

PATIENTS' ATTITUDE TOWARDS MEDICAL STUDENTS AT A TEACHING HOSPITAL, BHARATUR, NEPAL

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ABSTRACT

Patients are essential for the acquisition and development of medical students' clinical skills thus, cooperation and positive attitude of patient towards medical students is very crucial. Therefore, this study was aimed to identify patients' attitude towards medical students at a Teaching Hospital, Bharatpur. A descriptive cross-sectional study was conducted among 119 patients admitted in the Tropical, Surgical, Gynecology/Obstetrics and Orthopedic wards of Chitwan Medical College Teaching Hospital, Bharatpur. Non-probability purposive sampling technique was adopted to select patient. Data was collected by using semi-structured interview schedule from 27/08/2017 to 09/09/2017 and then collected data was analyzed and interpreted by using descriptive and inferential statistics. Result of this study showed that majority of the respondents belongs to age group 19-39 years (54.6%) with mean age of the respondents 40.7 ± 17.79 and female (54.6%). The total mean score of attitude towards medical students of respondents is 3.38 ± 0.34 . More than half of respondents (52.1%) had positive attitude however negative attitude had found in the area of communication skills of medical students with mean score of 3.04 ± 0.21 . The significant variable for the respondents' attitude towards medical students was admitted wards ($p= 0.03$). It is concluded that even though more than half of the patients' attitude towards medical students is positive, the hospital needs to plan and implement various programs to maximize positive patient- medical student relationship emphasizing on the area of communication skills.

KEYWORDS: Patients' Attitude, Medical students, Patient-medical student relationship.

INTRODUCTION

Medical profession is considered as a noble profession. Health care is a social role relationship between helping agent and a person needing help. The stronger the relationship the better the patient's compliance to the treatment along with better disease outcomes and patient satisfaction. Therefore, the nature of relationship between medical student and patient has significant impact on the overall quality of health care.^[1]

Medical students are future health professionals and they must be competent on what they do. For this, the vital part of medical student's education is to develop skills through direct participation with the patients. Although there are many alternatives for it like standardized patient, simulation but they are unable to display clinical signs objectively thus hospitals and patients are the best conduit for medical students to gain clinical experiences.^[2]

With emerging numbers of medical colleges and out flowing number of medical students, the relationship

between patients and students have become more complex and challenging. The increasing involvement of students in the hospital has provoked patient dissatisfaction as it is perceived to reduce physician time with patients, compromises patients privacy and confidentiality.^[3] Traditionally patients have passive role and they simply act as teaching material only but now patients right and informed consent have gained greater importance and patient now have the right to choose whether to allow or refuse medical students involvement in their care.^[4]

With the increase emphasis of patient centered care, it is very crucial and logical to understand the attitudes of patients towards medical students and factors that influence it. Patient's views and needs should be at the center of care process because negative impact of patient satisfaction may raise challenges in creating a balance between maximizing patients care and the high quality education of future doctor.^[5]

In Kenya 44% refused in involvement of medical students in teaching practice among those who refused

medical students 25.81% said lack of quality of care, 19.35% were influenced by personality, 12.9% reported negative prior experience, 12.9% refused because of nature of medical condition, 25% reported student will take more time, 13% reported that culture and gender based norms affect them.^[6] In Syria 54.5% patients refused to be examined by medical students in absence of supervision. Privacy and Safety is the most important concerns for reticence towards examination by the students.^[7]

Nowadays in Nepal quality of medical students is being burning issue, which is directly related with patients care and satisfaction thus, identifying patients' viewpoint or attitude towards medical students is very crucial factor to determine it. Globally there are many studies to identify patients' attitude towards medical students but till date very few study has been conducted in Nepal. Therefore, objective of this study is to find out patients' attitude towards medical students at a teaching hospital.

METHODOLOGY

Descriptive, cross-sectional research design was used to identify the patients' attitude towards medical students. Research setting was Chitwan Medical College Teaching Hospital (CMCTH). The area included were tropical, surgical, gynecology/obstetrics and orthopedics wards. The populations of the study were those patients who were admitted at tropical, surgical, gynecology/obstetrics and orthopedics wards of CMCTH for their treatment.

Required sample for this study was calculated by using the formula,

$$n_0 = \frac{z_{\alpha/2}^2 pq}{d^2}$$

Where,

p = Prevalence of previous study i.e. 0.73^[8]

q = 1-p, hence q = 1 - 0.73 = 0.27

d = Permissible error set at $\pm 5\%$ or 0.05

z = Confidence level set at 95% which is 1.96

$$n_0 = \frac{z_{\alpha/2}^2 pq}{d^2}$$

$$n_0 = \{(1.96)^2 \times 0.73 \times 0.27\} / (0.05)^2$$

$$n_0 = 3.84 \times 0.73 \times 0.27 / 0.0025$$

$$n_0 = 302.7$$

$$n_0 = 303$$

According to medical record section, the total population from tropical, surgical, gynecology/obstetrics and orthopedics wards of Chitwan Medical College Teaching Hospital for 14 days (N) = 166. Calculating (n) desired sample size for finite population, where N = 166

$$n = \frac{n_0}{1 + \frac{n_0 - 1}{N}}$$

$$n = \frac{303}{1 + \frac{303 - 1}{166}}$$

$$n = 303 / 2.81$$

$$n = 107.8$$

$$n = 108$$

To reduce non-response error, 10% sample is added.

$$n = 108 + 10\% \text{ of } 108$$

$$n = 108 + 10.80$$

$$n = 118.8$$

$$n = 119$$

Therefore, the desired sample size was 119.

Non-probability, purposive sampling technique was used. The patient who were above 18 years, admitted for at least three days at Chitwan Medical College Teaching Hospital (CMCTH) and were willing to participate in the study were included. Semi structured interview schedule was used for data collection which was developed by researcher herself on the basis of extensive literature review. It consists of three parts.

Part I: Questions related to the socio demographic information of respondents

Part II: Questions related to the hospitalization of respondents

Part III: Likert Scale on respondents' attitude towards medical students. It consists five point likert scale as Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree.

The content validity of research instrument was maintained by consulting research advisor and subject experts. Cronbach's alpha coefficient is used to determine internal consistency between items of the instrument. The instrument was translated into Nepali version by avoiding jargon and technical words for simplicity and comprehensiveness. The ethical approval for the study was obtained from Institutional Review Committee (IRC) of Chitwan Medical College, Bharatpur, Chitwan. Administrative permission was taken from Chitwan Medical College Teaching Hospital. Informed consent was obtained from each respondent by clarifying the purpose of the study prior to the data collection. Data was collected from 27/08/2017 to 09/09/2017 by using face-to-face interview schedule and average time to take interview was 20 to 25 minutes. Confidentiality was maintained by not sharing information to others and using information only for the study purpose. The collected data was checked, reviewed, organized for accuracy and completeness and organized data was entered into IBM statistical package for social science (SPSS) version 20.0. Data was analyzed and interpreted by using descriptive statistics (frequencies, percentage, mean, median and standard

deviation) and inferential statistics (Chi square test was done considering p value < 0.05 as significance).

Findings of The Study

Table 1: Respondents 'Age, Gender, Place of Residence, Ethnicity, Religion and Marital Status n = 119.

Variables	Frequency	Percentage
Age group in years		
19 – 39	65	54.6
40 – 64	36	30.3
≥ 65	18	15.1
Mean age ±SD = 40.70 ±17.79		
Gender		
Male	54	45.4
Female	65	54.6
Place of residence		
Rural	25	21
Urban	94	79
Religion		
Hinduism	98	82.4
Buddhism	16	13.4
Christianity	5	4.2
Marital status		
Unmarried	12	10.01
Married	107	89.9

Table 1 reveals that out of 119 respondents, 54.6% of the respondents belong to age group 19-39 years with mean age 40.7 ± 17.79 , 54.6% of the respondents were female,

70% of the respondents were from urban area. Concerning the religion, 82.4% of the respondents follow Hinduism and 89.9% of the respondents were married.

Table 2: Respondents 'Educational Status, Educational Level, Occupation and Income Status n = 119.

Variables	Frequency	Percentage
Educational status		
Illiterate	26	21.8
Literate	93	78.2
Educational level*(n = 93)		
General literate	31	33.3
Basic literate	15	16.1
Secondary level	42	45.2
Bachelor and above	5	5.4
Occupation		
Service	12	10.0
Self-employed	18	15.3
Agriculture	23	19.4
Homemaker	54	45.3
Others	12	10.0
Income status		
Sufficient	93	78.2
Insufficient	26	21.8

*General Literate (Can read and write only), Basic Level (1-8 class), Secondary Level (9-12 class)

homemaker. Similarly, regarding the income status, 83.2% of the respondents lied in sufficient income status.

Table 2 indicates that concerning educational status, out of 119 respondents, 78.2% of the respondents were literate. Among 93 literate respondents, 45.2% had completed secondary level education and only 5.4% of the respondents had higher secondary level and above. Regarding occupation, 45.3% of the respondents were

Table 3: Respondents' Hospitalization related Characteristics n =119.

Variables	Frequency	Percentage
Admitted wards		
Tropical	31	26.1
Surgical	33	27.7
Gynecology and Obstetrics	27	22.7
Orthopedics	28	23.5
Duration of hospitalization		
≤5 days	57	47.9
>5 days	62	52.1
Median = 5days		
History of hospitalization		
First time	62	52.1
Second time and more	57	47.9
Prior experience with medical students		
Yes	42	35.3
No	77	64.7

Table 3 depicts that out of 119 respondents, 27.7% of the respondents are from surgical ward, 22.7 % of respondents are from gynecology, and obstetrics ward respectively. Regarding duration of hospital stay, 52.1% of the respondents had stayed more than 5 days. The duration of hospital stay ranged from 3-30 days with

(median duration=5days). Concerning the history of hospitalization, 52.1% had admitted for the first time. Likewise, regarding prior experience with medical students, 64.7% had no any prior experience with medical students.

Table 4: Respondents' Attitude towards Communication Skills of Medical Students n =119.

Statements	SD No.(%)	D No.(%)	N No.(%)	A No.(%)	SA No.(%)	Mean±SD
Medical students greet you with respect	21 (17.6)	69 (58.0)	9 (7.6)	19 (16.0)	1 (0.8)	2.24±0.95
Medical students introduce themselves before starting their work	25 (21)	74 (62.2)	5 (4.2)	14 (11.8)	1 (0.8)	2.09±0.89
Medical students are polite and soft spoken	–	1 (0.8)	16 (13.4)	89 (74.8)	13 (10.9)	3.96±0.52
Medical students shows concerns in understanding patients health needs/ problems	2 (17)	16 (13.4)	4 (3.4)	88 (73.9)	9 (7.6)	3.72±0.85
Medical students clearly explain about your condition and treatment, which help you to understand better	2 (1.7)	40 (33.6)	13 (10.9)	59 (49.6)	5 (4.2)	3.21±1.01

SD= Strongly Disagree, D= Disagree, N= Neutral, A= Agree, SA=Strongly Agree

Table 4 illustrates the respondents' attitude towards communication skills of medical students. Respondents' attitude score was higher in the item related to medical students are polite and soft-spoken (3.96 ±0.52) whereas lower in medical students introduces themselves (2.09

±0.89). It indicates that respondents are highly positive with medical students are polite and soft spoken and least positive with medical students not introducing themselves.

Table 5: Respondents' Attitude towards Professional Behaviors of Medical Students n =119.

Statements	SD No. (%)	D No. (%)	N No. (%)	A No. (%)	SA No.(%)	Mean ± SD
Medical students are helpful	1 (0.8)	19 (16)	23 (19.3)	74 (62.2)	2 (1.7)	3.48 ± 0.81
Medical students are careless	13 (10.9)	81 (68.1)	11 (9.2)	11 (9.2)	2 (1.7)	3.76± 0.86
Medical students discriminate among patients	16 (13.4)	84 (70.6)	6 (5.0)	11 (9.2)	2 (1.7)	3.85±0.53
Medical students are always in hurry	1	44	7	50	17	2.68± 1.14

	(14.3)	(42)	(5.9)	(37)	(0.8)	
Medical students have tidy grooming	1 (0.8)	3 (25)	12 (10.1)	100 (84)	3 (2.5)	3.85±0.53

SD= Strongly Disagree, D= Disagree, N= Neutral, A= Agree, SA=Strongly Agree

Table 5 illustrates the respondents' attitude towards professional skills of medical students. Respondents' attitude score was higher in the item related to medical students not discriminating patients (3.85±0.53) and medical students have tidy grooming (3.85±0.53)

whereas lower in medical students are always in hurry (2.68±1.14). It indicates that respondents are highly positive with medical students not discriminating patients and have tidy grooming and least positive with medical students are always in hurry.

Table 6: Respondents' Attitude towards Performance Skills of Medical Students n = 119.

Statements	SD No.(%)	D No.(%)	N No.(%)	A No.(%)	SA No.(%)	Mean±SD
Medical students always ask for permission before any procedure	–	27 (22.7)	9 (7.6)	81 (68.1)	2 (1.7)	3.49 ±0.86
Prior to any procedure, medical students properly explain about what they are going to do	2 (1.7)	28 (23.5)	6 (5)	83 (69.7)	–	3.43 ±0.90
Medical students maintain your privacy while examining you	3 (2.5)	29 (24.4)	8 (6.7)	78 (65.5)	1 (0.8)	3.38 ±0.94
Medical students perform their work confidently	1 (6.8)	2 (1.7)	4 (3.4)	111 (93.3)	1 (0.8)	3.92 ±0.43
You like medical students asking your every details	–	2 (1.7)	9 (7.6)	94 (79)	14 (11.8)	4.01± 0.51
You prefer to allow medical students to observe during procedures on you	1 (0.8)	30 (25.2)	22 (18.5)	66 (55.5)	–	3.75 ±0.65
You prefer to allow medical students to perform procedures on you	1 (0.8)	30 (25.2)	22 (18.5)	66 (55.5)	–	3.29 ±0.87
You want to be examined by medical students even in the absence of clinical supervisor	22 (18.5)	62 (52.1)	10 (8.4)	25 (21)	–	2.32±1.00
You don't like medical students examining you taking long time	1 (0.8)	75 (63)	10 (8.4)	32 (26.9)	1 (0.8)	3.36 ±0.91
You prefer to be examined by medical student of same gender	6 (5)	78 (65.5)	6 (5)	29 (24.4)	–	3.51 ±0.91
You feel uncomfortable when medical students are taught at your bedside	4 (3.4)	71 (59.7)	5 (4.2)	38 (31.9)	1 (0.8)	3.33 ±0.95
Involvement of medical students in your treatment process decreases the quality of service	1 (0.8)	64 (53.8)	21 (17.6)	31 (26.1)	2 (1.7)	3.26 ±0.91
Your participation with medical students is important learning process for future doctor	–	1 (0.8)	11 (9.2)	92 (77.3)	15 (12.6)	4.02 ±0.50

SD= Strongly Disagree, D= Disagree, N= Neutral, A= Agree, SA=Strongly Agree

Table 6 illustrates the respondents' attitude towards performance skills of medical students. Respondents' attitude score was higher in the item related to medical students asking every details (4.01±0.51) and importance of training of medical students(4.02±0.50) whereas lower in the examination by medical students in the absence of

clinical supervisor (2.32±1.00). It indicates that respondents are highly positive with medical students asking every details and importance of training of medical students whereas least positive with examination by medical students in the absence of clinical supervisor.

Table 7: Mean Scores of Attitude of Respondents towards Medical Students n = 119.

Subscale of Attitude	Mean± SD	Mean Percentage
Communication Skills	3.04 ± 0.59	60.8
Professional Behavior	3.52 ± 0.26	70.4
Performance Skills	3.47 ± 0.20	69.3
Total Attitude	3.38± 0.34	67.7

Table 7 depicts the mean score of attitude of respondents' towards medical students. The total mean

score of attitude was 3.38 ± 0.34 with mean percent 67.7%.Regarding different subscale of attitude,

respondents have obtained higher mean score than the total mean score in the area of professional behavior of medical students (3.52 ± 0.26) with mean percentage 70.4% and performance skills of medical students ($3.47 \pm$

0.20) with mean percentage 69.3 % whereas respondents have obtained lower than mean score in the area of communication skills of medical students (3.04 ± 0.59) with mean percentage 60.8 %.

Table 8: Respondents' Level of Attitude towards Medical Students.

Level of Attitude	Frequency	Percentage
Positive Attitude (\geq mean score 3.38)	62	52.1
Negative Attitude ($<$ mean score 3.38)	57	47.9

Mean = 3.38; SD \pm 0.34

Table 8 reveals that among 119 respondents, 52.1% of respondents' had positive attitude and 47.9 % respondents' had negative attitude towards medical students.

Table 9: Association between Respondents' Attitude towards Medical Students and Hospitalization related Variables n = 119.

Variables	Level of Attitude		χ^2 value	p value
	Positive No. (%)	Negative No. (%)		
Admitted ward				
Tropical	16(51.6)	15(48.4)	8.55	0.03*
Surgical	22(66.7)	11(33.3)		
Gynecology/ Obstetrics	8(29.6)	19(70.4)		
Orthopedics	16(57.1)	12(42.9)		
Total days of hospitalization				
\leq 5 days	29(46.8)	33(53.2)	1.47	0.22
$>$ 5 days	33(57.9)	24(42.1)		
History of hospitalization				
First time	32(51.6)	30(48.4)	0.01	0.91
Second time and more	30(52.6)	27(47.4)		
Prior experience with medical students				
Yes	21(50.0)	21(50.0)	0.11	0.73
No	41(53.2)	36(46.8)		

*Significance level $<$ 0.05

Table 9 shows association between respondents' attitude towards medical students and hospitalization related variable. It reveals admitted ward is statistically significant and none of the other variables are significant. There is no statistically significant association between respondents' attitude towards medical students and socio-demographic variables (not shown in table).

DISCUSSION

This chapter deals with the discussion of findings, conclusion, implications, limitations and recommendations concerning with the research objectives. The discussion and conclusion are drawn from each of the findings.

Attitude of Patients towards Medical Students

Findings of this study showed the mean score of attitude towards medical students of respondents is 3.38 ± 0.34 . This study finding is supported by the findings of study of Malaysia among 213 patients which revealed that, the mean score of patients' attitude towards medical students

is 3.65. Regarding different subscale of attitude, respondents have obtained higher mean score than the total mean score in the area of professional behavior of medical students (3.52 ± 0.26) and performance skills of medical students (3.47 ± 0.20) and obtained lower mean score in the area of communication skills of medical students (3.04 ± 0.59).^[9]

In this study 52.1% of respondents have positive attitude towards medical students. The finding is similar to the finding of the study conducted in western Saudi Arabia among 417 adult patients which concluded that 51% have positive attitude towards medical students. The similar type of attitude can be due to that the more than half of respondents in both studies belong to similar age group i.e. more than 18 years and patients were from similar departments like medicine, surgery, gynecology. The reasons for having positive attitude may be that more patients are influenced by the medical students tidy grooming, politeness and indiscriminating behavior. They like medical students asking every detail and

performing their work confidentially. Likewise, they want to support the learning process of future doctor.^[10]

In the present study there is no any significant association between respondents' attitude and socio-demographic variables (Age, gender, place of residence, religion, marital status, educational status and level, occupation, income status). The findings were supported by the findings of study conducted in Malaysia which showed that there were no significant association between patients age, race, marital status, occupation, education level.^[9]

The study findings revealed statistically significant association between admitted wards and respondents' level of attitude ($p = 0.03$). This study finding is in contrast to the finding of the study conducted at Nigerian university where department attended is not found significant ($p = 0.70$) to patients attitude.^[11] The differences in these findings might be due to the differences in study settings, differences in respondent's socio demographic characteristics and differences in the way of involvement of medical students. Respondents' from Gynecology/Obstetrics ward showed the highest negative attitude in compared with other wards which is similar to the findings of the study conducted in teaching hospitals of Kuwait which showed that patients from Obstetrics/Gynecology had highest refusal of medical students.^[12] The reasons for this negative attitude may be due to discomfort of female to being exposed in front of medical students for the desire for privacy during examination of genitalia and for the desire of minimal involvement of medical students during their severe pain.

Along with this, the study findings reported that there is no significant association between respondents' attitude and hospitalization related characteristics of respondents like duration of hospital stay, history of hospitalization and prior experience with medical students. The findings are similar to the findings of the study conducted in teaching hospital, Kathmandu which reveals that number of admission ($p = 0.31$) and duration of hospital ($p = 0.85$) did not show significant association with patients' attitude.^[13]

CONCLUSION

The findings of the study revealed that more than half of the respondents had positive attitude towards medical students. However, negative attitude has been found in the area of communication skills of medical students. Admitted ward of the respondent is statistically significant with respondents' attitude towards medical students. Thus, the study concluded that there is lack of positive attitude of patients towards medical students especially in the area of communication, which needs to be addressed by the hospital management by arranging session related to communication skills. Likewise, increasing supervision and guidance to medical students from seniors and providing more time and comprehensive information to patient is needed to

maximize patients' positive attitude towards medical students.

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