



**“SURVEY ON PATIENT’S SATISFACTION LEVEL RECEIVING SPINAL ANESTHESIA
FOR BELOW UMBILICAL SURGERY”**

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ABSTRACT

In modern world the importance of patients satisfaction level is not only limited to evaluate the medical care (that leads to improved quality of anesthesia) but also to reduce the complications of spinal anesthesia by anesthesiologist. With the aim of this we conducted a study to evaluate patients satisfaction level receiving spinal anaesthesia, to determine predictors which causes dissatisfaction in the patients regarding anaesthesia and to decrease or avoid the post operative complication related to it. This is a Prospective and Observational study. 60 patients of ASA grade I and II, between the age of 18 to 60 years, posted for below umbilical surgery under spinal anesthesia. A high percentage of the patients were satisfied after the spinal anesthesia and reasons of dissatisfaction were shivering, nausea/vomiting, pain in arm, difficulty in voiding urine. Few patients also had complain of headache and back pain after surgery. In our study, we concluded a high rate of patient satisfaction except some variables (which causes patient’s dissatisfaction). Keeping all factors in mind along with good explanation to the patient about anaesthetic procedure during the preanesthetic visit, could increase the satisfaction level.

KEYWORDS: Spinal anaesthesia, Patient’s satisfaction level, Questionnaire.

INTRODUCTION

Patients satisfaction help to evaluate medical care that leads to improved quality of anesthesia, as well as anesthesiologist attempt to reduce the complications of spinal anesthesia^[1-3] It is a subjective as well as a multidimensional concept which involves physical, emotional, social and cultural factors, that are difficult to measure.^[4-5] So it is measured by patient’s evaluation and assessment of their experience, after providing a good service of care by anaesthesiologist.^[6] The previous studies on effect and component of spinal anaesthesia on patient’s satisfaction level, did not demonstrate satisfactorily.

So we conducted a study to evaluate the determinants of spinal anesthesia on patients satisfaction level by assessing some questionnaires (tools), which were unidimensional.^[7,8] The aim of this study was to evaluate patients satisfaction level receiving spinal anaesthesia, to determine predictors which causes dissatisfaction in the patients regarding anaesthesia and to decrease or avoid the post operative complication related to it.

MATERIALS AND METHODS

This is a Prospective and Observational study which was approved by the Ethics Committee of People’s

University, Bhopal. The study population include 60 patients of ASA grade I and II, who comes between the age of 18 to 60 years, posted for below umbilical surgery under spinal anesthesia. Patients with ASA grade III & above, having systemic disorder (like respiratory, cardiovascular, neurocerebral defects etc), any coagulation defect and with any known allergy, are excluded from the study.

After taking written informed consent from patients, who were fitted in the inclusion criteria were selected and approached on the morning of surgery or a day before. The selection procedure did not involve randomization. The end-point of the survey was collecting 13 questionnaires by the patient after 24hours of surgery regarding any intraoperative and post operative discomfort. Questionnaire (appendix -1) contain about experiences with anesthesia satisfaction level.

Study was statistically analyse by –SPSS software version 22.0.

RESULTS

Table 1: Distribution of Patients according to Gender & Age.

Gender	Age (year)			
	Number	Mean age	SD	Range
Male	27	39.48	14.61	18-60
Female	33	38.73	13.36	18-60
Total	60	39.07	13.82	18-60

Table 1. Reveals distribution of patients according to gender & Age. Out of 60 patients, 27 were male and 33 were females. Mean age of male and female patients was 39.48±14.6 year and 38.73±13.36 year respectively. Its range was 18 to 60 year.

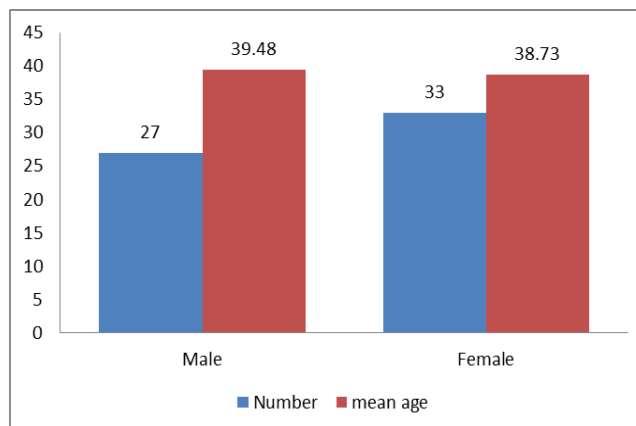


Figure 1: Distribution of patients according to gender & Age.

Table 2: Patient Satisfaction level receiving Spinal anesthesia for below umbilical surgery.

Satisfaction's Questionnaire		Yes N (%)	NO N (%)
1.	Have you been explained about the type of anesthesia and problem before surgery?	60(100%)	0(0.0%)
2.	Were you anxious before entering the theatre?	30(50%)	30(50%)
3.	Were you comfortable with the position when spinal anesthesia was conducted?	56(93.3%)	4(6.7%)
4.	Did you have shivering during or after the surgery ?	30(50%)	30(50%)
5.	Did you have breathlessness during surgery?	2(3.3%)	58(96.7%)
6.	Did you have pain during the surgery in the any other part of the body due to position?(e.g. Pain in Arm)	14(23.3%)	46(76.7%)
7.	Did you experience pain or abnormal sensation/feeling on the site of operation?(e.g.slight Abdominal Pain)	5(8.3%)	55(91.7%)
8.	Did you feel pain immediate after the surgery?	3(5.0%)	57(95%)
9.	Did you have nausea /vomiting during or after the surgery?	16(26.7%)	44(73.3%)
10.	During the pre-operative visit, did you get the opportunity to express your opinion about the type of anesthesia.	55(91.7%)	5(8.3%)
11.	Did you feel headache after surgery	3(5.0%)	57(95.0%)
12.	Did you feel back pain after surgery	5(8.3%)	55(91.7%)
13.	Did you feel difficulty in voiding of urine after the operation? Catheterization=41(68.3%)	7(11.7%)	12(20.0%)

Table 2/figure 2 reveals patient Satisfaction level receiving Spinal anesthesia for below umbilical surgery. It shows that most common reason for patient's unsatisfaction is shivering, nausea/vomiting during or after surgery, pain in arm & abdomen. Few patients also had headache and back pain after surgery. 30(50.0%) patients had shivering during or after surgery. 16(26.7%)

patients had nausea/vomiting during or after surgery. 14(23.3%) had pain in arm and 5(8.3%) had slight pain in abdomen. 3(5.0%) & 5(8.3%) patients had headache and back pain. 4(6.7%) patients were not comfortable with position during spinal anesthesia. 7(11.7%) felt difficulty in voiding of urine after the operation

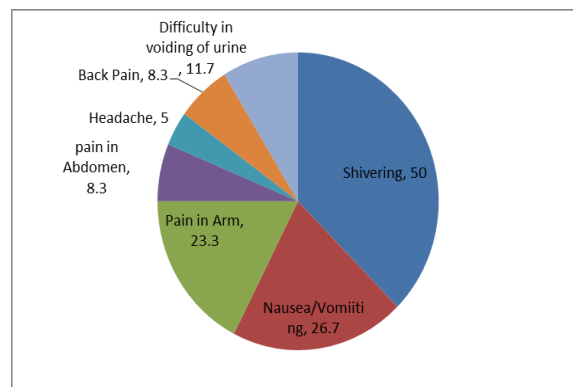
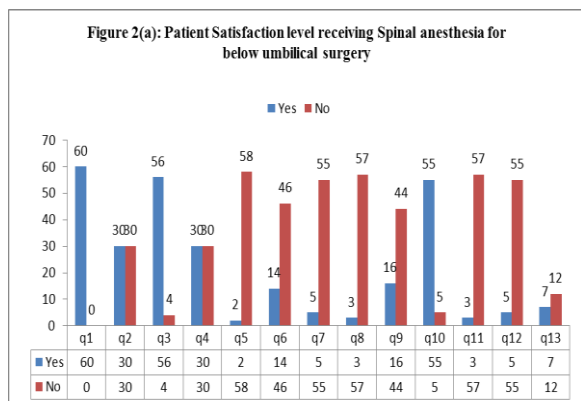


Fig. 2(b): Percentage distribution.

This survey shows that most common reason for patients dissatisfaction is shivering, nausea/vomiting during or after surgery, pain in arm, difficulty in voiding urine.

DISCUSSION

- Patients satisfaction is one of the important indicator of health care outcome and to evaluate the quality of anesthesia. The purpose of our research was to decrease intra operative as well as post operative complications, which lead to patients dissatisfaction. We conducted this study with the aim to identify characteristics and predictors of patients satisfaction who receives spinal anesthesia for below umbilical surgery. Statistical comparison between groups of satisfied and unsatisfied patient showed no difference in satisfaction scores according to gender and age^[12] Other parameters have significant correlation between patients satisfaction level, and have a p-value < 0.005.
- Siddiqi et Jafri studied among patients receiving spinal anesthesia for cesarean section^[12], found high level of satisfaction (81.4%), and ready to opt for spinal anesthesia (53.7%) for any surgery in future. In our study also satisfaction score is significantly high i.e. 82%.
- Jjala et al.^[13] conducted his study on patients who are posted for orthopedic surgery and demonstrated that 88.4% patients were satisfied with spinal anesthesia, which was similar to our study (82%)
- Rhee et al.^[11] achieved high level (96.3%) of satisfaction after spinal anaesthesia and predictable factors for dissatisfaction were Nausea/Vomiting and postoperative backache. In our study the main reasons of dissatisfaction were shivering, nausea / vomiting pain in arm and urinary retention.
- Dharmalingam et Zainuddin^[14] studied on 200 patients posted for caesarean section under spinal anesthesia and in his study, he concluded that all the patients were satisfied with the complete explanations provided by the trained personal regarding applicable anesthesia methods, which was similar to our study.
- Sindhvananda et al.'s study^[15] showed that PDPH, pruritus, and PONV were predictors of dissatisfaction. In our study PDPH and pruritus were not seen but 26.7% patients had complain of intra or PONV.
- In Bhattarai et al.'s study^[16] main cause of discomfort was immobility of lower limbs after regional anaesthesia. In our study, type of anaesthesia and its effects was explained during preanaesthetic visit so, patients might not have considered immobility of lower limbs as dissatisfaction.
- Rate of satisfied patients (if we compare with other studies) in our study was higher when the quality of explanation about the spinal anesthesia was explained during preoperative visit.

Few patients also had headache and back pain after surgery.

CONCLUSION

- Our study demonstrates that some variable are significant predictors of good satisfaction level in patients receiving spinal anesthesia.
- So as to increase the patient's satisfaction level we have to kept those variables in our mind (to reduce the patients complication)
Prewarming of the fluid could reduce patient shivering
Intraoperative application of drugs (in risk population) could reduce the nausea and vomiting
One-time urinary catheterization could reduce the difficulty in voiding
- Along with this, good explanation to the patient about anaesthetic procedure during the preanesthetic visit, should be the part of anesthetic plan.

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Appendix -1

Questionnaire

1.	Have you been explained about the type of anesthesia and problem before surgery?	Y/N
2.	Were you anxious before entering the theatre?	
3.	Were you comfortable with the position when spinal anaesthesia was conducted?	
4.	Did you have shivering during or after the surgery ?	
5.	Did you have breathlessness during surgery?	
6.	Did you have pain during surgery in any part of the body due to position?	
7.	Did you experience pain or abnormal sensation/feeling on the site of operation?	
8.	Did you feel pain immediate after the surgery?	
9.	Did you have nausea /vomiting during or after the surgery?	
10.	During the pre-operative visit did you get the opportunity to express your opinion about the type of anesthesia to be administered?	
11.	Did you feel headache after surgery	
12.	Did you feel back pain after surgery	
13.	Did you feel difficulty in voiding of urine after the operation?	

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