Awareness and Perceptions of Medical Students towards Health Care Ethics - A Study from Nepal

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ABSTRACT

Background

Medical practitioners are the men of science who treat patients based on their knowledge and skill. Unethical and immoral conduct in the practice of medicine pertains to human right issues and litigation.

Objective

The present study is conducted to understand the perceptions and awareness of the moral and ethical responsibilities of future medical doctors in Nepalese scenario.

Method

This cross sectional study was carried out among the undergraduate medical students of Manipal College of Medical Sciences, Pokhara, Nepal who were administered a pre-tested, semi-structured questionnaire relating to various aspects of health care ethics. A total of 202 students (116 girls and 86 boys) voluntarily participated in the study. Based upon the criteria whether a student had attended forensic medicine lecture the study participants were thus divided into two groups Group I and Group II. The responses of the participants were obtained on a 5 point Likert scale and analyzed.

Result

The study observed that the overall awareness on issues regarding consent was proportionately higher than for issues dealing with patient's right to treatment. The awareness levels were similar among the students of both groups for most of the issues with exception of a few issues where awareness levels were higher among the Group II students when compared to the Group I students.

Conclusion

This present study attempts to present the assessment of students on issues relating to ethics and moral reasoning. The present study also emphasizes on the importance of ethics in the practice of medicine.

KEY WORDS

Awareness, Health care ethics, Medical students

INTRODUCTION

Medicine is not an exact science as mathematics but is inherently experimental, and the response to a particular treatment varies between patients. The patients without the knowledge of medical science, intellectual capacity and moral authority surrenders to the wishes of the physician keeping utmost trust in the professional acumen of the medical practitioner. This attitude of the patient towards his physician is the outcome of strong trust and psychological belief followed as a tradition since thousands of years where it is believed that a physician, who, based on his doctrine decides what is good for his/her patient.[1,2] Thus, medicine supposedly is governed by valid moral principles. It is unethical to practice medicine without appropriate compassion or sensitivity.

Teaching of medical ethics to medical undergraduates would provide a framework to balance one's responsibility to their patient and profession and also the obligation to those seeking medical care.[3] This paper is aimed to explore the perception and awareness of the medical students towards health care ethics and to address the challenges in the existing understanding of health care ethics accordingly.

METHODS

Ethics Committee approval was obtained from the Institutional Ethics and Research Committee of Manipal College of Medical Sciences, Pokhara, Nepal prior to the commencement of this study. Following the approval, the aims and objectives of the study were explained to the students and a written informed consent was obtained from those who volunteered to participate in the study. The study participants were undergraduate medical students from Manipal College of Medical Sciences, Pokhara, Nepal. The undergraduate medical students were chosen for the study because they are not only research facilitators, but also future doctors who should have an insight and knowledge of health care ethics.[4] In accordance with the medical curriculum of Nepal, the students during their undergraduate medical education are told about health care ethics and related issues in the subject specialty of Forensic Medicine.

There are 22 medical schools in Nepal currently out of which 10 are run by Kathmandu University (KU). Forensic Medicine is taught as preclinical subject during 6th and 7th semester as per KU guidelines. It is during this period the ethical and legal aspect of medical practice is taught. However, in accordance to the revised curriculum by the KU, clinical medicine is introduced to 1st semester students where two lectures are given on medical ethics by the department of Forensic Medicine as a part of Intregated Clinical Medicine (ICM). Based upon the criteria whether a student had attended forensic medicine lecture during 6th and 7th semester, the study participants were thus divided into two groups Group I and Group II. Group I comprised of students who had attended only two lectures of medical ethics as part of ICM in 1st semester whereas Group II included students who had attended the Forensic Medicine lectures. The students currently studying 6th and 7th semesters were excluded from the study.

The data was collected using a pre-tested, semi structured questionnaire modified from the questionnaire used by Unnikrishnan et al.[5] in their study among Indian medical practitioners. The proforma consisted of socio-demographic profile of the participant and their source of knowledge and information regarding health care ethics. The proforma also included a 25 points questionnaire where initial 11 questions were related to perception and awareness of the students towards issues relating to consent in medical practice. The subsequent questions were concerned with other issues relating to health care ethics in medical practice. The self-administered questionnaire was distributed to 250 students initially enrolled in the study. The responses of the participants were collected on a five point Likert scale. The responses to the Likert-type items were graded using a differential grading system; from 1 (strongly agree) to 5 (strongly disagree) for the items (1-strongly agree, 2-agree, 3-not sure, 4-disagree and 5-strongly disagree). The incomplete forms (n=48) were excluded, thus a total of 202 students comprised of the study population. Scores 1 and 2 were put together to represent agreement, 4 and 5 together for disagreement and score 3 indicated that the student was not sure about the response in the statement.

The data obtained was analyzed using SPSS version 21.0 and the results in form of agreement/ disagreement for each item were expressed in proportions. A mean Likert score was calculated for each item among the participants from different semesters and among males and females for comparative as well as overall analysis.

RESULTS

A total of 202 medical students (Males=86, Females=116) participated in the study. The age of the participants ranged between 18 and 25 (21.81±1.39) years. The mean age and male-female ratio of the participants according to the Groups to which they belonged are shown in Table 1. The majority of the students were Hindu (n=152, 75.2%) followed by Buddhist (n=27, 13.4%). Forensic lectures provided the knowledge and information on health care ethics to the majority of the students followed by television/magazine and newspapers. Majority of the participants from Group I (30.26%), who had attended two lectures on medical ethics cited their source of knowledge as Forensic Medicine Lecture. It was also observed that lectures in clinical subjects did provide some knowledge on ethical issues in medical practice (Table 2).

Awareness on issues of informed consent:

The majority of the students were in strong agreement that written informed consent should be taken for major

Table 1. Baseline characteristics of study participants (n=202)

Characteristics		Group I (N=96)	Group II (N=106)
Age		20.78± 1.58)	22.17 ±1.06
Gender (Male: Female)		40:56	46:60
Religion	Hindu	58 (60.42%)	94 (88.68%)
	Muslim	7 (7.29%)	4 (3.77%)
	Christian	9 (9.38%)	2 (1.89%)
	Buddhist	22 (22.92%)	5 (4.72%)
	Sikh	0	1 (0.94%)

(n=198, 98%), and minor operations (n=192, 95%) and for treatment with adverse reactions (n= 181, 89.6%). Only 77.2% students (n= 156) felt the need of obtaining written informed consent for routine procedures. The students felt that consent should be taken for general physical examination (n=193, 95.5%), genital examination in males (n=201, 99.5%) and genital examination in females (n=200, 99.0%)(Table 3).

For issues relating to emergency treatment, a larger proportion of participants agreed that consent was not mandatory to treat children (n=142, 70.3%) and adults (n=157, 77.7%) in emergency conditions. In non-emergency situations, however, a larger proportion of participants disagreed for treatment of adults (n=147, 72.8 %) and children without the consent of parent/guardian (n= 146, 72.3 %) (Table 3).

Opinion of the participants was divided on the issue of adherence to the patient's wishes in emergency situations. However, there was agreement (n=142, 70.3%) among the students that the patient's wishes should be adhered in non-emergency situations. Students disagreed with the statements that a doctor could refuse treatment to a patient in emergency who could not bear his fees (n=171, 84.7%) or when the patient/ relatives of the patients were violent (n= 138, 68.3%). Significant responses were observed between the two groups in terms of a doctor should attend a patient in emergency irrespective of the fact that whether the patient or his/her relatives were violent $t(199)=2.8$, $p=0.005$. Varying responses were however, obtained for similar statements in non-emergency situations. Half of the participants (n=103, 51.0%) agreed that they can refuse treatment of a violent patient/ patient with violent relatives ($p<0.05$).

Variations in responses of participants from different groups were observed for issues relating to adherence to patient's wishes in emergencies, and refusal of treatment for want of fee or when the patient/relatives are violent in non-emergency situations. Mean scores obtained for each item in the questionnaire among participants from different groups are shown in Table 4.

Awareness about confidentiality and refusal to treatment:

It was agreed by the majority of the students (n= 194, 96.0%) that confidentiality is an important issue in the ethical practice of medicine. There was agreement among the students regarding divulging information to the patient of unfavourable condition, wrong diagnosis or treatment (n=170, 84.2%). Opinions were divided for situations where patient refused certain treatment due to his/her beliefs, a relatively larger proportion of the participants disagreed to continue with the treatment (n=87, 43.0%). They put forth the point that that in such a scenario the patient should be instructed find another doctor (42.1%, n=85) (Table 3). This response was statistically significant when observed between the male and female participants in the study $t(200)=2.161$, $p=0.32$.There was a strong agreement for the statement that the patient had the right to refuse treatment (n=171, 84.7%). However, when inquired specifically about the patient's right to refuse life supporting treatments, relatively lesser proportion of the participants showed agreement (n=115, 56.9%).

Table 2. Source of knowledge and information about the health care ethics among the study participants

	Semester		
Source of information[a]	Group I N (row %)	Group II N (row %)	Total N (row %)
Forensic lecture	46 (30.26)	106 (69.74)	152 (100)
Lecture in other subjects	10 (32.26)	21 (67.74)	31 (100)
TV/Magazine/Newspaper	37 (72.55)	14 (27.45)	51 (100)
Scientific Journal	2 (28.57)	5 (71.43)	7 (100)
Conference/CME/Workshop	0 (--)	0 (--)	0 (--)
Others	22 (100)	0 (--)	22 (100)

[a]-Participants were allowed to indicate more than one option, if required

A mixed response was obtained from the students when inquired about physician assisted suicide (PAS) in terminally ill patient; and 55.9% of the participants (n= 113) responded in favour of it. The statement 'Euthanasia is legalized in Nepal' was given to find the awareness levels of the medical students on this issue. Only 40.1% participants (n=81) responded correctly, while a larger proportion of participants (n=82, 40.6%) were not sure about the legal status of Euthanasia in Nepal (Table 3). Variations in responses of participants from different semesters were observed for some issues relating to refusal of treatment as shown in Table 4. It was observed that students from Group II were more aware about the legal status of euthanasia than the students from Group I ($p<0.05$).

The participants were unsure in their responses on the issues relating to the adherence to patient's wishes in emergency, refusal of treatment for want of fees; in cases of violent patient/ relatives in non-emergency conditions, refusal of certain treatment owing to definite beliefs, PAS, and legal status of euthanasia in Nepal (Table 4).Though opinion among males and females was similar for most of the issues, gender differences were observed for a few items in the questionnaire. Females were more aware on

Table 3. **Items in the questionnaire and the responses of the participants (n=202)**

	Agreement N (%)	Not Sure N (%)	Disagreement N (%)
Consent should be taken for			
all major operation	198 (98.0%)	02 (1.0%)	02 (1.0%)
all minor operation	192 (95.0%)	05 (2.5%)	05 (2.5%)
routine investigation	156 (77.2%)	08 (4.0%)	38 (18.8%)
treatment with adverse reaction	181 (89.6%)	13 (6.4%)	08 (4.0%)
general physical examination	193 (95.5%)	04 (2.0%)	05 (2.5%)
genital examination (male)	201 (99.5%)	00 (--)	01 (0.5%)
genital examination (female)	200 (99.0%)	01 (0.5%)	01 (0.5%)
In emergency			
Children can be treated without parent's /guardian's consent	142 (70.3%)	21 (10.4%)	39 (19.3%)
Adult can be treated without their consent	157 (77.7%)	25 (12.4%)	20 (9.9%)
Patient's wish must be adhered	78 (38.6%)	57 (28.2%)	67 (33.2%)
Doctor can refuse treatment if patient is unable to bear his fees	09 (4.4%)	22 (10.9%)	171 (84.7%)
Doctor can refuse to treat a violent patient/ patient with violent relatives	29 (14.4%)	35 (17.3%)	138 (68.3%)
In non-emergency			
Children can be treated without parent's/ guardian's consent	33 (16.3%)	23 (11.4%)	146 (72.3%)
Adult can be treated without their consent	36 (17.8%)	19 (9.4%)	147 (72.8%)
Patient's wish must be adhered	142 (70.3%)	44 (21.8)	16 (7.9%)
Doctor can refuse treatment if patient is unable to bear his fees	63 (31.2%)	50 (24.8%)	89 (44.0%)
Doctor can refuse to treat a violent patient/ patient with violent relatives	103 (51.0%)	37 (18.3)	62 (30.7%)
Confidentiality is an important ethical issue in medical practice	194 (96%)	07 (3.5%)	01 (0.5%)
Patient should be informed of a wrong	170 (84.2%)	19 (9.4%)	13 (6.4%)
If patient refuses certain treatment due to his/ her beliefs			
Instruct to find another doctor	85 (42.1%)	52 (25.7%)	65 (32.2%)
Continue with the treatment	44 (21.8%)	71 (35.1%)	87 (43.1%)
Patient has a right to refuse			
Treatment	171 (84.7%)	18 (8.9%)	13 (6.4%)
Life supporting treatment	115 (56.9%)	32 (15.8%)	55 (27.2%)
If a terminally ill patient wishes to die, he/she should be assisted to do so ethically	113 (55.9%)	44 (21.8%)	45 (22.3%)
Euthanasia is legalized in Nepal	39 (19.3%)	82 (40.6%)	81 (40.1%)

the issues like providing service to the patient whether or not the patient or patient party were violent (p=0.028), instruct patient to find another doctor if he/she refuses treatment due to certain belief or religion (p=0.03) and in issues relating to PAS (p=0.004).

DISCUSSION

Medical practitioners who have requisite qualifications and who are registered with the Medical Council are supposed to practice medicine. The study participants thus, had limited experience in independently dealing with clinical and medico-legal cases. The students during their undergraduate training take the history of the patients and do general physical examination either in groups or under supervision of their teachers during their clinical postings. Medical jurisprudence is incorporated and taught in Forensic Medicine lectures in the medical schools in Nepal. This forms the basis of knowledge and awareness among most of the participants who responded accurately to the items in the questionnaire suggesting their recent sensitization.[5,6]

Physician centred paternalistic health care was practiced in the past where the physician had autonomous right to make all health related decisions. The current health care system was founded on this principle where patients were regarded as objects or recipients of doctor's knowledge.[7] Then the doctrine of informed consent evolved which protected the patient's right of autonomous authorization on accepting or refusing certain treatment/ procedure or intervention if he/she were provided with information regarding risk, benefit and alternatives of care.[1] There was singularity observed in the awareness of the participants regarding informed consent. Majority of the respondents strongly agreed to obtain informed consent from the patient for any procedures, general or genital examination,

Table 4. Items in the questionnaire and the observed difference in mean score of each item in the two groups.

Items in the questionnaire	Group I (N=96)	Group II (N=106)	P value
Consent should be taken for all major operations	1.21 ±0.58	1.12 ±0.33	0.204
Consent should be taken for all minor operations/ Procedures	1.53±0.72	1.64±0.60	0.240
Consent should be taken for routine investigations	1.95±0.97	2.39±1.05	0.002*
Consent should be taken for Treatment with adverse reactions	1.60±0.81	1.6981±0.84	0.422
Consent should be taken for General physical examination	1.51±0.68	1.66±0.67	0.118
Consent should be taken for genital examination in males	1.26±0.57	1.31±0.47	0.484
Consent should be taken for genital examination in females	1.18±0.54	1.17±0.38	0.911
Children can be treated without the consent of parents/ local guardian in emergency.	2.40±1.37	2.22±1.11	0.339
Adults can be treated without their consent in emergency.	2.10±1.05	1.99±0.90	0.413
Children can be treated without the consent of parents/ local guardian in non-emergency.	3.51±1.19	3.88±0.99	0.019*
Adults can be treated without their consent in non-emergency.	3.61±1.22	3.81±.99	0.213
Patient's wishes must be adhered to in emergency.	2.84±1.15	2.87±1.06	0.876
Patient's wishes must be adhered to in non-emergency.	2.09±0.84	2.26±0.85	0.157
Doctor can refuse treatment if patient is unable to bear his fee in emergency cases.	4.25±0.93	4.20±0.89	0.684
Doctor can refuse treatment if patient is unable to bear his fee in non-emergency cases.	3.60±1.16	2.99±1.12	<0.001*
Doctors can refuse to treat a violent patient / patient with violent relatives in emergency.	3.92±0.96	3.50±1.06	0.005*
Doctors can refuse to treat a violent patient / patient with violent relatives in non-emergency.	3.07±1.12	2.48±1.08	<0.001*
Confidentiality is an important issue in ethical practice of medicine	1.28±0.61	1.20±0.45	0.275
Patient should be informed of a wrong	1.78±0.99	1.89±0.88	0.422
If a patient refuses certain treatment due to his/her beliefs, he/she should be instructed to find another doctor	3.08±1.05	2.71±1.09	0.016*
If a patient refuses certain treatment due to his/her beliefs, he/she should be Continued with the treatment	3.25±0.96	3.25±0.99	0.973
Patient has the right to refuse treatment	1.91±0.69	2.00±0.88	0.408
Patient has the right to refuse life supporting treatment	2.61±1.25	2.58±1.17	0.819
If a terminally ill patient wishes to die, he/she should be assisted in doing so ethically	2.55±1.20	2.58±1.12	0.841
Euthanasia is legalized in Nepal	3.03±0.99	3.59±1.29	0.001*

* Significant p value observed using Independent-Samples T-Test

routine investigations and treatment with adverse reaction irrespective of sex. Though there has been an increase in the number of patients seeking detailed information and requesting to have an opportunity to actively participate in their health care decisions recently, we should not forget the fact that the majority of the families in the study area live in nuclear family with collective earning.[1] All members take equal interest in matters related to life and death. In most instances, it is the eldest or the head of the family who decides on the health decisions of the fellow member or puts off the responsibility to the doctor. It is also not surprising to find husbands making health care decisions for their wife and children in this patriarchal society. These cultural and social factors may not sound reasonable when compared to western nations. The present study from Nepal is in agreement to a similar study in Indian scenario as both these countries share similar cultural values, a factor that is likely to influence the responses of the participants.[8]

During an emergency situation it is implied that the doctor should treat the patient irrespective of an expressed consent from the patient or surrogate decision maker if the patient is unable to consent, the responses of the students affirmed this fact.[5] When inquired about adhering to patient's wishes the respondents were in agreement that the patient's wishes should be adhered provided the situation is non-emergency. Opinion of the participants was divided on the issue of adherence to patient's wishes during emergency. A physician has a right to choose his patient but in emergency situation he is not entitled to do so, and should render his service even if the patient or the patient's relatives behave violently.[5]

Confidentiality is an essential aspect of medical ethics. A patient discloses all the secrets confined in him believing that all the facts would help the treating physician choose a best treatment for his cure. This trust upon the physician

is a corner stone in doctor patient relationship.[5] Disclosing secrets of the patients when such disclosure is not privileged is unethical. The vast majority of the students in our study agreed that confidentiality is an important aspect in medical practice.

The volunteer students comprising of the study population were not sure if the patient didn't want to continue a particular treatment he should be instructed to find another doctor or to continue with the treatment. However, they were clear that a patient could refuse treatment and should be informed of wrong or inadvertent medical errors. These opinions of the students probably were made based on the very fact that the patient had an autonomous right to accept or refuse treatment and if he/she was treated against his/her belief it might lead to litigation of the doctor.[5]

When a terminally ill patient didn't consent for treatment and refused life supporting treatment, most of the respondents agreed to withdraw such treatment. This observation is in contrast to the fact that in such cases it is implied that the doctor should do anything or everything to save life of the patient based upon the doctrine of necessity.[8] Ethical principle in medical field deals with moral decisions relied upon self-regulation of its members. These self-governed moral decisions are to be based upon the fundamental responsibility of the profession that is directed towards the welfare of the public.[9] Similar contrasting observation was made regarding the PAS and euthanasia. It is illegal for a physician to assist in suicide or mercy killing of his/her patients. The study participants were largely unaware of the legal status of euthanasia in Nepal. This highlights the fact that curriculum should include the law and statues of the country related to medical practices.

Previous studies have suggested that small group teaching provides students with greater gains in terms of moral reasoning rather than classroom lectures.[10,11] Exemplifying with case scenario and group discussion while teaching or training medical students will boost their reasoning power on situations that involve decision making pertaining to ethical issues. The capacity of moral reasoning doesn't come overnight but it will take weeks or months so there has to frequent seminars, workshops and CME not only for the students but also to the medical practitioners.

The observation of the present study only depicts the awareness of the undergraduate students of a particular institute and verifies the level of knowledge acquired after teaching medical ethics, and not of the whole country Nepal which is the limitation of the study. More detailed perception and awareness level could have been established if the same group of students were followed during the entire medical course. However, the present study paves way for future research in the country for planning of new curriculum on health care law and ethics.

CONCLUSION

Sound knowledge and awareness of healthcare ethics is mandatory in modern day practice of medicine. Ignorance doesn't mean the rule is not there; neither has it made an excuse that the rule will not be applied. This present study attempts to present the assessment of students on issues relating to ethics and moral reasoning. The present study emphasizes on the importance of ethics in the practice of medicine, and the specific need to incorporate practical aspects of ethical teaching in the undergraduate curriculum. Informed decision making in accordance to ethical practice is the need of time and medical students are to be sensitized in the subject.

Practice of medicine in accordance with the well-established medical ethics not only saves a medical man from allegations of negligence or litigation, but also increases the trust in doctor patient relationship, thus, upholding the dignity of noble medical profession.

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