**Medicolegal Awareness Among Reproductive Age Women : A Cross-sectional Study**

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Running title: Medicolegal awareness in general population

**Abstract**

**Introductive:** Various lawshave been implemented by Government to regulate the medical practice with the objective of improving the quality of health care services. This study was done with the objective to evaluate the awareness about various medicolegal aspects related to medical profession among general population.

**Methods:** A cross-sectional study. Knowledge for laws and ethics related to medical practice was assessed based on a well-structured questionnaire including 25 items. Women were categorized based upon the their score into Low (below 50th percentile), medium (50th -75th percentile) and high (above 75th percentile) awareness.

**Results:** Total 334 women were recruited. Mean age of the women in the study was 30.29±6.58 SD years and most women were between 20-30 years of age (56.28%). Most women were graduates (33.23%) followed by post graduates (29.04 %). Majority of women were unemployed (housewives :64.67%, students: 4.49%) followed by skilled workers (22.75%), semi-professional and professionals (8.08%). High awareness about the various medicolegal aspects was seen in 25.1% women while 29.04% had medium awareness and 45.80% had low awareness. It was also seen that the women with higher education(p=0.002) and those who were employed (0.001) had better knowledge. Further, graduate housewives had better awareness than non-graduate housewives.

**Conclusion:** Education and self-independency was a significant factor affecting awareness of medicolegal issues among our women. Assuring right to education and empowering women with self-independency will go a long way in ensuring an active participation in medical decision making.

**Key Words: Awareness, Consumer protection Act, PCPNDT act, MTP act, Medicolegal,**

**Introduction:** Due to considerable change in the medical practice in past few years it was realized that medical profession needs to be regularized and hence various laws have been implemented1. Objective of these laws is to involve patient in every aspect of their treatment, prevent malpractice by medical professionals and to improve the quality of health care services at all possible levels.2,3,4 Medical Termination Act (1971)5 and Preconception Prenatal diagnostic test Act (1994)6,7 were launched to prevent in utero sex determination, female feticide and unsafe abortions. To safeguard patients from medical negligence and to enable them to file lawsuit medical profession was covered under Consumer Protection Act (1995).8,9,10,11,12

Despite of various laws and efforts by Government the quality of health care facilities remain poor. For a successful implementation of any law it is important that there should be adequate knowledge and awareness about the law among provider as well as recipient. Inadequate knowledge, lack of awareness, and inappropriate attitude towards the health services are some of the reasons for the failure of quality care in health services.

Hence this study was done with the aim of evaluating awareness about the medicolegal aspects of medical service among women in the reproductive age group who attended the Gynecology OPD for various health issues.

**Material and methods:** This is a cross-sectional study done in the department of Obstetrics and Gynaecology, All India Institute of Medical Sciences, New Delhi. Women between the age of 18-45 years, who understand and were able to read and write either English or Hindi language were included in the study. Women who were already aware of the subject like lawyers, doctors, nurses, counsellors, NGO workers or those who themselves or their family members has filed a legal suit or complaint for medical negligence anytime were excluded from the study. An informed written consent was taken after the women read information sheet and understood plan and purpose of the study. A self-administered, structured questionnaire including 25 items was prepared both in English and Hindi to evaluate the awareness and practice regarding Consumer Protection Act, Preconception and prenatal diagnostic test (PCPNDT) and Medical termination of pregnancy (MTP) act. Prior to data collection the questions were pretested among a group of 20 women in order to ensure the level of validity and degree of repeatability. The participants were then asked to respond to each item according to the response format provided in the questionnaire which was later checked by the examiner. Each correct response was given one point and wrong or unanswered question was given zero point. Total marks were added, median was calculated based on which they were categorized into three categories. Those who scored less than 50th percentile were categorize as category 1 (Low awareness), those between 50th -75th percentile were categorized as category 2 (Medium awareness) and above 75th percentile were category 3 (High awareness).

**Study Design:** Observation study

**Data Analysis:** The data was analyzed using SPSS version 23.00 software. Descriptive statistics were obtained and frequency distribution, means, standard deviation was calculated for awareness among patients regarding various medicolegal issues. Chi-sqaure test has been used to find the significance of the study parameters on categorical scale between two or more groups. Non – parametric settings used for qualitative data analysis. Fisher exact test was used when the cell sample was very small.

**Results:** Total 450 women were briefed about the study out of which 108 women refused due to various reasons like lack of time and no interest. Only 334 women filled the questionnaire completely and were available for analysis. Mean age of the women in the study was 30.29±6.58SD years and maximum number of women were between 20-30 years of age (56.28%). Most of the women in the present study were graduates (33.23%) followed by post graduates (29.04 %). Majority of women were housewives (64.67%) followed by skilled workers (22.75%), semi-professional and professionals (8.08%) and students (4.49%). [Table 1]. Total 45.80% women in the present study were found to have low awareness, 29.04% medium awareness and 25.14% had high awareness about the different medicolegal aspects of the medical practice. When the results were compared with the education status of the women it was found that women with higher education were more aware than those with lower education level and the difference was statistically significant (P = 0.015) [Figure I]. Similarly the results were related with the occupation of the women and their awareness about the medicolegal issues and it was seen that there was statistically significant difference in the knowledge of women who were employed as compared with those who were not working (p=0.001) [Figure II]. Even in the subset of women who were graduate and above it was seen that women who were working had better knowledge than those who are housewives (p-0.002). The data was further evaluated to see the awareness about the PCPNDT and MTP act and it was seen that the awareness of those who were highly educated and employed was more than those with lower education and unemployed [Table II].

**Discussion:** Several laws have been implemented by the government to ensure the safety and quality care of the patient but the knowledge of these laws and medical ethics remain poor among general population. Ignorance, illiteracy, and neglected medicolegal services are the major contributors for these failures.

There are very few studies done to see the knowledge of the patients and physicians about the medicolegal aspects of health care facilities. A study done in Malaysia by Yousuf et al.13 shows that around 85% patients were reasonably informed about their illness. Similar findings were seen in the present study where 81.7% women wanted to know about their diagnosis whenever they visit a doctor. However 18.3% did not bother to know what is wrong with them but were satisfied by just getting treated. Although it is the duty of the doctor to explain the patient about the problem he or she is suffering from however it is equally important for the patient to enquire about their health issues then only they will be able to take care of themselves and ensure follow up. In India where various forms of medicine is practiced and various levels of health care providers ranging from General physician to super-specialist exist, it is important for the patient to know about their health service providers speciality and expertise. Around 60.8% women knew about treating doctors qualification while 39.2% were not aware. This implies that these women are not even aware whom to consult for a particular problem. In such practice patient loose a significant amount of their valuable time and money. If the patient is aware about the field of expertise of doctor they might make a better choice while choosing their treating doctor based upon doctors qualification hence decreasing unnecessary referrals. In this study a 38.1%women were not aware that doctors also come under Consumer Protection Act which means such a large population do not know where to go if they need to complaint about a malpractice and negligence if the needs arise hence contributing towards the failure of such laws implemented to save the rights of patients.

Medical Termination of Pregnancy (MTP) Act has been in practice in India since 1971 despite of that the awareness about the act among the general population is low.14 In the present study 45.47% women did not know that the doctors performing MTP should be certified. Only 29.9% of the women were aware about the legal limit of gestational age till which abortion can be done leading to delay in seeking medical help resulting in denial of abortion services at advanced gestation which further poses these women at risk of illegal abortions increasing maternal morbidity and mortality and also increasing the number of abandoned newborns born as a result of unwanted pregnancies among unmarried women. Around 13.2% of the women did not know that their medical records and information is kept confidential which can be a significant contributor in not seeking medical advice or delay in seeking medical advice in certain situations like unwanted pregnancies among adolescent girls and going for unsupervised abortions further increasing the burden of maternal mortality15.

In a study done by Ghose et al.16 around 95% women were aware about the availability of methods for intrauterine sex determination but only 75% knew that its punishable to do so under the law. Another study done by Puri et al.17 found that the 65% of the women feels its not appropriate to determine the sex of child in utero but only 16% were aware that it is punishable. In our study only 47.6% women were aware about the PCPNDT act. Around 75.4% women felt its inappropriate to do the sex determination while 11.7% feels its okay and 12.9 % were not sure again leaving around 24.6% women in the grey zone who could go for prenatal detection for sex willingly or under pressure from the family and can have consequences in terms of female feticide, illegal abortions at inappropriate gestations by an underqualified person even posing a life of mother at danger. So there are so many area where an intensive work is needed to improve the knowledge about quality of health care. Not only the doctor but the general population needs to be educated about the services available, how to procure them and the legal implications for both the patient and the doctor.

In a study done by Kumar Manisha et al.18 authors found that 52.3% of doctors were giving less time in explaining the diseases and the procedure being done to the patient. In our study also 41.9% of the patients felt that there was lack of communication between them and the doctor treating them. Thus there is a need that undergraduate doctors need to be trained in the art of better communication with the patient, to understand the need of the patient and give information keeping in mind the education level and background of the patient so that maximum information should be provided in simple language to the patient and it should be checked if patient understood it. If referrals are needed make sure to explain the need of referral. Similarly general population should be given minimum basic knowledge about the medical profession and medicolegal aspect of it. They should be educated about the different services during school days by adding it in their school curriculum so that they know what should they ask for and expect from their doctor. An arrangements for nukad plays, awareness camps for different health related problems should be done more frequently. Television, radio, health care related messages on mobile phones, appropriate mobile apps and free health checkups, health talks are available but perception and acceptance to the knowledge needs to be enhanced. Author found that the literacy level was related to the patient’s attitude and understanding of the consent. We have also seen that level of education was directly related to women’s awareness of different health services and law. Similar trend was seen in a study done in Nepal by Tuladhar H et al.19 who did a study to see the awareness and practice of family planning methods in women attending Gynecology OPD, they also found that the social media had a major impact on spreading information. Author found that 100% of the those who were educated till secondary or more were aware about the different methods of contraception. Another study by Vadera et al.20 has also shown the impact of education of patient’s awareness. In the present study we have also seen that the level of awareness in women was directly related to their education level and more to their occupation. Women who are educated, working and self-independent are more aware and make better choices. We have seen that women who are housewives even when they are educated but not working have less knowledge and awareness about various medicolegal aspects than those who are working and self-independent.

**Conclusion:** Safe Medical care is the fundamental right of every individual and to provide it is the duty of state and treating doctor. Mere making of laws is not sufficient. For the effective and successful implementation of these laws it is important to spread awareness about the medicolegal aspect of medical services to both doctors at their initial training level and patients for them to know what is right and what is wrong. Knowledgeable and aware patients make better choice while choosing a doctor which avoids unnecessary referral form one speciality to other saving time and cost. They are interested to know about their problems, are open to discuss their problems with more clarity and are able to understand the relevance of consent, procedures, their benefits and complications and can make an informed choice rather than relying on the doctor to decide for them. They know their rights and are aware where to seek help if need arise. So its very important to spread awareness among people specially women who are mostly dependent on their male counterpart for most of their day to day decision in countries like India. So if they are educated, independent and aware they might be able to choose right health care facility for them, their children and family.

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**Ethical clearance:** **IEC / NP- 316**

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