

*ORIGINAL ARTICLE*

# Are Undergraduate Medical Students Aware of Patient's Rights?

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## ABSTRACT

### INTRODUCTION:

Patient's rights was established around the world as a way to uphold the safety and quality of treatment offered by the healthcare system. Due to the advancements in technology and the rising costs of treatment, the community are more aware of their rights as patients and medical staffs ought to have the same level of awareness to avoid any future medicolegal issues.

### METHODS:

To assess the knowledge that undergraduate medical students have on patients' rights, a 25 component questionnaire was administered and the students were asked to respond to the questionnaire on a three-point Likert scale- Agree, Disagree and Don't know; depending on the personal extent to which they agreed on the concerned patient right. Each correct answer was given a score of 1 and 0 for every incorrect response including the option, 'Don't Know'. The score was converted into percentage. If the knowledge percentage was  $\geq 75$ , then the level of knowledge was categorized as adequate, and inadequate if it was  $< 75$ .

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## RESULTS:

Our study showed that students who were aware of patient rights' were significantly more likely to have adequate knowledge, when compared to the students who were not aware of patient rights' (95% CI for OR 1.09 to 3.39; P-value 0.024).

## CONCLUSION:

More initiative to integrate the basis of patient rights' into the curriculum should be done as a step into the betterment of the knowledge on patient rights' among medical staffs. Since our study only includes medical students in one private college, we would like to recommend future researchers to include general physicians, nurses and patients in their study so as to improve the standards of the health care profession.

## **INTRODUCTION**

World Health Organization's cConstitution recognizes health as a fundamental human right; it also claims that the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, and political belief, economic or social condition. [1]. ] In 1948, the Universal Declaration of Human Rights recognizes "the inherent dignity" (1: Art. 1) and the "equal and unalienable rights of all members of the human family" (Preamble). [2]. It is based on these pre-existing rights that contributed to the establishment of patients' rights. Due to the rising cost of healthcare, increased patient awareness and medico-legal issues, there has been issues revolving around the care that is being provided by doctors. Doctors are now more accountable to the public than ever before. Do doctors who claim to care for patients really have the best interest of their patients' welfare? [3]. Patients have higher expectations of the attending medical personnel and they desire for the best. They also want to be actively involved in the decision-making, proposed procedures or treatments and their various alternatives [4]. There has been much judicial activity on medical negligence for doctors on the standard of medical care in many countries like England, Australia, the USA, Singapore and Malaysia [5]. In order to preserve the safety and quality of the health care system, the medical team including doctors, nurse's even medical students play a crucial role in helping patients to protect their rights. As to our knowledge, there has been no studies conducted on the awareness of students on patient's rights in Malaysia; the only study which was done in Malaysia was on patient's awareness of their rights [4]. Our objective is to assess student's awareness of the existence of the Patient's Charter, sensitize the students about the importance of the rights of a patient in clinical practice and assess the extent of their knowledge on it.

## METHODOLOGY

### Study design, study time, study setting, study population

A cross sectional study was conducted from June 2019 to July 2019 in our college, which is a private medical college centred in Muar, Malaysia. Our college has two campuses; one based in Muar, Johor and the other is based in Malacca. The Muar campus offers Bachelor of Medicine and Bachelor of Surgery (MBBS) Semester 6 and 7, while the Malacca campus offers Bachelor of Dental Surgery (BDS), Foundation in Science (FIS) and MBBS Semester 8, 9 and 10. This study aims to determine the knowledge of undergraduate medical students towards patient rights, and therefore a study population of 750 medical students from MMMC was selected.

### Sampling size and sampling method

Purposive sampling was used to enrol students for this study, which is a non-probability sampling method. The inclusion criteria were that the student must be a medical student, has voluntarily agreed to participate in this study and completed the given questionnaire including the consent form. The exclusion criteria included incomplete questionnaires as well as the students who were not present in class at the time of distribution of the questionnaires and since participation was voluntary, those students who did not give consent were excluded.

The sample size(n) was calculated using 'Statistics and Sample size' app version 1.0.

To estimate a proportion in finite population, the following equation was used:

$$n \geq \frac{NZ_{1-\alpha/2}^2 p(1-p)}{d^2(N-1) + Z_{1-\alpha/2}^2 p(1-p)}$$

Where;

Significance level ( $\alpha$ ) = 0.05

Estimated proportion (p)= 0.817

Estimation error (d) = 0.05

Population size (N) = 750

Based on a previous research [6], 81.7% of the participants had adequate knowledge towards patient rights, from which an estimated proportion of 0.817 was taken. Estimation error was taken as 0.05 and the population size (N), which is the approximate total of medical students in the selected private college, Malaysia, was taken as 750. After

calculation, the result was a minimum sample size of 177. Taking non-response percentage of 30% into consideration  $n_{\text{final}}$  was calculated as follows:

$$n_{\text{final}} = \frac{n_{\text{calculated}}}{1 - \text{non response \%}}$$

$$= \frac{177}{1 - 0.3}$$

253 was considered the final sample size and 253 questionnaires were distributed.

### **Data collection**

The questionnaire consisted of two parts. The first part contained the demographic data (age, gender, and ethnicity), awareness of patient rights and source of knowledge of patient rights. The second part included 25 questions regarding medical students' knowledge towards patient rights. The questionnaire was taken from a previous study [7] and adjusted according to the guidelines of Malaysian Hospital Accreditation Standards. The reliability of the tool was tested using Cronbach's alpha to calculate the overall internal consistency for the entire 25-item scale of the knowledge of medical students on the Patient's Bill of Rights (PBR), and the coefficient was 0.995. The questionnaires were then distributed among students during their regular classes and questionnaires were forwarded as Google forms to those students in semester 8 and 9, studying in Malacca campus. The students were asked to respond to the questionnaire on a three-point Likert scale- Agree, Disagree and Don't know; depending on the personal extent to which they agreed on the concerned patient right.

### **Data processing and data analysis**

Data was then fed into Microsoft Excel and compiled. Epi info V7.0 was used to statistically analyse the data. For quantitative data (knowledge), the range, mean along with standard deviation and median along with interquartile range was calculated. Bivariate analyses were carried out to calculate Odds Ratio (OR) for association between social demography variables and the level of knowledge (adequate/inadequate). For qualitative data (gender and ethnicity) frequency and percentage was calculated. For the questions related to knowledge, each correct answer was given a score of 1 and 0 for every incorrect response including the option, 'Don't Know'. The score was converted into percentage. If the knowledge percentage was  $\geq 75$ , then the level of knowledge was categorized as adequate, and inadequate if it was  $< 75$ . The minimum possible score was 0 (0%) and the maximum possible score was considered as 25 (100%). For qualitative data (gender, ethnicity and semester), frequency and percentage was calculated.

Chi-squared test was used to determine the relationship between awareness and the knowledge of students on patient's rights.

## RESULTS:

A total of 255 questionnaires consisting of 25 questions were distributed to the medical students in the selected private college and a total of 197 responses were received by our side, giving a response rate of 77.25%.

Table 1 shows the participant was aware of the existence of Patient's Rights to which 106 (53.81%) responded yes and the remaining 91 (46.19%) were not aware of it.

Table 2 highlights the main part of our questionnaire which was the 25 questions on their knowledge on Patient Right's. The highest correct response rate was 95.94% for 'Consent must be written in a language understandable by the patient' and the lowest response rate was 19.29% for the following statement, 'Doctors are entitled to withhold any procedures related to a patient condition if patient refuses their choice of treatment. Four other items were below the 50% mark which were , 'A doctor can disclose a patient's information to judicial department only with his/her permission'(37.06%), 'A consent form is required for both routine and emergent lifesaving procedures'(34.01%) 'The patient's medical record can be accessed by health-care team members, researchers, or other hospital staff' (31.47%), and 'Patient should be provided by one consent for different interventions such as surgery, anaesthesia, and radiology (21.32%)'.

Table 3 shows that among the 197 respondents, 48.22% showed that they had adequate knowledge on Patient's Rights and the remaining 51.78% showed inadequate knowledge.

Table 4 shows the association between social demographic profile of students and their knowledge on Charter of Patient Rights. It is seen that the students who were aware of Patient's Rights were 1.92 significantly times more likely to have more knowledge on the rights than those who were not aware of Patient's rights (95% CI for OR 1.09 to 3.39; P-value 0.024). Logistic regression shows that participants who said they were aware of the existence of patient's rights were significantly 1.91 times more likely to have adequate knowledge on these rights compared to those who were not aware of it (95% CI for OR 1.07 to 3.41; P-value: 0.028).

**TABLES**

Table 1: Socio-demographic of the medical students that participated in the study and their awareness (n=197)

| <b>Variable</b>  |           | <b>Frequency (n)</b> | <b>Percentage (%)</b> |
|------------------|-----------|----------------------|-----------------------|
| <b>Age</b>       | Mean (SD) | 22.36 (1.28)         |                       |
| <b>Gender</b>    | Female    | 114.00               | 57.87%                |
|                  | Male      | 83.00                | 42.13%                |
| <b>Ethnicity</b> | Chinese   | 49.00                | 24.87%                |
|                  | Indian    | 66.00                | 33.50%                |
|                  | Malay     | 37.00                | 18.78%                |
|                  | Others    | 45.00                | 22.88%                |
| <b>Semester</b>  | 6         | 121.00               | 61.42%                |
|                  | 7         | 67.00                | 34.01%                |
|                  | 8         | 7.00                 | 3.55%                 |
|                  | 9         | 2                    | 1.02%                 |
| <b>Religion</b>  | Buddhist  | 52                   | 21.40%                |
|                  | Christian | 26                   | 13.20%                |
|                  | Hindu     | 60                   | 30.46%                |
|                  | Muslim    | 45                   | 22.84%                |
|                  | Other     | 14                   | 7.11%                 |

**Table 2: Responses to each item of the charter of patient rights**

| No. | Statement on Patient Rights in Malaysia  | Frequency of Correct Answer | Percentage (%) |
|-----|--|-----------------------------|----------------|
| 1.  | Patients are not required to be treated with courtesy and respect during times of emergency.                             | 155                         | 78.68          |
| 2.  | Patients should know the identity and professional status of the healthcare providers responsible for his/her treatment. | 171                         | 86.80          |
| 3.  | A patient is entitled to the name of the physician.  | 177                         | 89.85          |
| 4.  | Patients are entitled to a method of contacting her/his treating physician.  | 170                         | 86.29          |
| 5.  | Patient's culture and beliefs should be respected even if it was against medical advice.                                 | 149                         | 75.63          |
| 6.  | A patient may have the possibility of obtaining a second opinion within the same hospital or another.                    | 176                         | 89.34          |
| 7.  | When examining a patient, a third party (male or female) should be present   | 174                         | 88.32          |
| 8.  | Treatment options should be discussed within the health team; patients are only entitled to the treatment plan           | 116                         | 58.88          |
| 9.  | The patient's medical record can be accessed by health-  | 62                          | 31.47          |

|     |  |     |       |
|-----|--|-----|-------|
|     | care team members, researchers, or other hospital staff.   |     |       |
| 10. | A doctor can disclose adult patient information to anyone upon his/her permission.   | 113 | 57.36 |
| 11. | A doctor can disclose patients' information to a research team without his/her permission.   | 158 | 80.20 |
| 12. | A doctor can disclose an adult patient's information to a specific family member (father-husband-wife) without his/her permission. | 135 | 68.53 |
| 13. | A doctor can disclose a patient's information to judicial department only with his/her permission.                                 | 73  | 37.06 |
| 14. | A doctor can disclose a patient's information (to local and/or national health authorities) in case of communicable diseases.      | 159 | 80.71 |
| 15. | A consent form is required for both routine and emergent lifesaving procedures.  | 67  | 34.01 |
| 16. | Consent must be written in a language understandable by the patient.   | 189 | 95.94 |
| 17. | Patient should be provided by one consent for different interventions such as surgery, anaesthesia, and radiology.                 | 42  | 21.32 |
| 18. | Treatment procedure should be done even if refused by the patient.   | 160 | 81.22 |
| 19. | Doctors are entitled to withhold any procedures related  | 38  | 19.29 |

|     |  |     |       |
|-----|--|-----|-------|
|     | to a patient condition if patient refuses their choice of treatment.   |     |       |
| 20  | Patients in governmental hospitals do not have the right to refuse participation in any research done by the hospital. | 160 | 81.22 |
| 21. | Patient does not have the right to quit after agreeing to participate in a research.                                   | 159 | 80.71 |
| 22. | Patient has the right to in advance about her/his treatment cost and insurance coverage.                               | 184 | 93.40 |
| 23. | Patient does not need to know about treatment cost if she/he was covered by insurance.                                 | 168 | 85.28 |
| 24. | Patients have the right to choose his own statements to be written in the medical report.                              | 111 | 56.35 |
| 25. | The medical team should report any violence against children to the concerned authority.                               | 179 | 90.86 |

**Table 3: Knowledge of medical students about Charter of Patient Rights.**

| Level Of Knowledge | Frequency | Percent (%) |
|--------------------|-----------|-------------|
| Adequate           | 95        | 48.22%      |
| Inadequate         | 102       | 51.78%      |

**Table 4: Chi Square analysis of the association between awareness and their knowledge on Charter of Patient Rights' along with the logistic regression**

| Independent Variables | Knowledge      |                | ODDS RATIO (95% CI) | CHI-SQUARE | P-VALUE | Logistic regression |               |             |      |             |         |
|-----------------------|----------------|----------------|---------------------|------------|---------|---------------------|---------------|-------------|------|-------------|---------|
|                       | Adequate (%)   | Inadequate (%) |                     |            |         | Odds Ratio          | 95% CI for OR | Coefficient | S. E | Z-Statistic | P-Value |
|                       |                |                |                     |            |         |                     |               |             |      |             |         |
| <b>AWARENESS</b>      |                |                |                     |            |         |                     |               |             |      |             |         |
| <b>Yes</b>            | 59<br>(29.95%) | 47<br>(23.86%) | 1.92(1.09-3.39)     | 5.08       | 0.024   | 1.91                | 1.07 - 3.41   | 0.65        | 0.30 | 2.20        | 0.028   |
| <b>No</b>             | 36<br>(18.27%) | 55<br>(27.92%) |                     |            |         |                     |               |             |      |             |         |

## DISCUSSION

People nowadays are well informed of their rights and any negligence or disrespect to their rights by medical staffs could result in medical legal issues which can be taxing to for both parties. The aim of this cross sectional study was to assess student's awareness of the existence of the Patient's Charter, sensitize the students about the importance of the rights of a patient in clinical practice and assess the extent of their knowledge on it.

53.81% of medical students stated that they were aware of the existence of patient charter of right.

Interestingly, a study in Iran by Zahra Ghodsi showed the same result with our study where 53% of medical students had an average awareness about patient's bill of rights. [8].

Compared to the study carried out in Saudi Arabia, Al-Amoudi SM et al., observed that medical students at their centre were not well aware of women's health rights, reproductive health rights and rights of potentially vulnerable patients.

This study also showed that 48.22% of medical students had adequate knowledge on patient charter of rights.

A study byfrom Ranjbar et al. recorded that 42.4% of medical students had good knowledge in this context. Only 35.9% of the trainees (medical interns) ranked a good level with sufficient knowledge. [9].

Our study has shown that there is a significant association between awareness of patient rights' and knowledge towards patient rights'. Those who were aware of patient rights' were significantly more likely to have adequate knowledge, when compared to the students who were not aware of patient rights'. The same results were also seen in a previous study conducted in Saudi Arabia [10].

Similarly, a study conducted in Lithuania in 2002 [11], shows the same association, where the physicians who were aware of patient rights', practised with deference towards patients.

Unfortunately we too faced some limitations. Firstly, this study was conducted among medical students picked from only one private medical college at one point of time, so the results are not reflective of the current clinical practice in Malaysia, reducing the generalizability factor in our study. All the respondents are currently in their clinical phase which is Year 4 and 5. In our study 95.43% of the respondents are in Year 4 and the remaining respondents were from Year 5. This is due to the difficulty we faced in approaching Year 5 students as they are located in a different campus. Secondly, the respondents in our study might have given whatever they thought would be an acceptable response to the researcher, rather than revealing the whole truth or pick the answers that resonates with them the most.

## CONCLUSION

Our study shows that students who had the awareness of the charter of patient rights were found to have adequate knowledge regarding these rights as they have read or heard about the gist of these rights mainly through mass media. Patients' rights is still an issue that needs to be addressed among medical staff. Thus, it is obligatory to sensitize the newly-inducted medical students by instilling some information on these desirable topics during their foundation orientation course in the form of lectures/role-play; later on reinforcement of these messages can be done during community postings. This ensures patients to receive care based on humanistic and ethical rights.

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