

## INFORMED CONSENT IN DENTISTRY: PERCIEVED IMPORTANCE AND LIMITATIONS IN KHYBER PUKHTUNKHWA

**Wardah Farhat\*, Fahad Qiam\*, Syed Murad Ali Shah\*\*, Muslim Khan\*, Hadia Khan\***

\* Department of Oral and Maxillofacial Surgery, Khyber College of Dentistry, Peshawar

\*\* Department of Oral and Maxillofacial Surgery, Sardar Begum Dental College, Peshawar

### ABSTRACT

**Objectives:** *To assess the current attitudes regarding informed consent and its perceived limitations in the local dentist community*

**Materials and methods:** *This descriptive cross sectional study was carried out at two dental teaching hospitals of Peshawar, Khyber Pukhtunkhwa, namely Khyber College of Dentistry and Sardar Begum Dental College. A structured close ended questionnaire was used to obtain data from the dentists including the teaching staff, postgraduate residents, house officers and final year students. The aim was to assess the importance of informed consent in routine practice of dentistry. Likert scale was used to score the relative difficulty of the various obstacles faced by the dentist in obtaining consent. The collected data was analyzed using SPSS version 17.*

**Results:** *Out of a total of 300 distributed questionnaires, 224 were received. Informed consent was considered an integral part of dentistry by 223 participants and 109 of them assented to routinely obtained consent. Verbal consent was the most favored manner. Of the 224 participants, 82.6% rated it as both ethical and legal obligation. About 51.8% were in a practice of obtaining consent for multiple dental procedures. Six potential hurdles were evaluated, out of which excessive patient load was considered as the biggest and ime consuming nature of obtaining consent and lack of options in treatment as the smallest obstacle.*

**Conclusion:** *Most dentists are aware of the importance of informed consent in practical dentistry and consider it as an ethical and legal obligation. Verbal consent is the preferred means of obtaining consent from patients for most dental procedures. There is a general perception that major/minor oral surgical procedures are the ones that warrant consent more than any other specialty. Among the various potential obstacles, excessive patient load is the biggest burdle to obtaining informed consent from the patients.*

**Keywords:** *Informed consent, Dentistry, Limitations*

## INTRODUCTION

Informed consent, being an integral part of healthcare profession, has always been an issue subjected to debate and discussion, with medico-legal and ethical implications worldwide<sup>1</sup>. The increasing advancement of clinical procedures, invasiveness, cost and recognition of human rights, as well as the growing awareness among the general population

means that the importance of application of informed consent has to be realized in all healthcare disciplines, including dentistry<sup>2</sup>. The essential requirement of informed consent is to give the patients pertinent and precise information that they comprehend well enough; subsequently leading them to make a decision to assent or refuse voluntarily i.e. free from force, coercion, deceit or duress<sup>3,4</sup>. As the basis of bio-ethical principles of autonomy and beneficence, informed consent gives the patient the freedom to actively participate and make decision regarding their own treatment instead of completely relying upon the decision of the healthcare professional which has

---

### Correspondence:

**Dr. Wardah Farhat**

House Officer KCD Peshawar

Cell: 0333-9155592

Email address: wardahfarhat@hotmail.com

been a norm in the field of dentistry for the past several decades<sup>5</sup>.

Informed consent encompasses both implied and expressed consent. Expressed consent is further subdivided into verbal and written consent. In dentistry, mostly oral consent is obtained from the patient for procedures of non-invasive nature. However, in case of invasive techniques and surgical maneuvers, written consent is acquired. It is imperative for an individual to be fully conversant with germane facts, which is central to the concept of informed voluntary consent<sup>6</sup>. The essence of autonomy is self-determination, a frequently challenged notion in many eastern cultures and third world countries including Pakistan<sup>7,8</sup>. Some situations are exclusive to our region such as lack of interest of the patient, the power of decision making residing with delegating relatives, lack of education and awareness<sup>9,10</sup>. However, the fear of refusal to undergo treatment altogether<sup>11</sup> and failure of communicating the relevant information regarding a proposed treatment plan on the part of the doctor<sup>12</sup> are also the factors which pose a hurdle in the implementation and evolution of the process of informed consent all over the world including Pakistan. The importance and factors affecting the process as well as the application of informed consent in medicine and dentistry has been reviewed in different international studies. However, on the local front, very little data has been collected and documented on the said subject.

The objectives of this study are to assess the current attitudes regarding informed consent and its perceived limitations in the eyes of the local dentist community. This in turn will help us to formulate strategies for dealing with the commonly encountered obstacles and help us in making the whole process of obtaining consent easier for not only the dentist but also for the patients.

## MATERIALS AND METHODS

This descriptive cross sectional study was carried out at two dental teaching hospitals of Peshawar, Khyber Pukhtunkhwa, namely Khyber College of Dentistry from the public sector and Sardar Begum Dental College from the private sector. A total of 300

questionnaires were distributed among the dental professionals including the teaching staff, postgraduate residents, house officers and final year students of both the teaching hospitals

The questionnaires comprised closed ended questions in part one of the questionnaire to determine the importance given to obtaining consent in the daily dental practice. Part two of the questionnaire comprised of questions related to perceived obstacles in obtaining consent where the participants were asked to grade individual obstacles on a Likert scale (0-4). 0 represented no difficulty, 1 represented some difficulty, 2 was mild difficulty, 3 meant moderate difficulty and 4 represented extreme difficulty. Arithmetic mean of the Likert scale score of each hurdle was also calculated.

The data collected was entered into SPSS version 17 for analysis.

## RESULTS

A total of 300 proformas were distributed in Khyber College of Dentistry and Sardar Begum Dental College, Peshawar. 224 proformas were received which were completely filled, showing a response rate of 74.6%. 223 out of 224 dental professionals rated informed consent as an important part of dentistry. 109 of these routinely obtained consent from the patients and 12 practitioners admitted to not taking informed consent routinely for clinical examination, treatment planning and carrying out treatment. Verbal consent was the most preferred means of obtaining informed consent (84.4%) while the written form was the least practiced method (1.8%).

The study subjects showed a relatively mixed understanding of the true spirit of informed consent; only 13.8% rated it as an ethical requirement but 82.6% rated informed consent as both an ethical and legal requirement. Only 3.6% study participants noted informed consent as a purely legal requirement.

In this study, 51.8% of the study participants took informed consent for a combination of procedures with a predominance of combinations that included minor/major surgery while 20.5% acquired consent for all examination and treatment procedures. The most favored individual specialty for informed

consent taking was minor/major surgery (19.2%) and the least favored was periodontology (0.4%). The details are given in Table I.

The subjects were presented with 6 potential hurdles to taking informed consent; of which excessive patient load recorded the highest mean score of difficulty (2.70, by calculating the Arithmetic mean) as well as the highest frequency of 4 (extremely difficult) on the Likert scale (89). Financial and time constraints of patient was second biggest hurdle of taking consent with a mean score of 2.37 and the highest number (60) of 3 (difficult) on the Likert scale. Refusal or waiver of consent was considered to be

**Table I: Distribution of obtaining informed consent against various specialties**

TYPE OF PROCEDURE	n	%
Multiple specialties	116	51.8
All specialties	46	20.5
Major/Minor Oral surgery	43	19.2
Consultation & examination	12	5.4
Restorative Dentistry/Prosthodontics	5	2.2
Periodontolgy	1	0.4
None of the above	1	0.4
<b>Total</b>	<b>224</b>	<b>100.0</b>

**Table II: Distribution of Likert scoring for attendant's role in dictating treatment**

**Attendants role in dictating treatment**

Grading	n	%
Not difficult	28	12.5
Mildly difficult	32	14.3
Moderately difficult	67	29.9
Difficult	60	26.8
Extremely difficult	37	16.5
<b>Total</b>	<b>224</b>	<b>100.0</b>

**Table III: Distribution of Likert scoring for patient refusal or waiver of informed consent**

**Refusal or waiver of consent**

Grading	n	%
Not difficult	33	14.7
Mildly difficult	42	18.8
Moderately difficult	76	33.9
Difficult	47	21.0
Extremely difficult	26	11.6
<b>Total</b>	<b>224</b>	<b>100.0</b>

**Table IV: Distribution of Likert scoring for financial or time constraints of patient**

**Financial or time constraints of patient**

Grading	n	%
Not difficult	27	12.1
Mildly difficult	30	13.4
Moderately difficult	54	24.1
Difficult	60	26.8
Extremely difficult	53	23.7
<b>Total</b>	<b>224</b>	<b>100.0</b>

**Table V: Distribution of Likert scoring for lack of options in treatment**

**Lack of options in treatment**

Grading	n	%
Not difficult	44	19.6
Mildly difficult	33	14.7
Moderately difficult	63	28.1
Difficult	44	19.6
Extremely difficult	40	17.9
<b>Total</b>	<b>224</b>	<b>100.0</b>

**Table VI: Distribution of Likert scoring for time consuming nature of obtaining consent**

**Time consuming nature of obtaining consent**

Grading	n	%
Not difficult	45	20.1
Mildly difficult	38	17.0
Moderately difficult	54	24.1
Difficult	46	20.5
Extremely difficult	41	18.3
<b>Total</b>	<b>224</b>	<b>100.0</b>

**Table VII: Distribution of Likert scoring for excessive patient load**

**Excessive patient load**

Grading	n	%
Not difficult	27	12.1
Mildly difficult	17	7.6
Moderately difficult	41	18.3
Difficult	50	22.3
Extremely difficult	89	39.7
<b>Total</b>	<b>224</b>	<b>100.0</b>

the smallest hurdle to obtaining consent (mean score = 1.96). The time consuming nature of taking consent and lack of options in treatment also reported

low mean scores (2.00 and 201 respectively) and the highest frequency of 0 (not difficult), 45 and 44 respectively. The details of scores obtained for every hurdle are given in tables II-VII.

## DISCUSSION

The results from this study showed that most dental practitioners appreciated the substantial value of informed consent and 99% of the participants regarded consent as an integral part of dentistry. Among the types of consent, with 84.4 % verbal consent was found to be the favored method of acquiring consent over its written form. in this study 51.8% took consent for a variety of dental procedures. Excessive patient load was recorded as the biggest obstacle (39.7%) while the lack of options in treatment and the fear of refusal or waiver of consent had the least mean scores on Likert scale.

This study was limited to two dental teaching hospitals of Peshawar, Khyber Pukhtunkhwa, Khyber College of Dentistry and Sardar Begum Dental College. Private Dental clinicians were not made a part of this study and another dental teaching hospital was excluded due to time constraints. The participants were asked to mention their designation but most of them failed to do so thus preventing us from evaluating the knowledge regarding informed consent peculiar to each group. Due to these limitations the conclusions drawn from this study cannot be generalized to the city of Peshawar let alone the whole province.

Scarce literature is present on the subject of informed consent on local front. In a study conducted by Jafarey and Farooqui at Agha Khan University Hospital, Karachi, Pakistan, the Pakistani perspective on informed consent was explored<sup>13</sup>. Contrary to our study, the physicians were divided into focus groups and discussions held on different aspects of informed consent. Only physicians were included in the sample sparing the students and house officers. The importance of informed consent was thought to be an understood variable; hence, it was excluded from the study. Different elements of informed consent including the extent of information disclosure, refusal or waiver of consent upon disclosure of probable risks, legality concerning the involvement of the family in decision making process, apprehensions and factors adversely affecting the process of obtaining consent were considered. The two variables matching our study

were the time factor and the role of attendant. They concluded that, in time consuming clinical procedures, procuring consent from the patient was difficult which is in contradiction to our study. The role of the attendant in dictating treatment wasn't considered an impediment to the implication of informed consent. Instead, the issue was addressed mingling legality and custom of the country, therefore concluding that family and the patient were one and the same, owing to the distinguished status of family in Pakistani society. However, in our study, the role of the attendant was rated to be an obstacle of moderate difficulty on the Likert scale. They also discussed the intelligence level and education of the patient as a possible hindrance to acquiring consent. These variables were not considered in our study.

Kotrashetti et al<sup>14</sup> studied the knowledge and practice of general dental practitioners regarding informed consent in Belgaum city, India. Consumer Protective Act of India was the basis for the research. All of the subjects reported to be taking consent which is discordant with our study with a much greater sample size. Written consent was the preferred means of attaining consent from the patient (63.6%). Explanation of treatment modalities while taking consent, the risks and complications involved with specific procedures, alternative to a proposed treatment plan, decision making power residing with the patient and use of local language to acquire consent was also discussed. The sample size was limited to 44. Only registered general dental practitioners were included. As majority of the clinicians were inclined towards taking written consent, it was explored in detail. Other elements pertaining to consent like records keeping of case findings, giving the copy of signed consent to the patient, literacy of the patients and means of communication with illiterate patients, too, were reviewed. Verbal consent was the chosen manner of obtaining consent from illiterate patients. These variables were, however, not made a part of our study because oral consent was favored by most of the subjects given to the fact that legality was not the issue at hand.

In 2009, Tahir et al<sup>2</sup> conducted a study on 375 dental professionals including 3rd year and final year BDS students and house officers to assess the knowledge and perceived importance of informed consent of the dentists. Three different dental colleges were selected as centers for the study, namely

De 'Montmorency College of Dentistry, Fatima Memorial College of Dentistry, Lahore and Margalla College, Rawalpindi. Statistical significance of the results particular to each group was reviewed which in our study was not possible, attributing to the fact that the designation specification given in the questionnaire was disregarded by the participants. Their study reported that 61.1% (majority) were aware of the paramount significance of informed consent in dental practice. About 56.8% confessed they sometimes obtained consent from the patients. These parameters were in contradiction to our study where 99% were aware of the importance of informed consent and majority took consent from the patients. The difference can be ascribed to the variation of the sample population and inclusion criteria in both studies. Furthermore, invasive dental procedures like surgery demanded consent more as compared to others according to 43.6% of the respondent which is in conformity with our study, however, with a smaller sample size. Awareness concerning informed consent, provider of consent, its requirement, information disclosure and source of information regarding consent were also evaluated. They concluded that the house officers were better informed about the different aspects of informed consent as compared to the students.

Excessive patient load was found to be the greatest hurdle to the process of procuring consent and 39.7% of the subject considered enormous patient flow an encumbrance to taking consent from each and every patient individually. According to World Statistics 2012, released by the World Health Organization (WHO), Pakistan has less than 1 (0.6) dentist per 10,000 population.<sup>15</sup> In light of these statistics, excessive patient load is no doubt posing an issue not only to obtaining consent but also to providing quality dental care facilities to the masses. Another reason for the superfluous flow is the limited number of dental hospitals, both in public and private sector, which are unable to cater the dental needs of the population. Khyber Pukhtunkhawa also has to bear with the influx of patients from Afghanistan, seeking healthcare facilities.

**CONCLUSIONS**

It can be concluded:

- 1) Most dentists are aware of the paramount value

of informed consent in dental practice.

- 2) Majority of the dental professionals consider it as both ethical and legal obligation.
- 3) Verbal consent is preferred over the written form
- 4) Though a combination of different dental procedures require consent, major/minor oral surgical procedures warrant consent more than any other field of dentistry.
- 5) Excessive patient load is the major obstacle to attaining consent from the patients.

**RECOMMENDATIONS**

Based on the findings of this study, it can be recommended that:

- 1) Informed consent should be included in the curriculum of under graduate level.
- 2) Educating the practicing dentists about the process of taking consent through workshops and seminars.
- 3) Establishing new dental hospitals in Khyber Pukhtunkhawa to combat excessive patient load.
- 4) Upgradation and expansion of the existing dental care facilities to cater to the needs of greater patient influx.

**REFERENCES**

1. Amir M, Rabbani MZ, Parvez MB. Informed Consent in elective surgical procedures, "What do patients think?" JMPA 2009; 59(10): 679-82
2. Tahir S, Ghafoor F, Nusarat S, Khan A. Perception of consent among dental professionals. J Med Ethics Hist Med 2009; 2: 20
3. The President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research. Making Health Care Decisions: The Ethical and Legal Implications of Informed Consent in the Patient-Practitioner Relationship. Volumes I-III. Washington, DC: U.S. Government Printing Office, 1982
4. Lidz CW, Meisel A, Osterweis M, Holden JL, Marx JH, Munetz MR. Barriers to informed consent. Ann Intern Med 1983; 99: 539-43
5. Wu WC, Pearlman RA, Consent in medical decision making, JGIM 1998; 1(3): 9-14

6. Beauchamp TL, Childress JF. *The Principles of Bio-medical Ethics*, 5th edition. New York: Oxford University Press, 2001; 117-27
7. Sutherland HJ, Lockwood GA, Till JE. Are we getting informed consent from patients with cancer. *JRSM* 1990; 83: 439-43
8. Kerry WB, Edwin CH. Bioethics for clinicians: 20. Chinese bioethics. *Can Med Assoc J* 2000; 163: 1481-5.
9. Moazam F. Family, patient and physician in medical decision making: a Pakistani perspective. *Hastings Cent Rep* 2000;6:28-37
10. Correia JC. Autonomy and identity. *J Med Ethics* 2000;26:141
11. Burger I, Schill K, Goodman S. Disclosure of individual surgeon's performance rates during informed consent: ethical and epidemiological considerations. *Ann Surg* 2007; 245: 507-13.
12. Sbaraini A, Carter SM, Evan RW, Blinkhorn A. Experiences of dental care: what do patients value? *BMC Health Services Research*. 2012; 12: 177
13. Jafaray AM, Faroque A. Informed consent in the Pakistani Milieu: the physician's perspective. *J Med Ethics* 2005;31:93-6
14. Kotrashetti VS, Kale AD, Hebbal M, Hallikeremath SR. Informed consent: a survey of general dental practitioners in Belgaum city. *IJME* 2010; VII (2): 91-4
15. World Health Organization. *World Health Statistics* 2012. 126 (document available online at [http://apps.who.int/iris/bitstream/10665/44844/1/9789241564441\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/44844/1/9789241564441_eng.pdf))