Student attitude towards communication skills learning in a Caribbean medical school

Shankar PR, Dubey AK, Balasubramanium R, Dwivedi NR

Xavier University School of medicine, Aruba

RESEARCH

Corresponding Author:
Dr. P. Ravi Shankar
Xavier University School of Medicine
Aruba, Dutch Caribbean
Email: ravi.dr.shankar@gmail.com

Abstract

Background
Medical student attitudes towards communication skills are important for curriculum planners and teachers. Xavier University School of Medicine (XUSOM) is a private medical school admitting students mainly from the United States and Canada.

Aims
Attitude of students towards communication skills has not been previously studied in the institution. Hence the present study was carried out.

Method
The study was carried out among the first, second, third and fourth semester undergraduate medical (MD) students at XUSOM, Aruba during July 2013 using the communication skills attitude scale (CSAS). Respondents' age, gender, nationality, occupation of parents, place of residence of family, semester of study were noted. The positive and negative attitude scale scores were calculated and compared among different subgroups of respondents (p<0.05).

Results
Fifty-one of the seventy-three students (69.9 per cent) participated. The majority were between 20 to 25 years of age, of American nationality, from metro cities and had excellent or good self-perceived verbal and written communication skills. The mean positive attitude scale (PAS) score was 47.65 (maximum being 65) and the mean negative attitude scale (NAS) score was 31.06 (maximum being 65). PAS score was significantly higher among respondents whose fathers were not in health related professions. NAS scores were significantly lower among the third and fourth semester respondents.

Conclusion
Students overall had a positive attitude towards communication skills but negative attitudes were also noted Based on results of the study and a review of literature we are planning to start communication skills learning in the institution right from the first semester and students will be provided opportunities for supervised practice during early clinical exposure, hospital observership and with standardised patients. The medical humanities module will be expanded and communication skills learning will continue during the clinical years with higher order skills being taught.

Key Words
Attitudes, communication skills, education, medical school, medical students

What this study adds:

1. Medical student attitude towards communication skills has been studied in various settings using the communication skills attitude scale.

2. The present study offers information about medical student attitude towards communication skills in an offshore medical school in the Caribbean.

3. Many schools both in the Caribbean and in other regions teach the basic sciences during the first two years of the course with early clinical exposure and student attitude towards communication skills learning can have implications in designing courses to develop the skill among students. Our findings will be of interest to educators and curriculum planners in medical schools in different regions.

Background

Curriculum planners, medical teachers and policy makers have been interested in medical student attitudes towards doctor-patient communication.[1,2] The communication skills attitude scale (CSAS) was published in 2002 and measures medical students' attitude towards learning communication skills during medical school.[3]

CSAS has previously been used to study medical students' attitude towards communication skills learning in the United Kingdom (UK)[4-6] and in Nepal.[7] These studies found that female students, students in the earlier years of study and those who had not attended communication skills learning sessions had a more favourable attitude.

Attitudes has three main components, affective (the way we feel), cognitive (the way we think) and behavioural (the way we act) towards a particular entity.[8] There is an increasing need for instruments to monitor changes in specific components of attitudes among students in medical school. This is important because differences in attitudes may be due to differences in teaching methods and or school curricula.[9] In Norway the use of experiential learning methods, and integrating communication skills with visits to health centres helped in improving attitudes towards communication skills.[10] This underscores the fact that educational strategies and the curriculum could have a significant impact on attitudes towards communication skills.

Xavier University School of Medicine (XUSOM) is a private medical school in Aruba, Dutch Caribbean offering a four year undergraduate medical (MD) program. The first five semesters of the course are conducted at Aruba and students then complete their clinical years of training in different hospitals in the United States (US). At XUSOM, like in many Caribbean schools each semester is of fifteen weeks duration and at present XUSOM admits students three times a year in January, May and September. Recently a number of modifications have been carried out to make learning more student centred and self-directed.[11] Attitudes, professionalism and communication skills are being emphasised. Communication skills are being learned during early clinical exposure, case presentations, problem-based learning sessions, and other small group activities. Students admitted on or after the spring 2013 semester follow the integrated curriculum. From the summer semester early clinical exposure has been introduced for the first and second semester students. A medical humanities session is being conducted for all first semester students. The third semester students are posted in the hospital for a minimum of sixteen hours during the third semester. The fourth semester students practice history taking and physical examination with standardised patients. All students from the first to the fourth semester were invited to participate in the study and written informed consent was obtained from all participants.

Effective communication with patients has been stressed by different accreditation agencies as an important outcome of undergraduate medical education.[12,13] Good communication skills has a vital role in improving the doctor-patient relationship and leads to improved patient compliance, satisfaction with care and benefits to physical and mental health of patients.[14] Better communication skills of healthcare providers has been linked with more effective healthcare delivery, patient and provider satisfaction and fewer number of lawsuits.[15] Communication skills involves aspects of the social sciences and teaching-learning of the same may often encounter medical student resistance.[16] Hence studying medical students' attitude towards communication skills learning is important to design educational programs and experiences to improve student communication skills. CSAS is a consistent and stable measure of medical students' attitudes towards communication skills learning and has been used in a variety of settings. Hence we used the same to study student attitudes towards communication skills learning which has implications for designing learning modules for the subject in XUSOM.

XUSOM is an offshore Caribbean medical school and follows an integrated organ system-based curriculum. Early clinical exposure (ECE) has been introduced from the previous summer 2013 semester. ECE has been shown to help medical students to develop appropriate attitudes towards their communication skills learning and future medical practice and give them an opportunity for improving communication skills.[17] During the third semester students are posted in a tertiary care hospital for a total of 16 hours. Medical students' pre-clinical primary health care centre visits may influence their attitudes towards primary health care work and the doctor-patient relationship according to a study conducted in Finland.[18] Many medical schools both in the Caribbean and in other areas teach the basic medical sciences during the first two years of the undergraduate medical course along with ECE and the findings of our study will be of interest to medical educators and curriculum planners in other schools.

The attitude of students at XUSOM towards communication skills has not previously been studied. Hence the present study was carried out with the following objectives: To study attitudes towards communication skills among undergraduate medical students during the first four semesters of the course using CSAS and Note the association of the positive and negative attitudes with personal characteristics of the respondents if any.

Method

The study was carried out among the first, second, third and fourth semester MD students at XUSOM, Aruba during July

2013. Recently the MD curriculum at XUSOM has been modified to make it integrated and student-centred as previously described.

Assessment instrument and scoring:
The communication skills attitude scale (CSAS) was used to collect information regarding student attitudes about communication skills training.[3] The scale is presented in the appendix. The positive attitude scale (PAS) score was obtained by adding the scores of items 4, 5, 7, 9, 10, 12, 14, 16, 18, 21, 23, 25 and the reversed score of item 22. The negative attitude scale (NAS) score was obtained by adding 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.

Demographic and educational details:
Demographic information is shown in the scale in the Appendix. Information about age of the students, gender, nationality, occupation of parents, place of residence of family, and semester of study were noted. Respondents were also requested to rate their verbal and written communication skills.

Data analysis:
Descriptive statistics were used to identify the personal characteristics of the total respondents. The association of the dependent variables (PAS and NAS scores) with the independent variables (demographic and educational characteristics) was determined. One sample Kolmogorov-Smirnov test was used to test the normality of the distribution. Both the PAS and NAS score were normally distributed. Parametric tests (Student's t-test and ANOVA) were used to compare the scores among subgroups of respondents ($p<0.05$).

Ethical considerations:
The study was approved by the Institutional Review Board of the institution vide notification (XUSOM/IRB/2013/05) dated 28th June 2013. The respondents were given a broad outline of the objectives of the study, anonymity was maintained, and the students were free to either participate or refuse to do so.

Results

Fifty-one of the 73 students (69.9 per cent) participated in the study. Table 1 shows the demographic characteristics of the respondents. Majority of respondents were between 20 to 25 years of age, of American nationality, hailed from metro cities and had self-perceived excellent or good verbal

and written communication skills. Many respondents however did not fill in all the required demographic details.

Table 1: Demographic characteristics of the respondents

Characteristic	Number (percentage)[*]
Age (in years)	
<20	5 (9.8)
20-25	33 (64.7)
25-30	4 (7.8)
>30	3 (5.9)
Gender	
Male	24 (47.1)
Female	23 (45.1)
Nationality	
American	23 (45.1)
Canadian	8 (15.7)
Others	5 (9.8)
Occupation of father	
Health related	11 (21.6)
Others	16 (31.4)
Occupation of mother	
Health related	7 (13.7)
Others	13 (25.5)
Homemaker	5 (9.8)
Place of family residence	
Metro city	26 (51)
Small town	6 (11.8)
Village	4 (7.8)
Others	2 (3.9)
Semester of study	
First	11 (21.6)
Second	14 (27.5)
Third	13 (25.5)
Fourth	10 919.6)
Self-reported verbal communication skills	
Excellent	15 (29.4)
Good	20 (39.2)
Average	10 (19.6)
Poor	2 (3.9)
Self-reported written communication skills	
Excellent	18 (35.3)
Good	23 (45.1)
Average	5 (9.8)
Poor	1 (2)

*The numbers may not add up to 51 and the percentages to 100 as certain respondents did not fill all the demographic information

Table 2: Mean positive attitude (PAS) score among subgroups of respondents

Characteristic	Mean score	P value
Age (in years)		
<20	49.80	0.885
20-25	46.88	
25-30	52.00	
>30	47.67	
Gender		
Male	46.42	0.245
Female	49.69	
Nationality		
American	47.87	0.550
Canadian	43.12	
Others	49.60	
Occupation of father		
Health related	**44.18**	**0.004**
Others	**53.31**	
Occupation of mother		
Health related	43.57	0.128
Others	52.23	
Homemaker	51.4	
Place of family residence	48.11	0.322
Metro city	41.83	
Small town	48.00	
Village	59.00	
Others		
Semester of study		
First	46.90	0.987
Second	46.71	
Third	48.38	
Fourth	48.60	
Self-reported verbal communication skills		
Excellent	47.20	0.959
Good	47.75	
Average	46.90	
Poor	53.00	
Self-reported written communication skills		
Excellent	46.94	0.468
Good	48.96	
Average	41.60	
Poor	59.00	

The mean PAS score was 47.65 (maximum possible score being 65) and the mean NAS score was 31.06 (maximum being 65). Table 2 shows the mean PAS score among different subgroups of respondents. The score was higher among respondents in the age group 25 to 30 years, students whose mothers were in professions other than health care, in the third and fourth semester of study and in

respondents with poor self-reported verbal and written communication skills. In these cases the difference was not significant. The score was significantly higher among respondents whose fathers were not in health related professions.

Table 3: Mean negative attitude (NAS) score among subgroups of respondents

Characteristic	Mean score	P value
Age (in years)		
<20	30.20	0.239
20-25	30.51	
25-30	30.25	
>30	28.00	
Gender		
Male	31.42	0.408
Female	29.69	
Nationality		
American	31.04	0.780
Canadian	29.12	
Others	30.40	
Occupation of father		
Health related	32.37	0.389
Others	29.94	
Occupation of mother		
Health related	32.28	0.933
Others	30.15	
Homemaker	30.60	
Place of family residence	30.50	0.272
Metro city	31.00	
Small town	26.25	
Village	27.50	
Others		
Semester of study		
First	**34.09**	**0.008**
Second	**33.93**	
Third	**26.85**	
Fourth	**27.80**	
Self-reported verbal communication skills		
Excellent	28.73	0.460
Good	32.85	
Average	30.90	
Poor	27.50	
Self-reported written communication skills		
Excellent	29.50	0.572
Good	32.48	
Average	28.20	
Poor	33.00	

Table 3 shows the mean NAS score among different subgroups of respondents. The negative score was lower among respondents aged over 30 years, respondents whose families were staying in a village but the difference was not significant. The negative scores were significantly lower among the third and fourth semester respondents.

The reliability coefficient for each subscale of CSAS was calculated using Cronbach's alpha. The coefficient for PAS was 0.75 while that for NAS was 0.630.

Discussion

The majority of the respondents in the present study were between 20 to 25 years of age, of American nationality, hailed from metro cities and had self-reported excellent or good verbal and written communication skills. The mean PAS score was 47.65 (maximum possible score being 65) and the mean NAS score was 31.06 (maximum being 65). The scores were significantly different according to certain personal characteristics of respondents.

In a previous study conducted at a medical school in Nepal the median PAS score was 51 which is higher than that reported in our study.[7] The mean NAS score was 31.17 which is comparable to that reported in the present study. Students of Nepalese nationality had the highest PAS score followed by Sri Lankans and Indians. In the present study the PAS score was higher among respondents whose fathers were not in health related professions. The NAS score was higher among the first and second semester students. The school in Nepal mainly admits students from Nepal, India and Sri Lanka and follows an integrated curriculum similar to XUSOM. There is no ECE and assessment is mainly through short answer questions. In XUSOM about 70 per cent to 80 per cent of students though of United States (US) or Canadian nationality are of South Asian origin. They have been exposed to both western North American culture while growing up and also to the South Asian culture of their parents. In a study conducted in a medical school in Sri Lanka there was no significant difference in PAS scores between male and female students and those who were exposed to formal communication skills training and those who were not.[19] The authors concluded that though the students had realised the importance of communication skills for the practice of medicine a significant minority had some reservations about attending sessions. The Sri Lankan school has recently shifted to an integrated curriculum and a stream on communication, learning and research is conducted from the first to the fourth year of the curriculum.

In our study female students had higher PAS score and lower NAS score. A similar finding had been shown previously in many studies.[20,21] Female physicians engaged in more active partnership, positive talk, psychosocial counselling, and emotionally focused talk and patient visits to them lasted on an average two minutes longer than those to male physicians.[20] Students with higher positive attitudes tend to be female, foreign students and thought their communication skills needed improving while those with higher negative attitudes tended to be male and to have parents that were doctors or nurses.[14] However a gender difference was not seen in studies carried out in Nepal[7] and Sri Lanka.[19]

In the present study students in the third and fourth semester had higher PAS scores and lower NAS scores. This is contrast to that reported in a Sri Lankan study were junior students had higher positive scores.[19] A similar trend to ours was seen in an Iranian study were basic science students had higher PAS scores and lower NAS scores compared to students in the clinical years of study.[22] In Iran the undergraduate medical course lasts for seven years and half of the course concentrates on teaching basic sciences and pathophysiology and the other half towards teaching clinical sciences. Courses on communication skills are not formally offered. In Iran Islamic culture may have a major influence. In XUSOM there are Muslim students but most have been born and raised in North America. In a nationwide survey carried out in Norway, cognitive attitudes towards communication skills did not vary significantly according to the year of study in any of the medical schools but the affective attitudes did show variation.[23] In Norway the majority of students are Norwegian but there are a few foreign students. In Norway medical education is free and students are admitted after high school. They have to study maths, physics and chemistry and demonstrate an adequate knowledge of both English and Norwegian as the majority of medical teaching is in Norwegian. Female students had more positive scores. In a study in Scotland female students had a higher PAS and lower NAS scores compared to males.[6] PAS scores for year 1 were significantly higher than those for years 2 and 3. NAS scores for year 1 were significantly lower than the scores for year 2 but not year 3.

In a study conducted in the UK, PAS scores declined after a communication skills course conducted for first year medical students while NAS scores showed no significant difference.[5] A similar tendency was noted in a medical school in Turkey.[24] In Turkey undergraduate medical education takes six years and every medical school graduate is qualified to practice as a general practitioner.[25] Medical schools follow either traditional, PBL based or mixed

curricula. In Finland an opposite tendency was noted and medical students positive attitudes increased significantly while negative attitudes decreased after a communication course.[10]

Different authors have modified CSAS for use in specific settings and Korean[26], Turkish[27] and Catalan[21] versions of the questionnaire have been created. Development of new factors other than the simple positive and negative attitudes recommended by the original developers of CSAS has also been suggested.[21, 26,28]

Cronbach's alpha for PAS was high while that for NAS was low. Rees and coworkers had calculated a Cronbach's alpha of 0.87 for PAS and 0.80 for NAS.[3] In a study by Harlak and others Cronbach's alpha was 0.90 for PAS and 0.65 for NAS.[27] In the Iranian study the value for PAS was 0.90 while that for NAS was 0.68.[22]

There were differences in methods of student selection, financing of medical education, methods of teaching-learning and in cultural and social characteristics of both the student and the patient population in the various studies cited compared to our study population. Thus though the instrument, CSAS has been validated in a wide range of populations and settings these differences have to be considered while extrapolating the results of our study to a wider population.

The respondents had a positive attitude towards communication skills but the negative attitudes should be addressed. PAS score was higher and NAS scores lower among the third and fourth semester students. Communication skills learning in the institution should be further strengthened and formal courses on the subject can be considered. At present communication skills are taught in the first four semesters during the medical humanities module, patient-doctor relationship and introduction to clinical medicine courses. From the summer 2013 semester communication, history taking and clinical examination skills are being tested during an objective structured clinical examination. We are also working towards strengthening communication skills education during the clinical years. Different methods of teaching and learning communication skills have been discussed in the literature. Aspegren has suggested that experiential learning methods where the student conducts the patient interview himself/herself and then receives feedback from the teacher is more effective compared to methods where the teacher lectures about communication skills or demonstrates interviewing techniques.[29] Information from the literature is not clear regarding how best to teach communication skills, such as

for how long or whether different students require different durations or types of training.[30,31] The authors mention that communication between doctor and patients is a hierarchy of tasks progressing from taking a history, providing information, counselling, breaking bad news, handling difficult situations like aggressive patients to existential conversation about imminent death.[30] The authors were of the strong opinion that education in communication skills must begin 'at the bottom of the ladder' with training in interviewing and giving information, emphasizing process skills and patient rapport, because, without these skills, students cannot proceed on to the higher order of communication tasks.

The results from another study suggests that acquisition of knowledge of communication skills is optimum when training is provided along with extensive supervised patient contact early in the curriculum.[32] Teaching communication skills throughout the medical curriculum may be worthwhile and it is necessary that students with problems in communication are detected early. The skills are best learned embedded in a patient-, student- and community-centred curriculum.[31] In a Belgian medical school, basic communication skills are taught during the first year, real life exercise in the form of visiting a family is done during the second year, and the medical consultation is carried out during the third year. The higher order skills are learned later during the program. Starting communication skills early during the program and having an integrated, longitudinal program which continues during the clinical years is recommended.[33]

Based on these studies the best method for communication skills learning at XUSOM, Aruba will be to start right from the first year of the course concentrating on the lower order skills first and eventually progress to higher order ones. These are best learned in the context of interaction with patients and we are providing opportunities for students to practice these during ECE, hospital observership and interviews with standardized patients. The importance of these skills is stressed throughout the curriculum and we are concentrating on cultural sensitivity and difficult issues during the medical humanities sessions conducted during the first semester and medical ethics sessions during the third. The higher order skills will be learned during the clinical years of training. We are developing a short interdisciplinary communication skills training module which can be provided to students during the first two semesters of the course. In Germany it was found that a two hour interdisciplinary training program was beneficial for medical students with regard

to communication competencies, self-confidence and learning-outcomes.[34]

Student attitudes towards communication skills learning has not previously been studied in Caribbean medical schools. The study was carried out using a validated instrument. As many medical schools both in the Caribbean and in other areas teach the basic sciences in an integrated fashion along with early clinical exposure the findings of our study would be of interest to others. The limitation of the study was the moderate response rate (around 70 per cent). The response rate of the second and third semesters was low. Most of our students though of US or Canadian nationality were of South Asian descent which may have had an influence on the results.

Further studies on student attitudes towards communication skills learning in offshore Caribbean medical schools which admit mainly students from the US and Canada are required. This will help strengthen communication skills learning in these institutions and the region.

Conclusion

Students overall had a positive attitude towards communication skills but negative attitudes were also noted and first and second semester students had a less positive and more negative attitude towards communication skills compared to third and fourth semester students. Based on results of the study and a review of literature we are planning to strengthen communication skills learning in the institution right from the first semester and students will be provided opportunities for supervised practice during early clinical exposure, hospital observership and with standardised patients. The medical humanities module will be expanded and communication skills learning will continue during the clinical years with higher order skills being taught.

References

1. Meryn S. Improving doctor-patient communication. Not an option, but a necessity. BMJ 1998;316(7149):1922.

2 Jones R, Higgs R, de AC, Prideaux D. Changing face of medical curricula. Lancet 2001;357:699-703.

3, Rees C, Sheard C, Davies S. The development of a scale to measure medical students' attitudes towards communication skills learning: the Communication Skills Attitude Scale (CSAS). Med Educ 2002;36:141-147.

4, Rees C, Sheard C. The relationship between medical students' attitudes towards communication skills learning and their demographic and education-related characteristics. Med Educ 2002;36:1017-1027.

5. Rees C, Sheard C. Evaluating first-year medical students' attitudes to learning communication skills before and after a communication skills course. Med Teach 2003;25:302-307.

6. Cleland J, Foster K, Moffat M. Undergraduate students' attitudes to communication skills learning differ depending on year of study and gender. Med Teach 2005;27:246-251.

7. Shankar RP, Dubey AK, Mishra P, Deshpande VY, Chandrasekhar TS, Shivananda PG. Student attitudes towards communication skills training in a medical college in Western Nepal. Educ Health (Abingdon) 2006;19:71-84.

8. Petty RE, Wegener DT, Fabrigar LR. Attitudes and attitude change. Annu Rev Psychol 1997;48:609-647.

9. Searle J, Prideaux D. Medical education research: being strategic. Med Educ 2005;39:544-546.

10. Koponen J, Pyörälä E, Isotalus P. Comparing three experiential learning methods and their effect on medical students' attitudes to learning communication skills. Med Teach 2012;34:e198-207.

11. Shankar P, Dubey AK. 'Modernizing' the Basic Sciences MD program at XUSOM, Aruba. WebmedCentral Medical Education 2013;4(4):WMC004198.

12. Frank JR, editor. The Canmeds 2005 physician competency framework. Better standards. Better physicians. Better care. Ottawa: The Royal College of Physicians and Surgeons of Canada. 2005. Available from: http://www.royalcollege.ca/portal/page/portal/rc/common /documents/canmeds/resources/publications/framework_f ull_e.pdf. (Accessed on August 30, 2013)

13. General Medical Council. Tomorrow's Doctors: Recommendations on undergraduate medical education. 2009. London: General Medical Council. Available from: http://www.gmc-uk.org/TomorrowsDoctors_2009.pdf_39260971.pdf. (Accessed on August 30, 2013)

14. Stewart MA. Effective physician-patient communication and health outcomes: A review. CMAJ 1995;152:1423-1433.

15. Brown JB, Stewart M, Ryan BL. Outcomes of patient-provider interaction. In: Thompson TL, Dorsey AM, Miller KI, Parrot R, editors. Handbook of Health Communication. Mahwah, New Jersey: Lawrence Erlbaum Associates; 2003. p. 141-161.

16. Benbassat J. Teaching the social sciences to undergraduate medical students. Israel J Med Sci 1996;32:217-21.

17. Petek Šter M. Teaching communication at the medical school in Ljubljana. Acta Med Acad 2012;41:38-46.

18. Miettola J, Mäntyselkä P, Vaskilampi T. Doctor-patient interaction in Finnish primary health care as perceived by first year medical students. BMC Med Educ 2005;5:34.

19. Marambe KN, Edussuriya DH, Dayaratne KMPL. Attitudes of Sri Lankan medical students towards learning

communication skills. Educ Health (Abingdon) 2012;25:165-171.

20. Roter DL, Hall JA, Aoki Y. Physician gender effects in medical communication: a meta-analytic review. JAMA 2002;288:756-764.

21. Molinuevo B, Torrubia R. Validation of the Catalan version of the communication skills attitude scale (CSAS) in a cohort of south European medical and nursing students. Educ Health (Abingdon) 2011;24:499.

22. Fazel I, Aghamolaei T. Attitudes toward learning communication skills among medical students of a university in Iran. Acta Med Iran 2011;49:625-629.

23. Anvik T, Grimstad H, Baerheim A, Bernt Fasmer O, Gude T, Hjortdahl P, Holen A, Risberg T, Vaglum P. Medical students' cognitive and affective attitudes towards learning and using communication skills - a nationwide cross-sectional study. Med Teach 2008;30:272-279.

24. Harlak H, Gemalmaz A, Gurel FS, Dereboy C, Ertekin K. Communication skills training: effects on attitudes toward communication skills and empathic tendency. Educ Health (Abingdon) 2008;21:62.

25. Durak HI. A closer look to medical education and its context in Turkey. Available from: www.tead.med.ege.edu.tr/dosya.indir.tsp?id=14. (Accessed on August 31, 2013).

26. Ahn S, Yi YH, Ahn DS. Developing a Korean communication skills attitude scale: comparing attitudes between Korea and the West. Med Educ 2009;43:246-253.

27. Harlak H, Dereboy C, Gemalmaz A. Validation of a Turkish translation of the Communication Skills Attitude Scale with Turkish medical students. Educ Health (Abingdon) 2008;21:55.

28. Anvik T, Gude T, Grimstad H, Baerheim A, Fasmer OB, Hjortdahl P, Holen A, Risberg T, Vaglum P. Assessing medical students' attitudes towards learning communication skills--which components of attitudes do we measure? BMC Med Educ 2007;7:4.

29. Aspegren K. BEME Guide no. 2: Teaching and learning communication skills in medicine – a review with quality grading of articles. Med Teach 1999;21:563-570.

30. Aspegren K, Lønberg-Madsen P. Which basic communication skills in medicine are learnt spontaneously and which need to be taught and trained? Med Teach 2005;27:539-543.

31. Deveugele M, Derese A, De Maesschalck S, Willems S, Van Driel M, De Maeseneer J. Teaching communication skills to medical students, a challenge in the curriculum? Patient Educ Couns 2005;58:265-270.

32. Baerheim A, Hjortdahl P, Holen A, Anvik T, Fasmer OB, Grimstad H, Gude T, Risberg T, Vaglum P. Curriculum factors influencing knowledge of communication skills among medical students. BMC Med Educ 2007;7:35.

33. van Dalen J, Kerkhofs E, van Knippenberg-Van Den Berg BW, van Den Hout HA, Scherpbier AJ, van der Vleuten CP. Longitudinal and concentrated communication skills programmes: two Dutch medical schools compared. Adv Health Sci Educ Theory Pract 2002;7:29-40.

34. Bachmann C, Barzel A, Roschlaub S, Ehrhardt M, Scherer M. Can a brief two-hour interdisciplinary communication skills training be successful in undergraduate medical education? Patient Educ Couns 2013 pii: S0738-3991(13)00221-8.

ACKNOWLEDGEMENTS

PEER REVIEW

Not commissioned. Externally peer reviewed

CONFLICTS OF INTEREST

The authors declare that they have no competing interests.
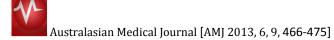
ETHICS COMMITTEE APPROVAL

Institutional Review Board, Xavier University School of Medicine (XUSOM/IRB/2013/05) dated 28th June 2013.

Appendix: Questionnaire used in the study
Communication Skills Attitude Scale (CSAS)

Age: Gender: M/F   Nationality:
Occupation of father: Occupation of mother:
 Place of residence: Metro city/ Small town/ Village/ Others (specify)
Semester of study:
How would you rate yourself as a student? Outstanding/ Good/ Average/ Poor
My preferred subject for post-graduation:
I would rate myself as an excellent/ good/ average/ poor verbal communicator.
I would rate myself as an excellent/ good/ average/ poor written communicator.

Please read the following statements about communication skills learning. Indicate whether you disagree or agree with all of the statements according to the following scale 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree. Write the whole number of your response near the statements. **Please complete** both **sides of this scale.**

1.   In order to be a good doctor I must have good communication skills.

2.   I can't see the point in learning communication skills.

3.   Nobody is going to fail their medical degree for having poor communication skills.

4.   Developing my communication skills is just as important as developing my knowledge of medicine.

5.   Learning communication skills has helped or will help me respect patients.

6.   I haven't got time to learn communication skills.

7.   Learning communication skills is interesting.

8.   I can't be bothered to turn up to sessions on communication skills.

9.   Learning communication skills has helped or will help facilitate my team-working skills.

10. Learning communication skills has or will improve my ability to communicate with patients.

11. Communication skills teaching states the obvious and then complicates it.

12. Learning communication skills is fun.

13. Learning communication skills is too easy.

14. Learning communication skills has helped or will help me respect my colleagues.

15. I find it difficult to trust information about communication skills given to me by non-clinical lecturers.

16. Learning communication skills has helped or will help me recognise patients' rights regarding confidentiality and informed consent.

17. Communication skills teaching would have a better image if it sounded more like a science subject.

18. When applying for medicine, I thought it was a really good idea to learn communication skills.

19. I don't need good communication skills to be a doctor.

20. I find it hard to admit to having some problems with my communication skills.

21. I think it's really useful learning communication skills on the medical degree.

22. My ability to pass exams will get me through medical school rather than my ability to communicate.

23. Learning communication skills is applicable to learning medicine.

24. I find it difficult to take communication skills learning seriously.

25. Learning communication skills is important because my ability to communicate is a lifelong skill.

26. Communication skills learning should be left to psychology students, not medical students.

Any other comments:

Thank you for taking the time to complete this questionnaire