Original Article

Medical Students' Attitudes Toward Communication Skills Learning in Chitwan Medical College, Nepal

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Abstract

Introduction: Medical students' attitude towards communication skills is crucial for curriculum planners, teachers and health professionals. Chitwan Medical College (CMC) is a private medical school admitting students mainly from the Nepal.

Objective: To assess the attitudes of medical students towards learning communication skills.

Methods: A cross-sectional study was conducted among third and fifth year medical (MBBS) undergraduates at Chitwan Medical College (CMC), Nepal in April 2018 using the 26-item Communication Skills Attitude Scale (CSAS) developed by Rees, Sheard, and Davies. Participants' age, sex, year of study, nationality, religion, relationship status, the occupation of father and mother, place of residence of a family, were noted. The CSAS scores were computed. Student's t-test and ANOVA test were used to compare the scores among subgroups of participants.

Results: The mean positive attitudes scale (PAS), negative attitudes scale (NAS) and overall CSAS scores were 51.77 ± 5.21, 35.68 ± 4.43, and 83.97 ± 5.77 respectively. PAS score was statistically significantly higher among the respondents whose mothers were not in the health-related profession. Whereas NAS score was statistically significantly lower among females, self-rated outstanding students, and good self-reported written communication skills.

Conclusion: Medical undergraduates had strong positive attitudes towards learning communication skills, but negative attitudes were also noted. Hence, faculty members need to change these attitudes through improving teaching and assessment strategies.

Keywords: Attitudes, Communication Skills, Medical Students, Nepal, Undergraduates.

Introduction

Communication is one of the essential skills of competency for medical students, residents, and practicing physicians.[1,2] Good communication enables medical students to collect comprehensive, inclusive, relevant, significant and accurate information about a patient's problems. It helps to make an accurate diagnosis of a patient's problems. Communication skills are also crucial for community-based learning. Several studies had shown that effective communication improves health outcomes, patient satisfaction and treatment compliance, and also improves job efficiency and satisfaction of medical professionals.[3–7] Unfortunately, a study found that patients rated their own physician's communication skills to be unsatisfactory.[8] Medical Educationists are very much concerned and interested in medical students' attitudes toward the communication skills.[9,10] Attitudes have three main components-affective (the way an individual feels), cognitive (the way an individual thinks) and behavioural (the way an individual acts) towards a particular entity (object, person, etc.).[11] Cognitive and

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affective attitudes drive behavioral attitude. It is evident that changing behaviour by training new ways of acting in professional situations and resolving dilemma may influence the more fundamental aspects of attitudes without targeting them directly.[12] Doctor-patient communication is a learnable skill.[13] Studies had shown that training programs designed to learn communication skills have proven to be effective.[14] Attitude to learn do influence learning. Hence, studying the attitudes of the medical students becomes essential before implementing the communication skill training program, because negative attitudes may hinder the success of a training program and ways are needed to be sought to enhance the effectiveness of such programs. There is limited research assessing medical students' attitudes towards communication skills learning in Nepal. Hence, this study was conducted with the objective to assess the attitudes of medical students toward learning communication skills at a private medical college.

Methodology

Participants

A cross-sectional study was conducted among the third and fifth year MBBS students at Chitwan Medical College (CMC), Nepal in April 2018. Out of 210, only 175 students of third and fifth year were present on data collection day and they were invited to participate in the study. A total of 175 students duly filled out the questionnaires; hence, the response rate was 83.33%.

Study area

Chitwan Medical College is a private medical institute, affiliated to Tribhuvan University offering a five and half year undergraduate MBBS program (2 years Basic Science, 2½ years Clinical Sciences, and 1year internship).

Assessment instrument and scoring

The Communication Skills Attitude Scale (CSAS) developed by Rees, Sheard, and Davies published in 2002 was used to assess the medical students' attitudes towards learning communication skills training.[15] The CSAS is a 26 item scale and consists of two subscale positive attitudes (PAS) and negative attitudes (NAS) each with 13-items. All 26 items have response options along a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The PAS score was computed by summing the scores of items 4, 5, 7, 9, 10, 12, 14, 16, 18, 21, 23, 25 and the reversed score of item 22. The NAS score was computed by summing the scores of items 2, 3, 6, 8, 11, 13, 15, 17, 19, 20, 24, 26 and the reversed score of item 1. Both scales range from 13 to 65 with higher scores indicating stronger positive or negative attitudes.

Data collection and analysis

Data were collected using self-administered and structured questionnaire. Data analysis was done using SPSS V.21. Descriptive statistics were used to identify the demographic and education-related characteristics of the participants. The association of the PAS and NAS scores with the demographic and educational-related characteristics was determined. One sample Kolmogorov- Smirnov test was used to test the normality of the distribution. Both the PAS and NAS scores were normally distributed. Student's t-test and ANOVA test were used to compare the scores among subgroups of participants. The p-value of less than 0.10 was considered statistically significant.

Ethical consideration

Ethical approval was provided by Institutional Review Committee (IRC) of Chitwan Medical College. Informed written consent was obtained from the participants. Confidentiality of the information provided by participants was maintained.

Results

One-hundred and seventy-five medical students participated in the study. Table 1 presents the demographic and education-related characteristics of the participants. Majority of participants were male, between 20 to 24 years of age, hailed from cities, mother's occupation was homemaker, father's occupation was other than health (teacher, engineer, etc.), desired to be specialist of medical and allied, and had self-perceived good or average verbal and written communication skills.

The reliability coefficient for each subscale of CSAS was computed using Cronbach's alpha. The coefficient for PAS was 0.770 while that for NAS was 0.516.

The mean PAS, NAS and overall CSAS scores were 51.77 ± 5.21, 35.68 ± 4.43, and 83.97 ± 5.77 respectively. Table 2 shows the mean PAS and NAS scores among different subgroups of respondents. The PAS score was higher among respondents in the age group less than 20 years, female students, hailed from cities, respondents whose fathers were in professions other than health-related, respondents who were sponsored by government, in the fifth year of study, self-rated outstanding student, and in respondents with excellent self-reported verbal and written communication skills. However, NAS score was lower among respondents who were below 20 years, hailed from cities, respondents whose fathers were in health-related profession, mothers were in professions other than health-related, respondents who were sponsored by private, in the fifth year of study, and in respondents with good self-reported verbal communication skills. The PAS score was significantly higher among the respondents whose mothers were not in health-related professions. Whereas, the NAS score was statistically significantly lower among females, self-rated outstanding students, and good self-reported written communication skills.

Table 1: Demographic and education-related characteristics of the participants

Characteristic	Number (percentage)
Age	
Below 20 years	13 (7.4)
20-24 years	160 (91.4)
25 years and above	2 (1.1)
Mean age	
Sex	
Male	102 (58.3)
Female	73 (41.7)
Religions	
Hinduism	166 (94.9)
Buddhism	6 (3.4)
Islam	3 (1.7)

Place of family residence	
City	94 (53.7)
Small Town	56 (32.0)
Village	25 (14.3)
Father's Occupation	
Health Related	15 (8.6)
Others	160 (91.4)
Mother's Occupation	
Health Related	10 (5.7)
Homemaker	124 (70.9)
Others	41 (23.4)
Type of Student	
Govt. Sponsored	24 (17.3)
Private Sponsored	151 (82.7)
Year of study	
3rd year	85 (48.6)
5th year	90 (51.4)
Self-rating as a student	
Outstanding	4 (2.3)
Good	58 (33.1)
Average	109 (62.3
Poor	4 (2.3)
Self-reported verbal communication skills	
Excellent	4 (2.3)
Good	68 (38.9)
Average	98 (56.0)
Poor	5 (2.9)
Self-reported written communication skills	
Excellent	4 (2.3)
Good	86 (49.1)
Average	81 (46.3)
Poor	4 (2.3)
Preferred subject for Post-graduation	
Medical specialties	75 (42.9)
Surgical specialties	60 (34.3)
Basic Sciences	6 (3.4)
Not decided	34 (19.4)
Communication skills course in clinical years	
Yes	154 (88.0)
No	21 (12.0)

Table 2: Mean positive attitude score (PAS) and negative attitude score (NAS) among subgroups of Participants

	Positive attitude score		Negative attitude score	
Characteristic	**Mean Scores**	**P-value**	**Mean Scores**	**P-value**
Age				
Below 20 years	51.85	0.942	35.54	0.840
20-24 years	51.78		35.67	
25 years and above	50.50		37.50	
Sex				
Male	51.64	0.686	36.25	0.041*
Female	51.95		34.88	
Religions				
Hinduism	51.75	0.918	35.67	0.984
Buddhism	51.67		36.00	
Islam	53.00		35.67	
Place of family residence				
City	51.90	0.898	35.57	0.933
Small Town	51.50		35.75	
Village	51.84		35.92	
Father's Occupation				
Health Related	49.80	0.572	34.33	0.867
Others	51.95		35.81	
Mother's Occupation				
Health Related	51.00	0.098**	35.30	0.533
Homemaker	51.32		35.92	
Others	53.29		35.05	
Type of Student				
Govt. Sponsored	52.54	0.433	36.92	0.141
Private Sponsored	51.64		35.48	
Year of study				
Third year	51.71	0.883	35.79	0.754
Fifth year	51.82		35.58	
Self-rating as a student				
Outstanding	56.25	0.110	34.50	0.012*
Good	51.88		34.52	
Average	51.71		36.16	
Poor	47.25		40.75	
Self-reported verbal communication skills				
Excellent	54.75	0.138	37.75	0.123
Good	52.69		34.74	
Average	51.06		36.17	
Poor	50.60		37.20	
Self-reported written communication skills				
Excellent	54.75	0.114	36.25	0.024*
Good	51.95		35.03	
Average	51.69		36.05	
Poor	46.25		41.50	
Preferred subject for Post-graduation				
Medical specialties	52.04	0.473	36.01	0.282
Surgical specialties	51.57		35.18	
Basic Sciences	48.67		38.50	
Not decided	52.06		35.32	
Communication skills course in clinical years				
Yes	52.01	0.098	35.53	0.184
No	50.00		36.76	

* <0.05 ** <0.10

Discussion

In this study majority of the students were male, between 20 to 24 years of age, hailed from cities, mother's occupation was the homemaker, father's occupation was other than health (teacher, engineer, etc.), and desired to be specialist of medical and allied. The NAS and PAS scores were significantly different according to a certain demographic characteristic of the respondents.

In this study, the mean CSAS score was 83.97, which is lower than that found in a study conducted in Iran (2014).[16] Likewise, the mean PAS score was 51.77, which is higher than that reported in a study conducted at a medical school in Caribbean island (2013), and dental college in India (2016) but comparable with studies conducted at medical college in Nepal (2006), India (2014), and Iran (2016).[4,16–19] Similarly, the mean NAS score was 35.68 in this study, which higher than that seen in research carried out at medical college in Nepal (2006), Caribbean island (2013), India (2014), and dental college in India (2016), but comparable with Iran (2014).[4,16–19]

In the current study, there was no significant difference of PAS and NAS scores between age groups, and this finding is consistent with results of studies from Nepal (2006), Caribbean island (2013), and Iran (2014).[4,16,17] Similarly, PAS score was not statistically significantly different between males and females. This finding corresponds with the result of research conducted in Nepal (2006), Sri-Lanka (2012), Caribbean island (2013), India (2014), and Iran (2014)[4,16,17,19,20] Whereas, the NAS score was significantly higher among males, which is not comparable with findings of studies conducted in Nepal (2006), Caribbean island (2013), India (2014), and Iran (2014).[4,16,17,19]

Studies conducted in Nepal (2006) and Caribbean island (2013) found that there is no influence of place of family residence on PAS and NAS scores, a similar finding was seen in this study.[4,17] In this study, PAS score was statistically significantly higher among the respondents whose mothers were not in the health-related profession. Whereas a study conducted in Caribbean island (2013) found that PAS was statistically significantly higher among the respondents whose fathers were not in the health-related profession, but no such effect in NAS was seen in this study as well as in Caribbean island (2013) study.[17] Moreover, study conducted in Nepal (2006) found no effect of parents occupation on PAS and NAS scores.[4] There was no statistically significant difference in PAS and NAS among government sponsor and self-financed students, a similar finding was reported by an earlier study from Nepal.[4]

In the current study, students in the fifth year had higher PAS scores and lower NAS scores compared to third-year students. A similar trend was also seen in a study conducted in a medical college in Caribbean island (2013) study where students in third and fourth semesters had high PAS scores and lower NAS scores compared to first and second semesters students.[17] But contrasting trend was observed in Sri-Lankan (2012) and Iranian (2014) studies.[16,20] A study carried out in the UK (2003) showed, PAS score decreased after conduction of communication skill course for first-year students while NAS scores did not show the statistically significant

difference.[21]

In the present study, no significant effect of self-reported verbal communication skills on PAS and NAS scores. Moreover, no significant impact of self-reported written communication skills on PAS score, however, NAS was significantly lower among the good self-reported written communication skills. Likewise, no significant effect of self-rated as a student on PAS but NAS was statistically significantly lower among the self-rated outstanding student. Studies from Nepal (2006) and Caribbean island (2013) found no significant effect of self-reported communication skills on PAS and NAS, further studies from Nepal (2006) and India (2016) did not observe an effect of self-rated as a student on PAS and NAS scores.[4,17,18]

Limitation of study

This study was conducted in one medical college in Nepal, so it may not be generalized for all medical colleges of Nepal. Furthermore, the causal inference cannot be made due to the cross-sectional design.

Conclusion

This study concluded that medical undergraduates have strong positive attitudes towards learning communication skills. Hence, communication skills training programs should be designed and implemented so that undergraduate learn and pay more attention to communication skills that will ultimately help in professional practice.

List of Abbreviations

CMC Chitwan Medical College
CSAS Communication Skills Attitude Scale
NAS Negative Attitudes Scale
PAS Positive Attitudes Scale

Consent for publication: Not Applicable.

Availability of data and materials: The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

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Authors' contributions: SP was involved in conceptualizing the study, reviewing the literature, designing protocol, developing questionnaire, data collection, analysis and interpretation of data, preparing the manuscript. RMP helped in conceptualizing the study, designing protocol, data collection, statistical analyses, interpretation of data and preparing the manuscript. GPD helped in data collection and manuscript writing. All authors read and approved the final manuscript.

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