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Patients' Operative Care Knowledge and Desire for Information About Surgery and Anesthesia

Renu Gurung, Binita Acharya, Bigen M Shakya

Author(s) affiliation

Department of Anesthesiology, Maharajgunj Medical Campus, Tribhuvan University Teaching Hospital, Institute of Medicine, Maharajgunj, Kathmandu, Nepal

Corresponding author

Bigen M Shakya, MBBS, MD
bigensk@yahoo.com

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ABSTRACT

Introduction

Good communication between patients and health professionals and sharing of information on operative procedures form the basis of informed consent. The objective of the study was to assess our patients' information on the operative procedures and their desire for information about surgery and anesthesia.

Methods

This was a descriptive cross-sectional study done in one of the academic institutes of Nepal. The sample size calculated was 422. A simple random sampling by proportionate method was used. Patients between 18 to 80 yrs. scheduled for elective surgeries were included in the study. The questionnaires were read by anesthesiologist to the participants after preanesthetic check-up just before scheduled operation in the preparation room. Patients were requested to complete a 100 mm visual analogue scale by marking a cross to indicate level of anxiety on a spectrum of 'not anxious ' to 'extremely anxious'.

Results

The final number of participants were 404. About 21.53 % of the patients did not know about the type of operation that they were about to undergo and 19.8 % of the patients were unaware whether they would be put into unconscious state or not. More than half did not know about duration of surgical procedure (61.88%), time of resuming daily activities after surgery (60.64%), duration of stay in hospital (48.76%), pain after surgery (47.77%). There was positive correlation between the information and level of education ($p<0.001$) and patients with past history of surgeries ($p=0.001$).

Conclusion

The patients lacked information on operative care especially regarding duration of surgical procedure, duration of stay in hospital and time required for resuming daily activities.

Keywords
Access to information, communication, knowledge

INTRODUCTION

Every day we conduct many different operations as a day care surgeries or for inpatient. It may be minor surgeries or major surgeries. Many times we think communication gap between patient and medical person is a reason for mishap that's happening with doctors, nursing staffs and medical institutes. Some of us believe that we have given sufficient information to patient, some of us are still in dilemma. The importance of good communication between medical professionals and delivering adequate information to patients is well known. It also leads to decrease malpractice claim, decreases anxiety level and improves satisfaction among patients.[1,2,3] The objective of the study was to assess our patient's information on the operation that were undergoing and their desire for information about surgery and anesthesia.

METHODS

A hospital based descriptive cross sectional study design was applied to assess the patient's knowledge of operative care and their desire for information about surgery and anesthesia. The study was carried out at Tribhuvan University Teaching Hospital (TUTH), Maharajgunj over duration of two months. This hospital was chosen, as it is one of the tertiary and large hospitals of Nepal with relatively maximum patient inflow.

For sample size calculation, the prevalence was assumed to be 50%, allowable error 5%. Using the formula, $N=z^2pq/l^2$, the sample size was 384. With the addition of non-responding rate of 10%, the final sample size was 422.

Sampling method used was simple random sampling by proportionate method. The total number of surgical cases per day in all operation theaters was considered as a sampling frame and the participants were chosen randomly from those surgical lists.

Ethical approval was taken from Institutional Review Committee of Institute of Medicine (IOM), Tribhuvan University. Patients between 18 to 80 yrs. scheduled for elective surgeries were included in the study. Patients were either inpatients or admitted the day of operation, and belonged to various surgical specialties. Informed consent was taken from all the patients before data collection, after doing clear explanation of the purpose and plan of the study. Every patient was explained about the investigation questionnaire. These questionnaires were dictated by doctors to the participants after preanesthetic checkup just before scheduled operation in the preparation room. The questionnaire consisted of general information of the patient, types of surgery, previous experience of surgery/anesthesia, operation going to be performed, American Society of Anesthesiologist (ASA) Physical Status grading, education level, occupation. The questionnaire consisted of four sets of questions. 1) The amount of information received (none, little, enough) relating to the following six topics: the operation, the anesthetic, length of time in operating theater, amount of postoperative pain, duration of hospital stay and time to return to normal fitness. 2) If further information was desired (yes, no, doesn't matter) for each of the six topics. 3) If they tried to seek for further information (yes, no) 4). The lack of information score (IS) was defined as overall lack of information regarding the topics and calculated by giving score of two to don't know , one to know little and zero to know well.[4] The patient score could vary from 0 to 12. As the number increased, the lack of knowledge also increased. The Desire for more information (DIS) was a measure of lack of satisfaction with the information the patients have. It was calculated by giving score of two to response yes and zero to responses no and doesn't matter.[4] The score could range from 0 to 12, higher number signified lack of satisfaction with information thus more desire.

Patients were requested to complete a 100 mm visual analogue scale (VAS) by marking a cross to indicate level of anxiety on a spectrum of 'not anxious' to 'extremely anxious'.

The collected data were entered in Microsoft excel and then exported to Statistical Package for Social Sciences (SPSS) version 16. Mean, standard deviation, frequency and percentage were used in descriptive analysis. Kruskal-Wallis H test and Mann-Whitney test was used to assess association between education level, previous experience of surgery/anesthesia with information score and desire for information score. Spearman rank correlation coefficient was calculation to look for the association between information score and desire for information score. The p-value was considered at 0.05.

RESULTS

The number of participants in the study were 404. The general characteristics of the respondents are given in Table 1. There were 166 (41.09%) male and 238 (58.91%) female patients. Among them 232 (57.43%) had no previous history of surgery. Majority of cases, 378 (93.56%) were of ASA physical status I and II.

As evident from Table 2, most of our patients who arrived in operation room on the day of surgery had either no or little information about the procedure they were undergoing. Eighty-seven (21.53%) patients didn't know about the name or type of operation that were about to undergo. Similarly, 328 (81.19%) patients had either no knowledge or knew little about duration of hospital stay after the

Table 1. General characteristics of participants (n=404)

Characteristics	Frequency (%)
Age in years	
18-65	372 (92.08)
>65	32 (7.92)
Sex	
Male	166 (41.09)
Female	238 (58.91)
Previous surgery	
No	232 (57.43)
Yes	172 (42.57)
ASA Grading	
I	246 (60.89)
II	132 (32.67)
III	24 (5.94)
IV	2 (0.50)
Education	
Illiterate	103 (25.50)
School education	218 (53.96)
Graduate and above	83 (20.54)
Occupation	
Employed	156 (38.61)
Unemployed	236 (58.42)
Retired	12 (2.97)

Table 4. Association of median Lack of information score (IS) and median Desire for information score (DIS) with level of education and history of previous surgery (n=404)

Features	Median IS	p-value	Median DIS	p-value
Education				
Illiterate	10	<0.001*	10	0.19*
School	8		12	
Graduate	5		12	
Previous surgery				
Yes	7	0.001#	12	0.02#
No	9		10	

**Kruskal wallis H test #Mann Whitney U test p-value significant at < 0.05*

procedure.

Table 3 showed that as they had no or little information most of them had desire for further information. Majority of our patients had desire for more information, 82.18% of our patients wanted to know about total days they had to spend in hospital. Also most, 84.16% also keen to know about the time taken to resume daily activities after operation.

In our study there was no correlation between lack

Table 2. Information on the following subjects among the participants undergoing surgery under anesthesia (n=404)

Information	Don't know frequency (%)	Know little frequency (%)	Know well frequency (%)
Regarding operation	87 (21.53)	211 (52.23)	106 (26.24)
Making conscious/unconscious for operation	80 (19.80)	204 (50.50)	120 (29.70)
Regarding duration of surgery	250 (61.88)	106 (26.24)	48 (11.88)
Regarding total duration of stay in hospital	197 (48.76)	131 (32.43)	76 (18.81)
Regarding time of resuming the daily activities after surgery	245 (60.64)	108 (26.73)	51 (12.62)
Regarding pain after surgery	193 (47.77)	155 (38.37)	56 (13.86)

Table 3. Desire for further information among patients undergoing surgery under anesthesia (n=404)

Desire for Information	Don't know frequency (%)	Know little frequency (%)	Know well frequency (%)
Regarding operation	310 (6.73)	50 (12.38)	44 (10.89)
Making conscious/unconscious for operation	274 (67.82)	76 (18.81)	54 (13.37)
Regarding duration of surgery	310 (76.73)	51 (12.62)	43 (10.64)
Regarding total duration of stay in hospital	332 (82.18)	49 (12.13)	23 (5.69)
Regarding time of resuming the daily activities after surgery	340 (84.16)	35 (8.66)	29 (7.18)
Regarding pain after surgery	325 (80.45)	43 (10.64)	36 (8.91)

of information and desire of information (r= 0.009, p=0.85).

The education of the patients was one of the significant factor in the information of topic. As the education level increased, the lack of information decreased and it was statistically significant. Also those who had previous experience of surgery also had more information and it was also statistically significant. However only the desire for more information was significant only in patients with previous history of surgery (Table 4).

About 56.68% of participants tried to seek for more information. Visual Analogue Scale for anxiety, 44.30% of patients had score of less than 30 mm, 42.075% had score of 30 mm to 70 mm and 13.61% had score of 70 mm and above.

DISCUSSION

Once there was an era, when the decision of the health workers were respected not only by patients but also by patients' relatives. With time, the information on medicine became easily accessible. The lawsuit against the doctors also increased and patients started to demand more information on the pros and cons of the procedures they are undergoing. It is still debatable what amount of information should be provided to patients and relatives regarding the course of surgeries. The younger patients and female had more desire for information and more preference was given to information related to postoperative period.[5] Elderly did not want to know complications of surgeries.[6] However, everyone now agrees that patients have rights to know basic information about the operative procedures.

Our aim of the study was to investigate the information of the surgical procedures among the patients on the day of surgery. This questionnaire based observational study was carried out in one of the academic hospitals of Nepal with more than 5000 elective surgeries of different specialties per year.

Findings from our study showed that the information provided to the patients regarding surgery are very poor. It should be matter of concern that about 21.53% of the patients did not know about the type of operation that they are about to undergo even on the day of surgery. About 19.8% of the patients were unaware whether they would be put into unconscious state or not. When such basic and vital information provided to patients were lacking, it would not surprise us to know that more than half did not know about duration of surgical procedure (61.88%), time of resuming daily activities after surgery (60.64%), duration of stay in hospital (48.76%), pain after surgery (47.77%). In the study by Mac Nair et al, done in patients with cancer surgery, there was lack of information on long term outcomes of surgeries which were of relevance to patient's perspective. The information was provided regarding to surgical techniques and risk but information on post-operative recovery, long term survival were not enough.[7] The literatures has pointed out the relation between lack of information and increase in lawsuit against the doctors.[1] The education of the patients and past history of any operation played the significant role in the information regarding surgeries. There was positive relation between the information and level of education (P value <0.001). The patients with past history of surgeries also had more information and was also statistically significant (P value 0.001).

It was also evident that as the patients had lack of information they had desire to know missing information. About 56.68% of participants even tried to seek for more information.

One of the surprising findings was lack of correlation between lack of information and desire to have information (Spearman correlation coefficient 0.009 and p-value 0.85). The study by Williams found positive correlation.[4] We could not find positive correlation between lack of information and desire of information even in educated population. The previous history of surgery is only one variable that showed positive correlation (p-value 0.02).

We also measured anxiety among patients using Visual Analogue Scale for Anxiety. This scale is shown to be effective in assessment of pre-operative anxiety.[8,9] About 44.30% of patients have score of less than 30mm, 42.075% have score of more than 30 mm but less than 70 mm and 13.61% have score of 70 mm and above. The score of 70 mm and above is considered as highly anxious.[10]

Our patients lack the basic information regarding the operative procedures. The intent of this study is not to blame any particular specialty for not providing the information. But this lack of information to the patients should be an eye opener for the health professionals. The authorities of the institute should be made aware and should facilitate the communication between operative team members and patients, not only for the medical treatment but also regarding dissemination of rightful information to the patients.

CONCLUSION

Our study shows lack of information on operative care especially regarding duration of surgical procedure, duration of stay in hospital and time required for resuming daily activities.

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CONFLICT OF INTEREST

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REFERENCES

1. Moore PJ, Adler NE, Robertson PA. Medical malpractice: the effect of doctor –patient per-ceptions and malpractice intentions. West J Med. 2000 Oct;173(4):244-250.
2. Kiyohara LY, Kayano LK, Oliveria LM et al. Surgery information reduces anxiety in the per-operative period. Rev Hosp Clin Fac Med Sao Paulo. 2004 Apr;59(2):51-6.
3. Ong LM, Visser MR, Lammes FB et al. Doctor-patient communication and cancer patients quality of life and satisfaction. Patient Educ Couns. 2000 Sept;41(2):145-56.
4. Williams OA. Patient knowledge of operative care. J R Soc Med. 1993 Jun;86(6):328-331.
5. Lonsdale M, Hutchison GL. Patients desire for information about anaesthesia: scottish and canadian attitudes. Anaesthesia. 1991 May;46(5):410-2.
6. Farnill D. Patients desire for information about anaesthesia: Australian attitudes. Anaesthesia. 1993 Jun;48:162-164.
7. McNair A GK, Mackichan F, Donovan L et al. What surgeons tell patients and what pa-tients want to know before major cancer surgery:a qualitative study. BMC Cancer. 2016 Mar;16:258.
8. Kindler CH, Harms C, Amsler F et al. The Visual Analogue Scale allows effective meas-urement of preoperative anxiety and detection of patients anesthetic concerns. Anesth An-alg. 2000 Mar; 90(3):706-12.
9. Williams V SL, Morlock RJ, Feltner D. Psychometric evaluation of a visual analogue scale for the assessment of anxiety. Health Qual Life Outcomes. 2010 Jun;8:57.
10. Hernandez Palazon J, Fuentes Garcia D, Falcon Arana L et al. Visual Analogue scale for anxiety and Amsterdam preoperative anxiety scale provide simple and reliable measurement of preoperative anxiety in patients undergoing cardiac surgery. Int Cardiovasc Res J. 2015;9(1):1-6.