# **ORIGINAL ARTICLE**

# Level of Understanding in Surgical Patients Undergoing Operative Procedures

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## **ABSTRACT**

Process of informed consent is the most important communicating tool before making any surgical decision in patients undergoing operative intervention. Level of understanding and informed consent is a complex issue. We conducted prospective randomized double blind study on level of understanding about consent. Data was collected for a large number of patients from General surgical, orthopaedic and other allied specialties. We included patients undergoing elective as well as emergency procedures. In our study, majority of patients have poor understanding about procedure, its pros and cons, level of surgery, level of surgeon, post-operative care and expectations. We recommend ways of improving communication, in order to reduce complaints and dissatisfaction afterwards.

Key words: Operative procedure, level of understanding, postop care

# INTRODUCTION

Informed consent is a process of sharing information with patients that is essential to their ability to make rational choices among multiple options in their perceived best interest<sup>1</sup>. All the institutions are required to take informed consent prior to any intervention or procedure done on the patient, but studies raise the question whether informed consent is being implemented in true spirit or it is being adhered to as a medico legal formality<sup>2</sup>. There are five major components of informed consent i.e., voluntariness or autonomy, adequate disclosure of all the relevant information about the procedure, understanding of information by the patient, competence of the patient to grant consent and finally consent itself<sup>3</sup>. The ultimate ethical objective should be the evolution of a process of informed consent which covers all aspects relevant to the patients' individual rights and preference and yet is not redundant in order to ensure better understanding on the patient's behalf. There are many assumed myths regarding informed consent that have not been formally explored and documented.<sup>3</sup> Since the medico legal requirement concerns the doctor's interest more than the information component it is feared that doctors may secure documentation of informed consent without genuinely ensuring that the patient has received and understood the relevant information<sup>4</sup>. It is also assumed that telling the patient about possible complications would discourage the patient from going ahead with surgery<sup>3</sup>. Keeping

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these factors in mind it is essential to formally explore the relationship of informed consent procedure with the patients thought processes<sup>5</sup>. Lastly, the effectiveness of the informed consent process in satisfying the patients' needs and rights and the patients' own perception, of how the process should be, is an essential, yet often ignored, element in the evolution of this process<sup>6</sup>. While the topic is being researched on a global scale, two important studies have been done in Pakistan. One study assessed status of informed consent in patients presenting to the family medicine setting<sup>7</sup> and the second study assessed status of informed consent in patients who had undergone surgery in a tertiary care hospital<sup>8</sup>. Both studies indicated a very poor status of informed consent. The present study was done to find out the patients' perceptions and thought processes about various components of informed consent taken at a tertiary care teaching hospital.

## PATIENTS AND METHODS

A Cross sectional study with a standardized interview-based questionnaire was conducted over a period of two months from October 2010 to November 2010. Patients were randomly selected from the General surgery, orthopaedics and other surgical specialities at Mayo Hospital Lahore, a tertiary care multidisciplinary hospital. Both elective and emergency patients were included in the study. Data was collected from 250 patients who had undergone elective / emergency procedures. The data collectors interviewed the patients in English, Urdu (National language) and other local languages, if needed, in order to fill out the questionnaire.

Wherever required, patients were asked further explanatory and supplemental questions to get a better in-sight into their thought processes. Similar technique was used when the patients were asked if they understood the informed consent process and its information. Any patient who claimed to have understood the information was asked the relevant questions such as the type of treatment he/she was offered and if he could name alternative options of treatment. Data was analysed for frequencies and percentages of positive responses using SPSS 14.

## RESULTS

A total of 250 patients (143 males, 107 females) with mean age of  $37 \pm 3.5$  years (range 18-80 years) were interviewed for the study (Table-1).

Age Group (in years)	Patients (Percentage)
18-27	36
28-37	57
38-47	42
48-57	39
58-67	41
Above 67	35

The educational status correlated exactly with the level of understanding by the patients (Table-2).

Educatio n level	Understanding about the procedure		Total
	Yes	No	
None	11(13.9%)	94(55%)	105 (42%)
Primary	33(41.8%)	54(31.6%)	87(34.8%)
Metric or above	35(44.3%)	23(13.5%)	58(23.2%)
Total	79(31.6%)	171(68.4%)	250 (100%)

Only 79 (31.6%) patients said that they understood the surgical procedure about to undergo. Only 53 (21.2%) told that they were informed of any other options available for their treatment. Another finding was that only 07 (2.8%) patients knew the name and level of the operating surgeon who is about to operate on them. Only 26 (10.4%) patients were informed of any post-op complications related to their procedure. Regarding the post-op care and follow-up about the procedure, only 14 (5.6%) patients knew about it. An important finding in the study was that only 37 (14.8%) patients read their consent and related notes, rest of the patients blindly signed the consent. Patients were not even aware about the person who took the consent and only 19 (7.6%) patients knew the designation of the person taking the consent.

Question	Positive	
	responses	
Do you understand the surgical	79 (31.6%)	
procedure about to undergo?		
Are you informed of any other options	53 (21.2%)	
available for your treatment?		
Do you know who will do the	07 (2.8%)	
procedure?		
Are you aware of any complications	26 (10.4%)	
associated with this procedure?		
Do you understand about post-op	14 (5.6%)	
care and follow-up about your		
procedure?		
Did you read the consent and notes	37 (14.8%)	
regarding consent?		
Do you know who took the consent?	19 (7.6%)	

## DISCUSSION

The present study has shown some interesting trends in the patients' perceptions and values about informed consent being taken at our institute. Patients feel more confident and satisfied if the treating surgeon prior to surgery shares important and relevant information with them. 9,10 The poor understanding of the process exists despite the patients being given opportunity to have their questions answered (n=79, 31.6%). This paradox is depicted in many other studies as well, where despite being educated, the patients fail to understand the medical terminology often used by the physicians in verbal interactions or written forms. 11-13 For our patients in particular, the medical terminologies mostly used in English are not comprehensible even if they are formally educated (n=23, 13.5%). Other than low literacy rates, a review article 14 identified factors in the poor understanding and the delivery of the process of informed consent such as inefficient healthcare system, no concept of individual rights, unwillingness to hear bad news and inhibition in the presence of treating physicians who enjoy much higher status in their eyes. Only 37 (14.8%) read the consent and notes regarding consent, and just 19 (7.8%) knew who is taking the consent from them. It is, therefore, important for the healthcare provider, who is having the informed consent form signed, to emphasize the ethical as well as medico-legal significance of the document. As reported in the European studies, the majority of patients sign the consent form as a medico-legal requirement. 15, 16 The issue 'Who takes the consent?' is also highlighted in literature. Usually the patients are informed about the various aspects of the procedure by the treating surgeon or members of his team and then the consent signatures are taken by the junior members

of the team or by the paramedics.<sup>17</sup> In the published series the patients and the junior doctors had similar perceptions of being less informed if the consent was taken by the junior doctors or the paramedic staff. The junior doctors felt that they had less than adequate knowledge about the complex surgical procedures to explain the patients and satisfy their queries properly. 18 Another study highlighted the need for more education of the senior as well junior surgical faculty in obtaining proper informed consent from the more knowledgeable patients of today. 19 The study also mapped out a particular pattern of information that was given preferentially over other information. More patients were informed of the possible complications if surgery was not done as opposed to complications of the surgery itself 26 (10.4%). The patients, too, felt discouraged on mentioning of possible risks of the procedure. The present study appears limited in respect of a quantitative rather than qualitative analysis of the perceptions of the patients which are affected by, and dependent upon, multiple personal, family and social setup-related factors.

# CONCLUSION

Results indicate that the current practice of informed consent does not meet the criteria which should be followed. In our study, majority of patients have poor understanding about procedure, its pros and cons, level of surgery, level of surgeon, post-operative care and expectations. We recommend ways of improving communication, in order to reduce complaints and dissatisfaction afterwards.

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