

# Involvement of Women with the Decision of Caesarean Section and their Degree of Satisfaction for Post-operative Care and Pain Management

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## Abstract

**Background:** Most women who undergo Caesarean birth experience a feeling of resentment towards the physicians, profound disappointment at treatment expectation, and the loss of the happy moment of natural birth. So addressing women's views and concerns should be recognized as being integral to the decision making process.

**Objective:** The objectives of this research were to investigate women's involvement with the decision of Caesarean Section and their degree of satisfaction about the decision, post-operative care and pain management.

**Methodology:** This study was a descriptive-comparative in nature and was conducted at King Fahd Medical City, Women's Specialized Hospital, Department of Obstetrics and Gynecology in 2017. All women who underwent cesarean section during the study period either emergency or elective and agreed to participate were enrolled in the survey after signing written informed consent. They were given a questionnaire to be filled by them in their preferred language English or Arabic on day three post cesarean section before the discharge from the hospital. Data was collected by a questionnaire that has been designed by having a complete view from different researchers performed earlier. The questionnaire contains both types of questions, i.e. open and close ended. The data was analyzed using Fisher exact test to compare categorical variables and 2 sample t-tests to compare continuous variables. Consent was obtained.

**Main results:** The total number of study population involved in this study was 200. Planned CS was performed for 91 (45%) while emergency CS was performed for 109 (54.5%). The only significant finding between indication of CS and satisfaction was maternal request (P-value 0.001). Regarding satisfaction of involvement in the decision; most of them were fairly satisfied 82 (41%), very satisfied 68 (34%), fairly unsatisfied 32 (16%), very unsatisfied 13 (6.5%) and no strong feelings 5 (2.5%). Most of them were anesthetized by epidural or spinal 162 (81.4%) and majority were given a choice of anesthesia 192 (96.0%). Those who were satisfied with their choice of anesthesia were 172 (88.7%). Most of them had enough information about recovering from CS 189 (94.5%), about 182 (91.5%) had enough help with recovering from CS. Regarding their feeling having had a Caesarean delivery most of them felt fair 63 (31.5%) and 71 (35.5%) felt excellent towards post-operative care, and 70 (35.0%) answered that they will definitely prefer a Caesarean delivery. When the pain score was assessed, the mean was 2.1, SD 1.7 (min 0-max 8).

**Conclusion and recommendations:** The general satisfaction rate was found to be 96%. The level of satisfaction with the involvement of the respondents in decision-making was approximately 39.5%. The results of this study suggest that strategies are necessary to improve the quality of informational satisfaction.

**Keywords:** Caesarean section; Satisfaction; Post-operative pain; Pain; Anesthesia

greater for women who undergo a cesarean delivery versus those who deliver vaginally [4].

## Introduction

It is estimated that about 20 million Caesarean Section (CS) deliveries occur each year in the world [1,2] making this the most frequent abdominal surgery performed in adults. The rates of CS have steadily increased in almost all middle and high-income countries over the last three decades. According to the latest global estimates, the average CS rate is approximately 15%, with large discrepancies between and within different countries [1,3]. Caesarean section is a major abdominal surgery, and the morbidity and mortality rates are

According to NICE guideline pregnant women should be offered evidence-based information and support to enable them to make informed decisions about childbirth. Addressing women's views and concerns should be recognized as being integral to the decision-making process [5]. Stress is increased when the birth occurs by cesarean section because major surgery is an additional life crisis event. Patient satisfaction is a very vaguely defined, yet definite term used in the evaluation of results. With growing emphasis on consumerism and competition in the health care system, patient

satisfaction is the single most important criterion that needs to be addressed, irrespective of the nature of practice [6-9].

Patients' evaluation of care has become a prominent method of assessing the quality of health care services [9]. Health care organizations are operating in an extremely competitive environment, and patient satisfaction has become a key to gaining and maintaining market share [10]. Patient satisfaction is defined as a positive evaluation of the hospital experience. It has several short and long term effects on the functional outcome of patients. Dissatisfaction with childbirth can lead to sexual dysfunction, aversion to further pregnancy and birth and increase in complaints and litigation [11].

Most women who undergo cesarean birth experience a feeling of resentment towards the physicians, profound disappointment at treatment expectation, and the loss of the happy moment of natural birth [12]. The objectives of this research are to investigate women's involvement with the decision of Caesarean Section and their degree of satisfaction about decision, post-operative care and pain management.

## Methodology

This study was a descriptive-comparative in nature and was conducted at King Fahd Medical City, Women's Specialized Hospital, Department of Obstetrics and Gynecology in 2017. All women who underwent cesarean section during the study period had it either emergency or elective and agreed to participate were enrolled in the survey after signing written informed consent. They filled the questionnaire in their preferred language, English or Arabic, on day three post cesarean section before their discharge from the hospital. The Non-Probability Sampling Method was chosen due to its convenience, since it was feasible to collect all patients in the hospital and ask them for their participation.

All patients who agreed to participate were given the questionnaire and those who were in the post CS ward and refused to participate were excluded. The inclusion criteria included women having caesarean section (either elective or emergency caesarean delivery) during the defined study period and consented to participate in the survey, age more than 18 years and those who were mentally competent.

Patient who had caesarean section but their age was under 18 years, or were not mentally competent to take consent and follow with the questionnaire later on were excluded from the study. Data was collected by a questionnaire which has been designed by having a complete view from different researches performed earlier contains both types of questions, i.e. open and close ended.

Open-ended questions are the ones in which participants are given a free hand to discuss in detail their experiences, and to share their viewpoints related to the topic for which questions are being asked.

However, in close-ended questions, the participants have been restricted to choose only from the options provided in questionnaire without having their detailed viewpoints.

Personal information included in the questionnaire is age of respondents, employment status, and qualification level. For close-ended questions, which include information on demographics, Likert scale has been used which is comprised of 5 choices including poor to excellent.

Initially, the questionnaire was tested on 15 patients from our hospital to determine whether the questions were clear, understandable, and logical (face validity). Three research professionals were asked to criticize the content of the questionnaire (content validity). The indicators were adopted from pre-tested patient questionnaires used and were further validated by benchmarking against similar ones in the literature.

The data was analyzed using Fisher exact test to compare categorical variables and 2 sample t-tests to compare continuous variables. Logistic regression model was used to control for potential confounders. Odds ratios (ORs) and 95% confidence intervals (CIs) were computed. P-value 0.05 was considered as statistically significant.

## Results

The total number of study population involved in this study was 200. In order to investigate women's involvement with the decision of Caesarean Section and their degree of satisfaction about the decision, post-operative care and pain management. Their age at mean 32.1 sd 5.9 (min 19-max 49). Those who had previous children were 2.2 sd 2 (min 0-max 12). Gestational age (weeks) at mean 38.9 sd (min 26-max 46). Majority of them were housewife (63%) with insignificant correlation, most of them had university education (63.5%), most of them expected to have cesarean section (54%) and spontaneous labor started in (32%) (Table 1).

Planned cesarean section was reported among 91 (45%) while emergency was 109 (54.5%). The indications were found to be non-reassuring CTG 42 (21%), failure to progress 32 (16%), Malpresentation 11 (5.5%), previous caesarian section/myomectomy 90 (45%), pregnancy induced hypertension 3 (1.5%), maternal request 3 (1.5%) and others indication were 155 (77.5%). The only significant finding between indication of C/S and satisfaction was maternal request (p-value 0.001) (Table 2).

The person who was involved in the decision to do a Caesarean Section is important in determining the satisfaction. Patient herself was involved in 46 (23%), husband 7 (3.5%), doctor 178 (89%). There were significant results when the patient involved as well as the doctor (p-value<0.001) (Table 3).

Woman's involvement with the decision of Caesarean Section					
Within group comparison		No (n=154)	Yes (n=46)	Total (n=200)	p-value
Occupation	Employee	19 (12.3)	4 (8.7)	23 (11.5)	0.953
	Household	97 (63.0)	29 (63.0)	126 (63.0)	
	Nurse	6 (3.9)	2 (4.3)	8 (4.0)	
	Student	4 (2.6)	1 (2.2)	5 (2.5)	

	Teacher	28 (18.2)	10 (21.7)	38 (19.0)	
Literacy status	Primary and below	13 (8.4)	1 (2.2)	14 (7.0)	0.204
	Diploma and secondary	42 (27.3)	17 (37.0)	59 (29.5)	
	University	99 (64.3)	28 (60.9)	127 (63.5)	
Expected delivery type	SVD	67 (43.5)	17 (37.0)	84 (42.0)	0.024
	Caesarean	84 (54.5)	24 (52.2)	108 (54.0)	
	Likely Caesarean	3 (1.9)	5 (10.9)	8 (4.0)	
How did your labor start?	Itself	68 (44.2)	15 (32.6)	83 (41.5)	0.159

**Table 1:** Distribution of the study population according to general characteristics (Caesarean section decision and degree of satisfaction-KFMC, Riyadh, Saudi Arabia, 2017).

Woman's involvement with the decision of Caesarean Section					
Indication		No (n=154)	Yes (n=46)	Total (n=200)	p-value
Caesarean Section	Planned	66 (42.9)	25 (54.3)	91 (45.5)	0.17
	Emergency	88 (57.1)	21 (45.7)	109 (54.5)	
Non reassuring CTG	No	124 (80.5)	34 (73.9)	158 (79.0)	0.334
	Yes	30 (19.5)	12 (26.1)	42 (21.0)	
Failure to progress	No	126 (81.8)	42 (91.3)	168 (84.0)	0.124
	Yes	28 (18.2)	4 (8.7)	32 (16.0)	
Malpresentation	No	146 (94.8)	43 (93.5)	189 (94.5)	0.729
	Yes	8 (5.2)	3 (6.5)	11 (5.5)	
Previous caesarean section/myomectomy	No	81 (52.6)	29 (63.0)	110 (55.0)	0.211
	Yes	73 (47.4)	17 (37.0)	90 (45.0)	
Pregnancy induced HTN	No	152 (98.7)	45 (97.8)	197 (98.5)	0.668
	Yes	2 (1.3)	1 (2.2)	3 (1.5)	
Maternal request	No	154 (100.0)	43 (93.5)	197 (98.5)	0.001
	Yes	0 (0.0)	3 (6.5)	3 (1.5)	
Others	No	118 (76.6)	37 (80.4)	155 (77.5)	0.885

**Table 2:** Distribution of the study population according to the indication of caesarean section (Caesarean section decision and degree of satisfaction-KFMC, Riyadh, Saudi Arabia, 2017).

Woman's involvement with the decision of Caesarean Section					
Variables		No (n=154)	Yes (n=46)	Total (n=200)	p-value
Patient herself	No	154 (100.0)	0 (0.0)	154 (77.0)	<0.001
	Yes	0 (0.0)	46 (100.0)	46 (23.0)	
Husband	No	151 (98.1)	42 (91.3)	193 (96.5)	0.029
	Yes	3 (1.9)	4 (8.7)	7 (3.5)	

Doctor	No	2 (1.3)	20 (43.5)	22 (11.0)	<0.001
	Yes	152 (98.7)	26 (56.5)	178 (89.0)	
Who was involved in the decision to do a caesarean section?	1. Self	0 (0.0)	20 (43.5)	20 (10.0)	<0.001
	2. Husband	2 (1.3)	0 (0.0)	2 (1.0)	
	3. Doctor	151 (98.1)	0 (0.0)	151 (75.5)	
	1 and 3	0 (0.0)	22 (47.8)	22 (11.0)	
	2 and 3	1 (0.6)	0 (0.0)	1 (0.5)	
	1, 2 and 3	0 (0.0)	4 (8.7)	4 (2.0)	
I and husband	No	132 (85.7)	35 (76.1)	167 (83.5)	0.123
	Yes	22 (14.3)	11 (23.9)	33 (16.5)	
Doctor and we	No	68 (44.2)	13 (28.3)	81 (40.5)	0.054
	Yes	86 (55.8)	33 (71.7)	119 (59.5)	
Mostly doctor	No	119 (77.3)	39 (84.8)	158 (79.0)	0.273
	Yes	35 (22.7)	7 (15.2)	42 (21.0)	
Doctor	No	141 (91.6)	42 (91.3)	183 (91.5)	0.957
	Yes	13 (8.4)	4 (8.7)	17 (8.5)	

**Table 3:** Distribution of the study population according to who was involved in the decision to do a caesarean section? (CS decision and Degree of Satisfaction-KFMC, Riyadh, Saudi Arabia, 2017).

When the decision of C/S was made most the study population were satisfied with it 192 (96.0%). Before the Caesarean operation, most of them felt that they had enough information about it 129 (64.5%). Regarding satisfaction of involvement in the decision; most of them were fairly satisfied 82 (41%), very satisfied 68 (34%), fairly unsatisfied 32 (16%), very unsatisfied 13 (6.5%) and no strong feelings 5 (2.5%). Most of them were anesthetized by epidural or spinal 162 (81.4%) and majority were given a choice of anesthesia 192 (96.0%). Those who

satisfied with their choice of anesthesia were 172 (88.7%). Apart from medical staff, no one else presented at the time of birth. After the birth, most the babies did not need special care and were admitted to the ward 169 (84.5%) (Table 4).

Regarding medication used for pain management, it's mainly Paracetamol 118 (59%), ibuprofen 112 (56%), Diclofenac 60 (30%) and other drugs (tramadol/Tylenol) 10 (5%) (Table 5).

Woman's involvement with the decision of Caesarean Section					
Variables		No (n=154)	Yes (n=46)	Total (n=200)	p-value
Before the Caesarean operation, did you feel you had enough information about it?	Yes, enough	101 (65.6)	28 (60.9)	129 (64.5)	0.735
	No, because there wasn't enough time	33 (21.4)	10 (21.7)	43 (21.5)	
	No, I would have liked more information	20 (13.0)	8 (17.4)	28 (14.0)	
How satisfied are you with your involvement in the decision?	Very unsatisfied	8 (5.2)	5 (10.9)	13 (6.5)	0.583
	Fairly unsatisfied	23 (14.9)	9 (19.6)	32 (16.0)	
	Fairly satisfied	66 (42.9)	16 (34.8)	82 (41.0)	
	Very satisfied	53 (34.4)	15 (32.6)	68 (34.0)	
	No strong feelings	4 (2.6)	1 (2.2)	5 (2.5)	
What type of anaesthesia did you have for the Caesarean Section?	General (you were put to sleep)	29 (19.0)	8 (17.4)	37 (18.6)	0.811
	Epidural or spinal (injection in the back)	124 (81.0)	38 (82.6)	162 (81.4)	

Were you given any choice of anaesthesia?	No	8 (5.2)	0 (0.0)	8 (4.0)	0.115
	Yes	146 (94.8)	46 (100.0)	192 (96.0)	
Are you satisfied with the one which you had?	No	15 (10.1)	7 (15.6)	22 (11.3)	0.309
	Yes	134 (89.9)	38 (84.4)	172 (88.7)	
Apart from medical staff, was anyone else present at the birth?	Husband	0 (0.0)	0 (0.0)	0 (0.0)	1
	Friend	0 (0.0)	0 (0.0)	0 (0.0)	
	Relative	0 (0.0)	0 (0.0)	0 (0.0)	
	Other	0 (0.0)	0 (0.0)	0 (0.0)	
	No one	154 (100.0)	46 (100.0)	200 (100.0)	
After the birth, did the baby go to special care? (NICU)	NICU	25 (16.2)	6 (13.0)	31 (15.5)	0.6
	Ward	129 (83.8)	40 (87.0)	169 (84.5)	

**Table 4:** Distribution of the study population according to level of satisfaction about the management and anesthesia (CS decision and Degree of Satisfaction-KFMC, Riyadh, KSA, 2017).

Woman's involvement with the decision of Caesarean Section					
Variables		No (n=154)	Yes (n=46)	(n=200)	p-value
Pain medication: Paracetamol	No	66 (42.9)	16 (34.8)	82 (41.0)	0.329
	Yes	88 (57.1)	30 (65.2)	118 (59.0)	
Pain medication: Ibuprofen	No	67 (43.5)	21 (45.7)	88 (44.0)	0.797
	Yes	87 (56.5)	25 (54.3)	112 (56.0)	
Pain medication: Diclofenac	No	106 (68.8)	34 (73.9)	140 (70.0)	0.509
	Yes	48 (31.2)	12 (26.1)	60 (30.0)	
Pain medication: Others (Tramadol/Tylenol)	No	149 (96.8)	41 (89.1)	190 (95.0)	0.037
	Yes	5 (3.2)	5 (10.9)	10 (5.0)	

**Table 5:** Distribution of the study population according to Pain medications (CS decision and Degree of Satisfaction-KFMC, Riyadh, Saudi Arabia, 2017).

Those who had a problem during their management were only 2 (1%), speak to them after the operation to discuss the reasons for the operation in only 19 (9.5%), in 13 (6.5%) speak to patients after the operation to discuss any problems. In only 11 (5.5%) received advise about future pregnancies/births. Those who received counseling and

the staff talked to them after operation were 128 (64.0%). The doctor did the operation for patient's request in about only 6 (3%), consultant/ team member at patient request in 52 (26%), another doctor at request 149 (74.5%) and midwives/nurse at request are available only in 1 (0.5%) (Table 6).

Women's involvement with the decision of Caesarean Section					
Variables		No (n=154)	Yes (n=46)	Total (n=200)	P-value
Did you have any problem?	No	153 (99.4)	45 (97.8)	198 (99.0)	0.362
	Yes	1 (0.6)	1 (2.2)	2 (1.0)	
Did anyone speak to you after the operation to discuss the reasons for the operation	No	139 (90.3)	42 (91.3)	181 (90.5)	0.832
	Yes	15 (9.7)	4 (8.7)	19 (9.5)	
Did anyone speak to you after the operation to discuss any problems	No	146 (94.8)	41 (89.1)	187 (93.5)	0.171

	Yes	8 (5.2)	5 (10.9)	13 (6.5)	
Did anyone speak to you after the operation to advise you about future pregnancies/births	No	146 (94.8)	43 (93.5)	189 (94.5)	0.729
	Yes	8 (5.2)	3 (6.5)	11 (5.5)	
Did anyone speak to you after the operation to: No-one spoke to me	No	54 (35.1)	18 (39.1)	72 (36.0)	0.614
	Yes	100 (64.9)	28 (60.9)	128 (64.0)	
The doctor who did the operation at your request?	No	152 (98.7)	42 (91.3)	194 (97.0)	0.01
	Yes	2 (1.3)	4 (8.7)	6 (3.0)	
Your consultant/team member at your request?	No	116 (75.3)	32 (69.6)	148 (74.0)	0.435
	Yes	38 (24.7)	14 (30.4)	52 (26.0)	
Another doctor at your request?	No	39 (25.3)	12 (26.1)	51 (25.5)	0.917
	Yes	115 (74.7)	34 (73.9)	149 (74.5)	
Midwife/Nurse at your request?	No	153 (99.4)	46 (100.0)	199 (99.5)	0.584
	Yes	1 (0.6)	0 (0.0)	1 (0.5)	

**Table 6:** Distribution of the study population according to communication between treating staff and the patients (CS decision and Degree of Satisfaction-KFMC, Riyadh, Saudi Arabia, 2017).

Post-operative management is an important factor to determine the outcome and satisfaction. On the postnatal ward, most of them had enough information about recovering from CS 189 (94.5%), about 182 (91.5%) had enough help with recovering from CS. Regarding their feeling having had a Caesarean delivery most of them felt fair 63 (31.5%) and 71 (35.5%) felt excellent towards postoperative care; 70

(35.0%) answered that they would prefer a Caesarean delivery (Table 7).

Regarding distribution of the study population according to pain score, the mean score was 2.1, and the SD was 1.7 (min 0-max 8) (Table 8).

Woman's involvement with the decision of Caesarean Section					
Variables		No (n=154)	Yes (n=46)	Total (n=200)	p-value
On the postnatal ward, did you have enough information about recovering from CS?	No	7 (4.5)	4 (8.7)	11 (5.5)	0.279
	Yes	147 (95.5)	42 (91.3)	189 (94.5)	
On the postnatal ward, did you have enough help with recovering from CS?	No	12 (7.8)	5 (11.1)	17 (8.5)	0.483
	Yes	142 (92.2)	40 (88.9)	182 (91.5)	
How did you feel having had a Caesarean delivery?	Poor	14 (9.1)	4 (8.7)	18 (9.0)	0.094
	Fair	41 (26.6)	22 (47.8)	63 (31.5)	
	Good	39 (25.3)	9 (19.6)	48 (24.0)	
	Very good	34 (22.1)	7 (15.2)	41 (20.5)	
	Excellent	26 (16.9)	4 (8.7)	30 (15.0)	
How do you feel about how we looked after you?	Poor	0 (.0)	1 (2.2)	1 (.5)	0.183
	Fair	20 (13.0)	7 (15.2)	27 (13.5)	
	Good	28 (18.2)	7 (15.2)	35 (17.5)	
	Very good	55 (35.7)	11 (23.9)	66 (33.0)	
	Excellent	51 (33.1)	20 (43.5)	71 (35.5)	

If you have another baby, would you prefer a Caesarean delivery?	Yes, definitely	56 (36.4)	14 (30.4)	70 (35.0)	0.5
	Yes, probably	49 (31.8)	13 (28.3)	62 (31.0)	
	Don't know	21 (13.6)	8 (17.4)	29 (14.5)	
	Probably not	19 (12.3)	5 (10.9)	24 (12.0)	
	Definitely not	9 (5.8)	6 (13.0)	15 (7.5)	
Comments if any	No	128 (83.1)	35 (76.1)	163 (81.5)	0.218
	Yes	26 (16.9)	11 (23.9)	37 (18.5)	

**Table 7:** Distribution of the study population according to satisfaction toward postoperative management (CS decision and Degree of Satisfaction-KFMC, Riyadh, Saudi Arabia, 2017).

Woman's involvement with the decision of Caesarean Section					
Variables		Yes (n=154)	No (n=46)	Total (n=200)	P-value
Pain score	Median	2	2	2	0.94
	Min-max	0-8	0-6	0-8	
	Mean (SD)	2.1 (1.6)	2 (2)	2.1 (1.7)	
After the birth, how long were you in hospital? (day)	Median	3	3	3	0.019
	min-max	03-07	03-10	03-10	
	Mean (SD)	3.1 (0.5)	3.4 (1.2)	3.2 (0.7)	

**Table 8:** Distribution of the study population according to pain score (CS decision and Degree of Satisfaction-KFMC, Riyadh, Saudi Arabia, 2017).

One of the important indicators of satisfaction is hospital stay. This study showed that the mean of hospital stays was found to be 3.2, SD 0.7 (min 3-max 10).

## Discussion

Satisfaction is a complex concept. It involves either a positive attitude or affective response to an experience, as well as a cognitive evaluation of the emotional response. The present study was an attempt to assess the women's involvement with the decision of caesarean section and their degree of satisfaction about decision, post-operative cares and pain management. Which represented the various aspects of health care in order to evaluate the quality in a main tertiary hospital in Saudi Arabia. Indeed the findings of this research were quite helpful if they were transformed into schedules for improving the quality of health care system. The strengths of our study include the good response rate and the fact that we used a hospital-based sample of women. The study also avoided some of the pitfalls of published research, which relied on women giving feedback to the clinicians involved in their care [13].

This study indicates that it's very important to involve the patient herself in the decision of CS. There were significant results when the patient was involved as well as the doctor (P-value <0.001). The person who was involved in the decision to do a Caesarean Section is important in determining the satisfaction. Patient herself was involved in the decision in 23%, husband in 3.5% and doctor in 89%. Before the operation 64.5% of women feel that had enough information about it.

Also a significant result was between indication of CS and satisfaction was maternal request (P-value 0.001). These factors are important to determine the level of satisfaction toward outcome of management. In the literature the assumption is often made that the decision to perform a CS is made on clinical grounds only [14]. The role of maternal request in decision-making has been raised, [15] but so far studies from the woman's perspective have tended to use small samples with unique characteristics [16,17].

Interpretation of the results for satisfaction is based on the assumption that women who answered anything other than "strongly agree" to positively worded items were not entirely satisfied or may have experienced problems with their care. This approach has been recommended in previous research [18] and has been applied to other Australian studies examining satisfaction in childbirth [19]. An appreciable number of women were only able to "agree" to such items or were "not sure" about their care. This study indicated that most of them were fairly satisfied (41%), very satisfied (34%), fairly unsatisfied (16%), very unsatisfied (6.5%) and no strong feelings (2.5%) regarding satisfaction of involvement in the decision. This level of satisfaction is accepted in comparison with other similar research. In other studies, the level of informational satisfaction was high [20-22].

It could be the result of different conditions in different countries and different care systems. The low satisfaction rate in this category could also be explained by the lack of sufficient time devoted to each patient due to crowded hospitals in the developing countries. Researchers realize that in a busy general hospital, time is a luxury that sometimes is unaffordable, but we must make the effort [23]. The level

of satisfaction with both communication and explanations given for spinal anaesthesia were high (88.7%). Most of them were anesthetized by epidural or spinal (81.4%) and majority were given a choice of anesthesia (96.0%). A number of studies have identified poor communication as a significant negative predictor of maternal satisfaction, [24,25] but none of them assessed to what extent it influenced satisfaction. Poor communication resulted in patient-doctor conflict in 8.3% of cases in one study, resulting in failure to give informed consent for delivery [26].

According to our hospital's protocol regarding medications used for pain management, it's mainly Paracetamol (59%), ibuprofen (56%), Diclofenac (30%) and other drugs (tramadol/Tylenol) (5%). This part of management is very important in satisfaction towards management and total quality. Using Likert scale assessed pain, pain score revealed that the score at mean of 2.1 sd 1.7 (min 0-max 8). So there is a variation in pain management satisfaction. This is similar to that reported by Siddiqi and colleagues (81.4%) [27]. Hodnett and colleagues found that factors traditionally thought to greatly influence satisfaction such as pain relief and intrapartum medical interventions were neither as obvious, nor as powerful as the psychological factors [28]. Lavender and colleagues conducted a study to determine what aspects of childbirth experience women perceived as being crucial. They found that spouse's support, emotional control, pain relief and involvement in decision-making were among the most important factors [29].

The general satisfaction rate was found to be 96%. The level of satisfaction with involvement of the respondents in decision-making was approximately (39.5%). Other studies done elsewhere to determine satisfaction with involvement with decision-making have yielded high not comparable results. Mould and colleagues found that women going for elective caesarean delivery had a 93% satisfaction score for involvement in decision making while those going for emergency delivery had a 69% satisfaction rating [30]. Graham and Hundley also had similar results [22]. Turnbull and colleagues reported a 90.9% satisfaction with the decision to have a caesarean delivery [31]. Postoperative management is important factor to determine the outcome and satisfaction. On the postnatal ward, most of them had enough information about recovering from CS 189 (94.5%), about 182 (91.5%) had enough help with recovering from CS. Regarding their feeling having had a Caesarean delivery most of them felt fair (31.5%) and (35.5%) felt excellent towards postoperative care; 35% answered that they would prefer a Caesarean delivery.

This study indicates that most babies did not need special care and were admitted to the ward (84.5%). Neonatal outcome was shown to have a strong influence on maternal satisfaction as general. Mothers whose neonates died were more likely to be dissatisfied compared to mothers whose neonates were alive and well. Respondents whose neonates had a poor outcome (i.e. died) were 15.5% more likely to be dissatisfied with spinal anesthesia for caesarean delivery. The results of this study suggest that strategies are necessary to improve the quality of informational satisfaction. It should not be forgotten that the patient is the central figure around whom our day revolves. She is the reason we are there. The patient needs informational care just as physical. Nurses should talk as gently as possible. On several occasions, the patient does not understand the large amount of information that has been handed out to him/her. Sometimes it may have to be reinforced in simpler terms; therefore, emphasizing on communication skills and the method of giving information to patients can be very beneficial for elevating informational satisfaction.

## Disclosure and Conflict of Interest

The authors having nothing to disclose and there was no any funding for the study. There are no conflicts of interest. The work was not presented at any of the meetings.

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