve and a consequential reduction in the fetal arterial oxygen tension. Relief of pain and anxiety during labor may benefit the mother and fetus by decreasing maternal hyperventilation and catecholamine secretion.^[1] The awareness and attitudes towards labor pain and labor pain relief agents in women are not clearly known, pain relief in labor become an important topic by the day as more women become aware for the best care in labor.^[1]

The physiological nature of the pain of labor makes it an experience most women want to avoid. For the mother, labor pain always be a source of worry and pain relief agents remain important. In addition, for health care providers, the search for the best pain relief agent in labor remain an important issue for research.^[3]

Women respond differently from one to other for the pain of labor and delivery. There is a many pain relief agents options the pregnant woman have it during labor and delivery dependent on women choice for example pharmacological options such as inhalation analgesia which enhancing inhibitory channels and attenuating excitatory channels, but whether or not this occurs through direct binding or membrane alterations is not known, spinal anesthesia which is block the transmission of afferent nerve signals from peripheral nociceptors. Sensory signals from the site are blocked, thereby eliminating pain, epidural analgesia which provides complete motor (causing paralysis) and sensory blockade (causing loss of sensation), around or near the site of pain, IV pethidine exerts its analgesic effects by acting as an agonist at the μ -opioid receptor and transcutaneous electrical nerve stimulation (TENS) and non-pharmacological methods are breathing exercises, transcutaneous electrical nerve stimulation, sterile water injections, acupressure, acupuncture, hydrotherapy, immersion bath, audio-analgesia, aromatherapy, hypnosis, labor support, massage and relaxation. The delivery plan can be individualized according to the woman choice.^[2]

The potential side effects that may happen due to use pain relief agents to both mother and fetus for IV pethidine, they cause sedation and respiratory depression in parturient, delay gastric emptying, nausea and vomiting appears in the fetal blood within 90 seconds. For

inhalation, analgesia may cause drowsiness, disorientation and nausea may occur including brief episodes of loss of consciousness and does not provide complete analgesia. For TENS side effects are actually very minimal, most commonly skin irritation. For spinal anesthesia, a headache is the most common side effect, back pain, prolonged numbness or weakness and urinary retention.^[3]

The type, safety, effectiveness and cost of pain relief agents would also become important to know for women and their families, but there is some of labor can be individual medical conditions which is sometimes determine what pain relief agents are indicated.

There was the recent study in Al-Riyadh city about Women's Awareness and Attitude toward Epidural Analgesia published on 2013 recommended that ' women's awareness regarding EA was relatively high.^[4]

However, there is a no previous studies performed about Saudi women awareness about proper pain relief agents during delivery.

The objective of our study is to assess the women awareness, preferences and utilization of pain relief agents in labor in Al-Hassa city.

2. METHOD

A cross-sectional design study conducted in Al-Hassa city. The 351 women conducted in this study from 19 December 2015 to 27 January 2016. By exclusion of unmarried women, the sample size of the study was 291 women. Our results analyzed by using electronic survey (Google Drive) to present our data as number and percentage.

The designed questionnaire included 16 questions as open, closed end and multiple choice questions to investigate the demographic data, experience in using pain relief agents of married woman, the factors that affect the woman decision about preferred pain relief agents in labour and explain woman beliefs towards the most beneficial pain control and most side effects induced by used pain relief agents.

3. RESULTS

Table (1): Demographic Data.

Baseline characteristic	
Married woman	291 (83.1%)
Non married woman	59 (16.9 %)
Age group	
15 – 24	72 (24.8%)
25 – 34	112 (38.6%)
35 – 44	88 (30.3%)
45 – 55	17 (5.9 %)
55 and more	1 (0.4%)
Number of Children	
0	10 (3.5 %)
1 – 4	226 (77.9%)
5 and more	54 (18.6%)
Educational level:	
Illiterate	0 (0%)
Primary school	2 (0.7 %)
Intermediate school	6 (2.1 %)
Secondary school	54 (18.6%)
Bachelor degree	228 (78.6%)

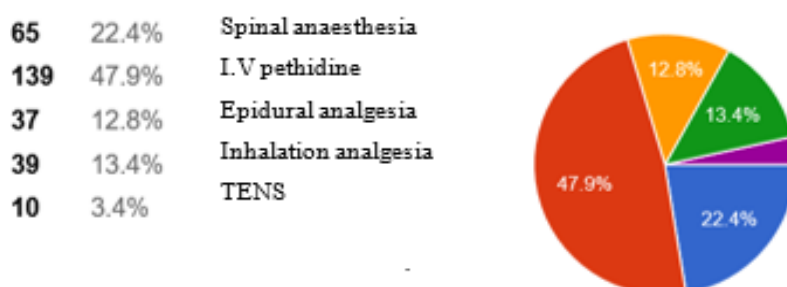


Figure (1): The pain relief agents used in first childbirth.

As results, the highest pain relief agents was IV pethidine 139 (47.9%) and the lowest pain relief agents used in first childbirth was TENS 10 (3.4%).

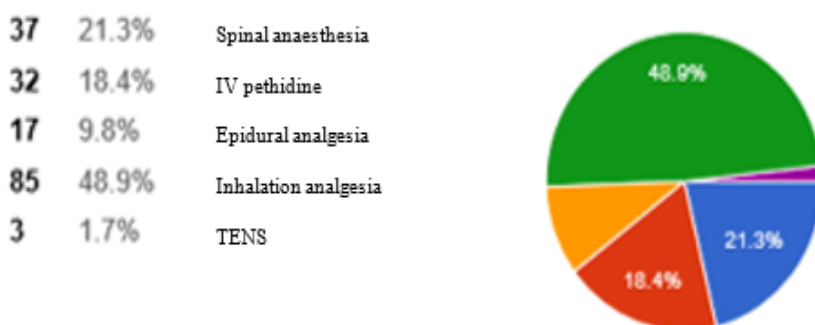


Figure (2): The pain relief agents used in second childbirth.

As results, the highest pain relief agents was inhalation analgesia 85 (48.9%) and the lowest pain relief agents used in second childbirth was TENS 3 (1.7%).

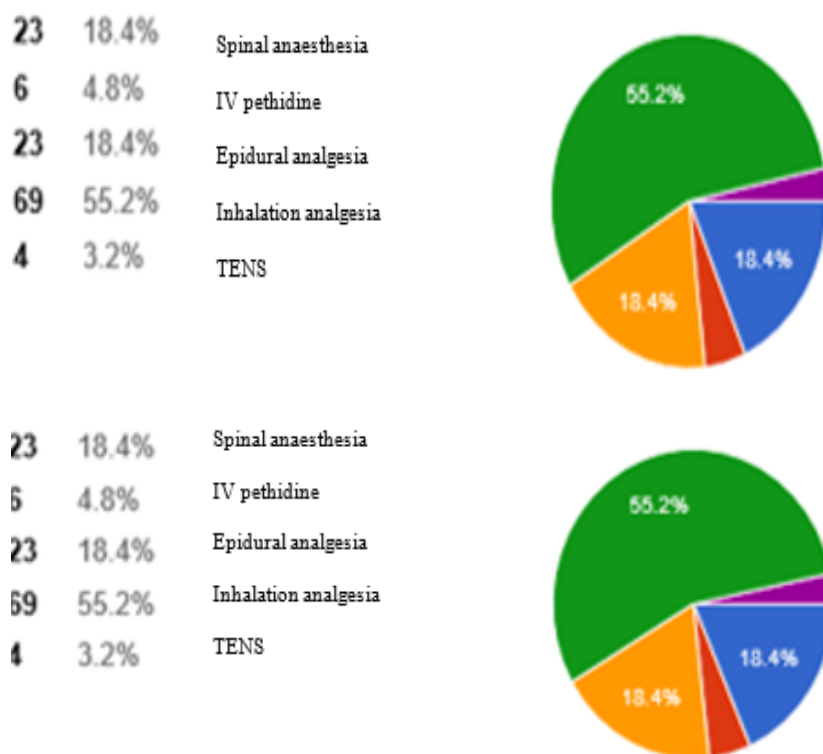


Figure (3): The pain relief agents used in third childbirth.

As results, the highest pain relief agents was inhalation analgesia 69 (55.2%) and the lowest pain relief agents used in third childbirth was TENS 4 (3.2%).

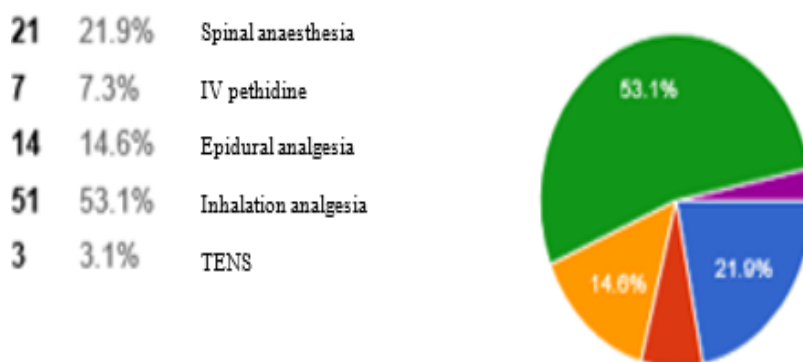


Figure (4): The pain relief agents used in fourth childbirth.

As results, the highest pain relief agents was inhalation analgesia 51 (53.1%) and the lowest pain relief agents used in fourth childbirth was TENS 3 (3.1%).



Figure (5): The effectiveness of used pain relief agents in first childbirth.

The effectiveness of pain relief agents categorized as effective (no feeling of pain during labour) decrease the pain level and ineffective. The results showed that the effective pain relief agent used (no pain) in first childbirth was 126 (47.2%), but the ineffective pain relief agents used in first childbirth was 48 (18 %).



Figure (6): The effectiveness of used pain relief agents in second childbirth.

The effectiveness of pain relief agents categorized as (no feeling of pain during labour) decrease the pain level and ineffective. The results showed that the effective pain relief agent used (no pain) in second childbirth was 65 (35.7%), but the ineffective pain relief agents was 33 (18.1%).



Figure (7): The effectiveness of used pain relief agents in third childbirth.

The effectiveness of pain relief agents categorized as (no feeling of pain during labour) decrease the pain level and ineffective. The results showed that the effective pain relief agent used (no pain) in third childbirth was 41 (32.8%), but the ineffective pain relief agents was 24(19.2%).



Figure (8): The effectiveness of used pain relief agents in fourth childbirth.

The effectiveness of pain relief agents categorized as (no feeling of pain during labour) decrease the pain level and ineffective. The results showed that the effective pain relief agent used (no pain) in fourth childbirth was 39 (39.8%), but the ineffective pain relief agents was 17 (17.3%).

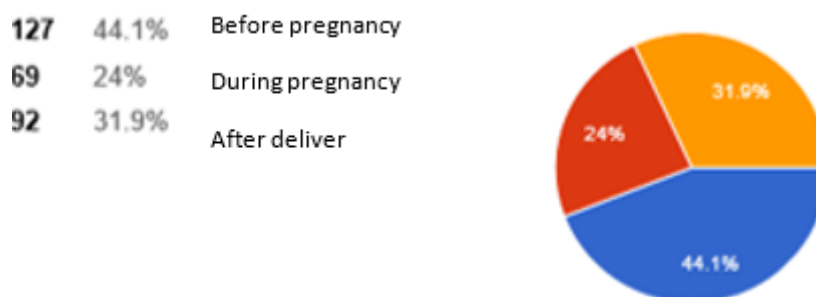


Figure (9): The first time of hearing about pain relief agents.

As results, the percentage of women who heard about pain relief agents as first time before pregnancy were 127 (44.1%).



Figure (10): The information resources about pain relief agent's preference.

Fortunately, the highest percentage of information resource was health care providers 102 (35.4%). In addition, the family was consider as the second highest information resource for married woman 97 (33.7%).

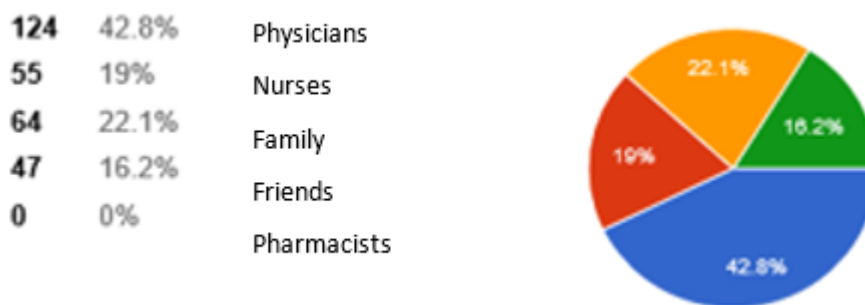


Figure (11): The advisers who encourage her to use certain pain relief agent.

Fortunately, the highest percentage as adviser for using certain pain relief agent was the physicians 124 (42.8%) and the pharmacists were not as adviser at all for women about her preference of pain relief agents.

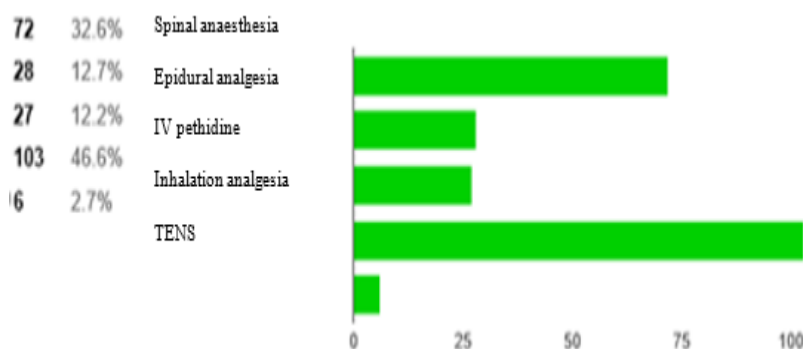


Figure (12): The most pain relief agents induced side effects.

Unfortunately, the highest pain relief agents inducing side effects was inhalation analgesia 103 (46.6%) and the spinal anaesthesia 72 (32.6%), but the lowest pain relief agents inducing side effects was TENS 6 (2.7%).

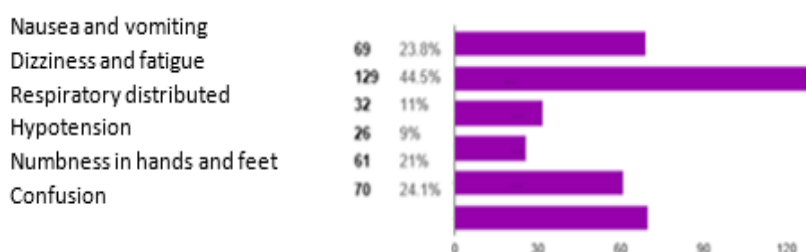


Figure (13): The incidence of side effects induced by pain relief agents.

As results, the highest incidence of side effects induced by pain relief agents were dizziness, fatigue 129 (44.5%) and nausea, vomiting 69 (23.8%) but the lowest incidence of side effects was hypotension 26 (9%).

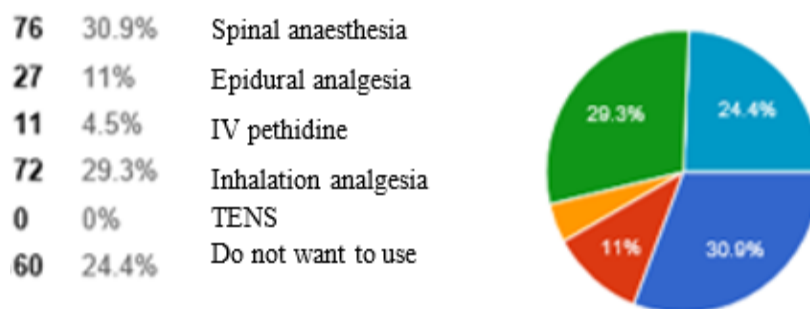


Figure (14): The preference of women for using pain relief agents in next labour.

The most preferred pain relief agents for next labour by women was the spinal anaesthesia 76 (30.9%) then the inhalation analgesia 72 (29.3%) but only 60 (24.4%) of married women did not want to use any pain relief agents in next labour.

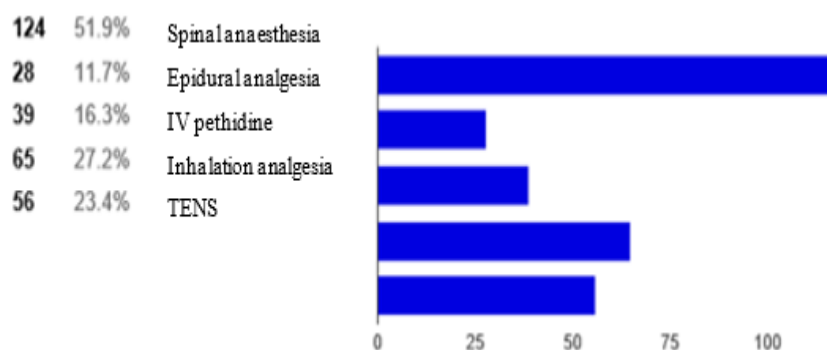


Figure (15): The not preferred pain relief agents in next labour.

The most not preferred pain relief agents for the next labour by women was the spinal anaesthesia 124 (51.9%) then the inhalation analgesia 65 (27.2%).

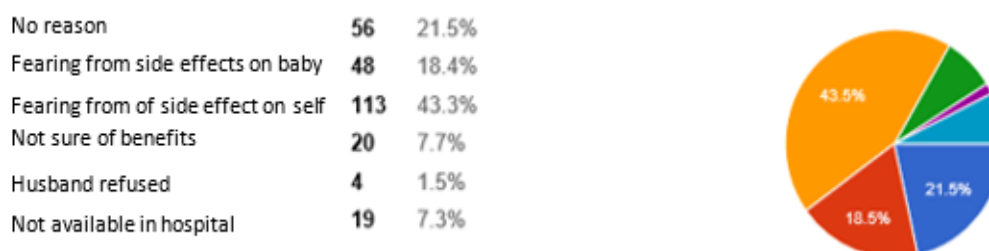


Figure (16): The reasons of unreferenced for pain relief agents in next labour.

The percentage of married woman who heard about pain relief in labour before was 204 (70.6%). However, only 212 (73.1%) of married women used a pain relief agents in previous labour. Actually, the percentage of women who had any side effects induced by pain relief agents was 144 (49.7%).

The major thoughts of women preference of using certain pain relief agents were the effectiveness of certain pain relief agents than others 122 (46%) but only 99 (37.4%) women thought that the preferred pain relief agents had lowest side effects. In addition, 44 (16.6%) women preferred certain pain relief agents due to it is availability in the hospital.

The assessment of women awareness categorized as the lowest awareness was from 0 to 30%, the moderate awareness was from 31% to 70% and the highest awareness was from 71% to 100%.

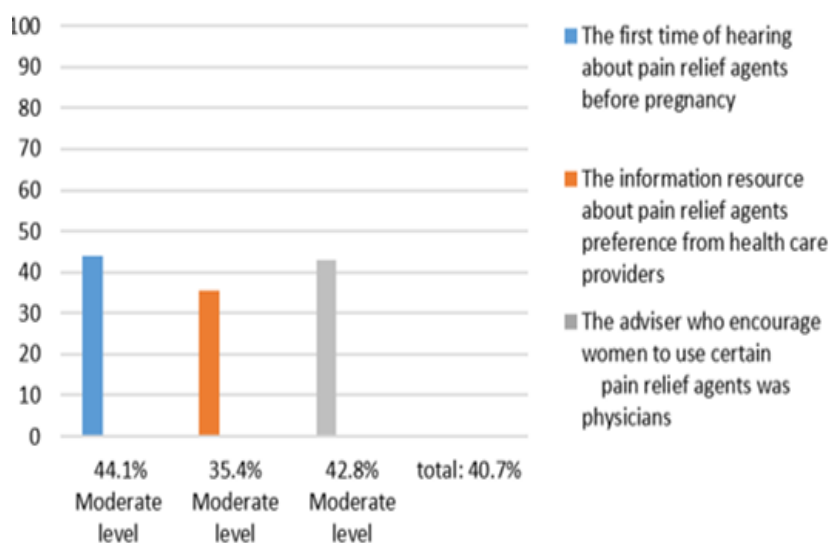


Figure (17): The awareness aspects about the pain relief agent in labour.

As results show in figure (17), the awareness of Saudi women about pain relief agents used in labour was moderately aware (40.7%).

4. DISCUSSION

In this study, the results showed a level of Saudi married woman awareness regarding the pain relief agents in labour in AlHasa city. The assessment of women awareness categorized as the lowest awareness was from 0 to 30%, the moderate awareness was from 31% to 70% and the highest awareness was from 71% to 100%.

Our results were comparable to the results of previous study performed in Nigeria (5).

The educational level (78.6%) had a bachelor degree of Saudi married women can effect awareness about the pain relief agents in labour. On other hand the women had bachelor degree were (66.9%) in the comparable study.

Therefore, the best advisers about the pain relief agent's preference were (42.8%) physicians, and (19%) nurses, but in comparable study, the best advisers were (79.4%) nurses, and (15%) physicians, which means that the most of married woman in our study seek for their information about pain relief agents from the physicians.

Actually, the percentage of Saudi married women who hear about pain relief agents in labour during their pregnancy was (44.1%), but in comparable study was (15.2%), which showed a moderate level of women awareness about pain relief agents in labour before their pregnancy.

In our study, the (73.1%) of Saudi married women were used the pain relief agents in the labour in previous birth, but in comparable study showed only (4.1%) which mean that the married woman in our study had a good experience and awareness about pain relief agents in labour.

The previous comparable points considered as strength points for our study. The Saudi married woman (47.9%) are more preferred to use inhalation analgesic more than other pain relief agents and that showed the effectiveness to reduce their pain (47.2%), but the comparable study the most of woman used IV pethidine (40%) that showed the lowest effectiveness to reduce the pain (20%).

The proportion of women reported that had side effects after using the pain relief agents was (49.7%), but in comparable study showed that the women who had side effects inducing by pain relief agents were (40%), therefore there was no differences in both study.

There was a difference in the pain relief agents preference from women, in our study (51.9%) of woman preferred to use the spinal anaesthesia in next labour, but in comparable study (92.9%) of woman preferred to use the epidural method, which was dependent on the availability of pain relief agents in hospital.

The major limitations of our study were a small size and no correlation between pain relief agents and their side effects specifically. In addition, no results were shown in our study about uneducated women awareness.

5. CONCLUSION

In Al-Hasa city, the women were young, educated. The results showed a moderate level of Saudi women awareness about pain relief agents in the labor. Saudi women reported that they

sought about their knowledge mainly from health care providers and from their experience. For further researches, we recommended to perform same study for different area in Saudi Arabia to determine the most cost-effective method. Based on our study results, we must encourage the education for our patients by provide educational programme in TV channels, social media and consuming sufficient time with the specialized health care providers in counselling centre about patients pain relief agents used in labour during the pregnancy period.

6. ACKNOWLEDGEMENT

We are grateful to the God for the good health and wellbeing that were necessary to complete this research.

We wish to express my thanks to Dr. Bandar Aldhbaib, Dean of Clinical Pharmacy College and Dr. Yasir Ibrahim, Head of pharmacy practice department for providing us with all the necessary facilities for the research.

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