

# Knowledge, Attitude and Practice of Medical Ethics among Doctors and Nurses in Pokhara Valley, Nepal

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## ABSTRACT

### Background

Medical ethics is defined as the ethical obligations of medical professionals towards their patients, colleagues, and society. The inadequacy and non-uniformity of this topic has been associated with rising cases of professional misconduct and medical negligence all over the world.

### Objective

To assess and compare the status of knowledge, attitude and practice of medical ethics among medical doctors and nurses in three major hospitals of Pokhara valley.

### Method

This was a cross-sectional study conducted from 15<sup>th</sup> Mar 2018 to 13<sup>th</sup> Apr 2018; in which 124 doctors and 103 nurses were asked to fill up medical ethics related questionnaire. The data was entered in SPSS file and the association of variables was determined by Chi-square and statistical significance was considered if the p-value < 0.05.

### Result

The study showed that 56.5%, 8.1%, and 13.7% of doctors were aware of the Hippocratic oath, Nuremberg Code, and Helsinki declaration respectively compared to only 1% of nurses. There was a significant difference in opinions on various questions related to medical ethics with p-value < 0.05 in 12 out of 22 questions. Only a few (12.1% doctors vs. 25.2% nurses) stood in support of the physician-assisted dying.

### Conclusion

The study showed that there was inadequate as well as a non-uniform level of knowledge of three major codes of medical ethics and principles related to it which resulted in significant disparity in the attitude and practice of medical ethics among doctors and nurses in Pokhara valley.

## KEY WORDS

Doctors, Medical ethics, Nepal, Nurses

## INTRODUCTION

In the past, many unethical and unprofessional healthcare practices were observed around the world. In the past, the “Bedlam tours” were practiced in England where the strange behavior and activities of the mentally ill patients were used as a measure of entertainment.<sup>1</sup> The Nazis and Soviets practiced various unethical experimentation of new treatments like a lobotomy on the psychiatric patients which encouraged the formulation of the Nuremberg code, Declaration of Hawaii and Declaration of Helsinki.<sup>2-4</sup> At present, the Beauchamp and Childress’ Principle of respect for Autonomy, the Principle of Non-maleficence, the Principle of Beneficence, and the Principle of Justice have been considered as the ideal principles of medical ethics.<sup>5,6</sup>

Adhikari et al, in his study conducted in tertiary care center in Kathmandu had concluded that a significant proportion of the resident doctors and nurses were unaware of major documents of healthcare ethics along with the significant difference in attitudes of doctors and nurses ( $p < 0.05$ ) in 9 out of 22 questions relating to different aspects of medical ethics.<sup>7</sup> Hariharan et al. had concluded that 11% of the doctors and a quarter of nurses in Barbados did not know the contents of the Hippocratic oath and the Nurses Code respectively whereas Nuremberg Code and Helsinki Code were known only to a few individuals.<sup>8</sup> Ranasinghe et al. in his study done in three teaching hospitals in Sri Lanka had concluded that most doctors had poor knowledge of medical ethics.<sup>9</sup>

With an aim of knowing the status as well as uniformity level of knowledge, attitude and practice of medical ethics among medical doctors and nurses in Pokhara valley, this study was conducted aiming for the changes required in the field of medical ethics to standardize the medical practice all over Nepal.

## METHODS

This was a cross-sectional study conducted among doctors ( $n=124$ ) and nurses ( $n=103$ ) in three major hospitals in Pokhara, Nepal, i.e; Gandaki Medical College, Manipal College of Medical Sciences and Pokhara Academy of Health Sciences. The study was started after the approval of ethical clearance from the Institutional Ethics Committee of Gandaki Medical College, Nepal. All the interested and registered doctors and nurses above 18 years of age were included in the study. After taking informed expressed consent from the participants, they were asked to fill up the questionnaire. The study was conducted from 15<sup>th</sup> March to 13<sup>th</sup> April 2018 with a questionnaire prepared by Adhikari et al. in his article. Besides some minor changes, the same format of the pretested questionnaire was used after taking permission from the corresponding author.<sup>7</sup> Out of 260 questionnaires, 235 were returned, out of which eight questionnaires were incompletely filled

and were excluded from the study. The response rate of the participants was 90 percent. The questionnaire was initiated with demographic details like age, sex, respondent type (doctors or nurses), and place of birth (urban or rural), etc. The first segment of the questionnaire consisted of 22 questions relating to the issues that could be present in the practice of healthcare ethics, the respondents’ tick marked either as “agreed” or “disagreed”. The second segment of the questionnaire consisted of information related to the source/instrument of knowledge for learning ethics and law, preference of doctors and nurses for consultation when they faced a legal and similarly ethical problem in their day-to-day profession. In this segment, multiple responses from the participants were allowed. The final segment of the questionnaire consisted of major medical ethics codes related knowledge namely Hippocrates codes, Nuremberg codes, and Helsinki codes. The correct answer was marked “yes” in which there was mention of the content of the codes whereas inadequate and wrong content about the codes was marked “no”. Data were analyzed using Statistical Package for Social Sciences (SPSS) version 16. The association of variables was determined by Chi-square and statistical significance was considered if the p-value was less than 0.05.

## RESULTS

Our study showed the mean age of the doctors was  $32.62 \pm 7.844$  and that of the nurses was  $24.40 \pm 5.624$ . There was a predominance of male doctors 81 out of 124 (65.3%) over female doctors 43 out of 124 (34.7%) and 100% (total 103) of nurses were female. A majority of 77.4% of doctors and 75.7% of nurses were from an urban place of origin.

**Table 1. Knowledge on ethical codes among doctors and nurses.**

Ethical codes	Job Category		p value
	Doctors (N=124)	Nurses(N=103)	
<b>Knew the content of Hippocratic oath</b>			
Yes	70 (56.5%)	1(1%)	0.000
No	54 (43.5%)	102(99%)	
<b>Knew the content of Nuremberg code</b>			
Yes	10 (8.1%)	1(1%)	0.013
No	114 (91.9%)	102(99%)	
<b>Knew the content of Helsinki declaration</b>			
Yes	17 (13.7%)	1(1%)	0.000
No	107 (86.3%)	102(99%)	

Among 22 questions related to the practice of healthcare ethics, 12 responses from the doctors and nurses group were statistically significant ( $p$ -value  $< 0.05$ ). There was a significant disparity among doctors and nurses in ethical issues related to abortion where 79%( 81/103) of nurses compared to 52%( 64/124) of doctors agreed to doctor’s obligation to perform any legal abortion. Significant

**Table 2.** Preferred instruments for learning about ethics and law among doctors and nurses.

Instruments for learning ethics and law	Job Category		p value
	Doctors(N=124)	Nurses(N=103)	
Ethics journal	83(66.9%)	84(81.6%)	0.013
Books on ethics	104(83.9%)	84(81.6%)	0.645
General texts	48(38.7%)	41(39.8%)	0.866
Media (Newspapers/TV)	59(47.6%)	68(66%)	0.005
Workshops	76(61.3%)	48(46.6%)	0.027
Lectures (UG/CME)	92(74.2%)	77(74.8%)	0.923
Panel discussions	65(52.4%)	56(54.4%)	0.769
Case conferences	70(56.5%)	62(60.2%)	0.569

**Table 3.** Preference in consulting on a legal and on an ethical problem among doctors and nurses.

Whom to consult on legal problem	Job Category		p value
	Doctors(N=124)	Nurses(N=103)	
Colleague	57(46%)	44(42.7%)	0.624
Supervisor	69(55.6%)	69(67%)	0.081
Chief of Medical staff	73(58.9%)	69(67%)	0.208
Matron	22(17.7%)	62(60.2%)	0.000
Hospital Administrator	80(64.5%)	74(71.8%)	0.239
Professional insurance company	27(21.8%)	36(35.3%)	0.024
Trade Union	17(13.7%)	24(23.3%)	0.061
Lawyer	107(86.3%)	50(48.5%)	0.000
Whom to consult on ethical problem			
Colleague	57(46%)	30(29.1%)	0.009
Supervisor	59(47.6%)	54(52.4%)	0.467
Head of Department	94(75.8%)	72(69.9%)	0.318
Chief of Medical staff	49(39.5%)	48(46.6%)	0.283
Matron	21(16.9%)	52(51%)	0.000
Hospital Administrator	64(51.6%)	47(45.6%)	0.369
Ethics Committee	92(74.2%)	76(73.8%)	0.944
Professional Association	50(40.3%)	47(46.1%)	0.384
Text, Internet	25(20.2%)	13(12.6%)	0.131
Close friend/family	26(21%)	16(15.5%)	0.294

disparity existed in the limitation of the importance of ethical conduct to avoid legal action where 89% (110/124) of doctors and 68% (70/103) of nurses disagreed with the statement. Concerning the question of receiving income from referring patients for medical tests, 61% (75/124) of doctors and 33% (34/103) of nurses agreed. Only 8% (10/124) of doctors compared to 35% (36/103) of nurses agreed to the acceptance of documents without actual examination performed on the patient. There was a significant disparity with the incorporation of medical ethics in the undergraduate curriculum where 18% (19/103) of nurses compared to only 3% (4/124) disagreed with the statement.

**Table 4.** Issues in different aspects of healthcare ethics.

Issues in healthcare ethics	Agree	Disagree	Chi-square	p value
<b>Patients wishes must always be adhered to</b>				
Doctors	94(75.8%)	30(24.2%)	0.998	0.318
Nurses	72(69.9%)	31(30.1%)		
<b>Patient should always be informed of wrong doing by anyone involved in his/her treatment.</b>				
Doctors	84(67.7%)	40(32.3%)	5.580	0.018
Nurses	84(81.6%)	19(18.4%)		
<b>Confidentiality is not so important aspect of treatment.</b>				
Doctors	7(5.6%)	117(94.4%)	0.998	0.318
Nurses	3(2.9%)	100(97.1%)		
<b>Doctors should do their best for the patient irrespective of the patient's opinion.</b>				
Doctors	93(75%)	31(25%)	0.417	0.519
Nurses	81(78.6%)	22(21.4%)		
<b>Close relatives should be told about patient's condition.</b>				
Doctors	103(83.1%)	21(16.9%)	1.818	0.178
Nurses	92(89.3%)	11(10.7%)		
<b>Children should not be treated without consent of their parents.</b>				
Doctors	110(88.7%)	14(11.3%)	8.467	0.04
Nurses	76(73.8%)	27(26.2%)		
<b>If law allows abortion, doctors cannot refuse to do abortion.</b>				
Doctors	60(48.4%)	64(51.6%)	21.884	0.000
Nurses	81(78.6%)	22(21.4%)		
<b>If there is Disagreement between patients/families and health care professionals about treatment decisions, doctors decision should be final.</b>				
Doctors	42(33.9%)	82(66.1%)	0.019	0.891
Nurses	34(33%)	69(67%)		
<b>Ethical conduct is only important to avoid legal action.</b>				
Doctors	14(11.3%)	110(88.7%)	14.753	0.000
Nurses	33(32%)	70(68%)		
<b>Ethics as a part of syllabus should be taught in every medical/nursing teaching institution.</b>				
Doctors	124(100%)	0(0%)	3.660	0.056
Nurses	100(97.1%)	3(2.9%)		
<b>It is very difficult to keep confidentiality, so it should be abandoned.</b>				
Doctors	8(6.5%)	116(93.5%)	4.066	0.044
Nurses	15(14.6%)	88(85.4%)		
<b>In your opinion do you think that doctors are receiving income from referring patients for medical tests?</b>				
Doctors	75(60.5%)	49(39.5%)	17.015	0.000
Nurses	34(33%)	69 (67%)		
<b>Consent is required only for surgeries, not for tests and medicines.</b>				
Doctors	11(8.9%)	113(91.1%)	0.837	0.360
Nurses	13(12.6%)	90(87.4%)		
<b>Copying answers in degree examinations is bad/sin.</b>				
Doctors	107(86.3%)	17(13.7%)	0.034	0.854
Nurses	88(85.4%)	15(14.6%)		

**Writing Nervous system examination- normal or blood pressure normal when it hasn't been done is acceptable because it is important for documentation.**

Doctors	10(8.1%)	114(91.9%)	25.173	0.000
Nurses	36(35%)	67(65%)		

**If a patient wishes to die, he or she should be assisted in doing so no matter what their illness.**

Doctors	15(12.1%)	109(87.9%)	6.570	0.010
Nurses	26(25.2%)	77(74.8%)		

**In your opinion do you think that doctors are influenced by drug company inducements, including gifts?**

Doctors	94(75.8%)	30(24.2%)	12.526	0.010
Nurses	55(53.4%)	48(46.6%)		

**In order to prevent transmission of TB, disclosure of TB positive status to neighbors should be done.**

Doctors	56(45.2%)	68(54.8%)	6.506	0.011
Nurses	64(62.1%)	39(37.9%)		

**Given a situation, a male doctor need to examine a female patient & female attendant is not available; in your opinion is it ethical to refuse the patient?**

Doctors	63(50.8%)	61(49.2%)	8.120	0.004
Nurses	33(32%)	70(68%)		

**Do you have interest in learning healthcare ethics?**

Doctors	120(96.8%)	4(3.2%)	3.382	0.066
Nurses	103(100%)	0(0%)		

**Do you think doctors/nurses must serve hard to reach areas and underserved population?**

Doctors	116(93.5%)	8(6.5%)	0.424	0.515
Nurses	94(91.3%)	9(8.7%)		

**Do you think it is necessary to incorporate medical ethics in undergraduate curriculum?**

Doctors	120(96.8%)	4(3.2%)	14.315	0.000
Nurses	84(81.6%)	19(18.4%)		

## DISCUSSION

In our study, 43.5% (54/124) of doctors were unaware of the Hippocratic Oath, 91.9% (54/124) of doctors were unaware of the Nuremberg code and 86.3% (54/124) of doctors were unaware Helsinki Declaration. Only 1% (1/103) of nurses were aware of all the three codes and declarations. This was a similar finding in studies done by Adhikari et al., Hariharan et al., Mohammad et al., Mallela et al. and Iglesias et al.<sup>7-12</sup> In our study, doctors preferred to learn ethics and law from books, lectures, and journals while nurses preferred books, ethics journals, lectures, and media. This is similar to previous studies done by other researchers.<sup>13-15</sup> Janakiram et al. had a different result in his study that the majority of medical and dental postgraduates acquired their knowledge via the internet, court reports, newspapers (45 to 64% out of 172 participants).<sup>15</sup> The majority of the doctors and nurses preferred to consult their head of department while they faced an ethical problem in their work. In contrast to our study, Hariharan et al. found that colleagues were the first preference in the case of doctors and third in the case of

nurses in this situation.<sup>8</sup> On legal issues, doctors opted to consult a lawyer and nurses opted to consult the hospital administrator. The lawyer was the first preference in legal issues in the case of both nurses and doctors in the study done by Hariharan et al.<sup>8</sup> The disparity seen among doctors and nurses in our study for the consultation of a lawyer in case of legal matters may be due to inadequate knowledge of medico-legal cases and their consequences in our context. The significant difference observed among doctors and nurses in question-related to the obligation of the doctor to perform legal abortion may be because Nepalese doctors are more aware of the Code of Ethics of Nepal which allows a doctor to refuse a patient except in case of emergency. The disparity concerning abiding ethical conduct just for the sake of avoiding legal action could be due to mixing up of ethical and legal issues as well as terms by nurse group in our study which in part is due to inadequate knowledge related to these topics. The difference in question-related to doctors benefitting from referring patients for medical tests could be due to the personal/real life experience of these practicing doctors which slightly deviates from the basic principles they had received during their student lives. With regards to the question related to the incorporation of medical ethics in the undergraduate curriculum, the disparity could be either due to pre-existing academic load of nursing students or straightforward unawareness of the importance of medical ethics and its implications in any medical personnel's career. There was a statistically different opinion in the statement where 75.8% of doctors agreed to them being influenced by drug company inducements whereas 53.4% of nurses agreed on this statement. The reason for this different opinion could be either due to the doctors being very honest or the sisters being ignorant of this kind of situation. In this study, 88% (109/124) and 75% (77/103) of nurses were not in favor of physician-assisted dying. This could be due to the understanding of Nepali law which states that euthanasia is not legalized in Nepal. Also, physician-assisted dying strongly contradicts a physician's duty of valuing human life from the time of conception.<sup>16,17</sup>

Besides the three major codes of medical ethics, there are also other codes/principles of conduct ascribed by the Nepal Medical Council or other health professional councils which could have been included to get the actual picture of knowledge of medical ethics among health professionals. For this, more workout on the instrumentation of the questionnaire was required.

## CONCLUSION

The study showed that there was inadequate as well as a non-uniform level of knowledge of three major codes of medical ethics and principles associated with, which resulted in significant disparity in the attitude and practice of medical ethics among doctors and nurses in Pokhara valley.

## RECOMMENDATIONS

Inadequate medical ethics-related knowledge, lack of trainings, conferences, and workshops required for updating of the knowledge are the reasons for a poor grasp of these topics. Shrestha et al. in her study had shown that participants who had received medical ethics education had higher knowledge, attitude, and practice scores.<sup>18</sup>

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Monsudi et al. and Imran et al. argued that different intensity of professional training creates the difference in opinions among health staffs.<sup>19,20</sup> The disparity seen in our study can be overcome by standardization and uniformity in medical ethics related teaching curriculum in the undergraduate levels.<sup>21-25</sup>