

## ORIGINAL RESEARCH ARTICLE

**Assessment of Consciousness of Medical Students towards Present Medical Education of Nepal****Mamata Sharma Neupane<sup>\*1</sup>, Harish Chandra Neupane<sup>2</sup> and Bijay Aryal<sup>3</sup>**<sup>1</sup>*Singhania University, Pachari Bari, Jhunjhunu, Rajasthan, India*<sup>2</sup>*Department of Surgery, Chitwan Medical College P. Ltd, Bharatpur-10, Chitwan, Nepal*<sup>3</sup>*Department of Clinical Pharmacology, Chitwan Medical College P. Ltd, Bharatpur-10, Chitwan, Nepal*

Received 25 Dec 2012; Revised 24 Mar 2013; Accepted 04 Apr 2013

**ABSTRACT**

The present study was undertaken to assess the consciousness of medical students about content and importance of Bachelor of Medicine and Bachelor of Surgery (MBBS) curriculum of Tribhuvan University (TU) Nepal. A cross-sectional study was conducted on first and second year MBBS students of Chitwan Medical College P.Ltd using Likert and Rensis scale. Result showed that maximum number of students agreed with awareness of the curriculum of TU ( $5.96 \pm 0.78$ ). They also agreed on providing syllabus to students at the beginning of academic session ( $5.96 \pm 2.77$ ). Disagreement was found regarding exposing first year students to patients ( $1.85 \pm 2.78$ ) and present day curriculum stimulates research among students ( $3.62 \pm 3.12$ ). Also students disagreed with marks obtained in MBBS examinations should be considered in PG selection process ( $1.21 \pm 6.78$ ). Furthermore, most of students agreed with the fact that taking attendance in class is relevant and necessary in a professional course ( $5.75 \pm 8.96$ ) and that one year of internship is sufficient for training of undergraduate (UG) students ( $3.74 \pm 10.24$ ). In conclusion, awareness of medical students regarding medical education technology shows that maximum number of students agreed with the necessity of upgrading students about recent trends in medical education technology and also recommended that it is necessity to upgrade the curriculum of Tribhuvan University's MBBS program.

**Key words:** Medical Students, MBBS program, Likert and Rensis scale and Tribhuvan University.**INTRODUCTION**

Medical education has undergone dramatic changes over the last decades. It has been recognized that traditional courses that encourage rote learning of facts to primarily assess a student's knowledge base is not sufficient to equip medical students quality that will be expected of them in the future. These characteristics include good communication skills, competence in practical tasks; professionalism, appropriate attitudes and ethics, and an aptitude for personal develop. Communication skills are deemed a crucial component of clinical practice as they are instrumental in accurate diagnosis as well as convincing the patient to follow medical advice. The doctor's communicative behavior influences patient outcomes such as their satisfaction, compliance with recommended treatment, and understanding and recall of information<sup>[1]</sup>. WHO has defined five attributes for a physician: a

caregiver who assesses and improves the quality of care, who makes optimal use of new technologies, who promotes healthy lifestyles, who reconciles individual and community health requirements and who is able to work efficiently in team<sup>[2]</sup>.

In order to achieve the aforementioned goals mastery, over communication skills is vitality important. Fortunately this issue has attracted increasing attention in recent years globally, which is based on the evidence that adequate doctor-patient communication is related to better health outcomes, better compliance and higher satisfaction of both doctor and patient<sup>[3]</sup>. Interpersonal and communication skills are considered a core area of competency for medical students, residents, and practicing physicians<sup>[4, 5]</sup>. Indeed, effective communication during medical encounters has been associated with significant

benefits in areas such as patient recall and understanding, adherence to treatment plans, symptom resolution, physiological outcomes, and medical decisions, as well as satisfaction of both patients and physicians<sup>[3, 6]</sup>. There is growing awareness that effective communication between doctor and patient and appropriate attitudes of doctors are core clinical requirements for the medical profession<sup>[7]</sup>. The attitudes of medical students toward learning communication skills have long been a matter of concerns for medical teachers, curriculum planners and policy makers<sup>[8, 9]</sup>.

Attitudes involve evaluations by which good or bad qualities to a topic or an organization or a person are attached. Attitudes drive behavior. If a person's attitude is changed, his or her behavior may change as well<sup>[10]</sup>. Communication skills are indispensable for medical practice and can be taught and learned. In recent years many medical schools all over the globe have incorporated communication skills into their curricula<sup>[5]</sup>. Assessing the attitudes of medical students toward communication skills is essential, since negative attitudes can give rise to lack of interest in such programs. Such assessment can serve to help educators devise more effective plans. Thus ways ought to be sought to improve attitudes toward these programs.

Today's medical education reflects on quality of tomorrow's health services. Apathy or ignorance towards innovation, training facilities and accountability may lead to block progress in the field of medical education. All new trends in Medical Education Technology (MET) have been directed towards imparting education to learner. Curriculum is a formal plan of educational experiences and activities offered to a learner by an educational institution, where knowledge, skill and values are to be developed during the basic medical course. In view of advances in medical sciences and technology, changing patterns of diseases, changing socio-economic realities, periodic updating of a curriculum is necessary. Thus, evaluation of perception of medical students about present medical education will help in future curriculum reforms. Student's perceptions of educational curriculum, assessment, quality of students, teaching technology are a useful basis for modifying and improving the quality of education. Hence, the present study was undertaken to assess the consciousness of medical students about the content and importance of Bachelor of Medicine and Bachelor of Surgery

(MBBS) curriculum of Tribhuvan University Nepal.

## MATERIALS AND METHODS

### Students

After getting ethical clearance from the Institutional Review Committee of Chitwan Medical College P.Ltd, Bharatpur-10, Chitwan, Nepal on January, 2013, a cross-sectional study was conducted from February 2013 to April 2013 on first and second year MBBS students of Chitwan Medical College P.Ltd. Study participants were surveyed using a questionnaire. A 23 item survey was used to gauge the consciousness of medical students regarding medical education. Questions regarding curriculum, assessment and Medical Education Technology were included in the study. After taking informed consent, a pre-designed questionnaire was administered to medical students (n=270). Anonymity was maintained. Questionnaire was prepared using Likert scale rating:

- 1= Strongly disagree
- 2= Disagree
- 3= Neither agree nor disagree
- 4= Agree
- 5= strongly agree

Likert scaling is a unidirectional scaling method. It is also known as summative scale. The final score for the respondent on the scale is the sum of their rating for all of the items. Likert scaling is a bipolar scaling method, measuring either positive or negative response to a statement (Likert and Rensis 1932)<sup>[3]</sup>.

### Statistical analysis

Data was analyzed using mean scores and standard deviation for each item. And summative score was prepared for various aspects like curriculum, assessment, quality of student and medical education technology for the questionnaire.

## RESULTS AND DISCUSSION

In educational research orientation to learning is not only associated within educational research orientation to learning is not only associated with perception of students but also perception of teachers<sup>[14]</sup>. In this study "Consciousness of medical students towards present day medical education" questions were grouped in curriculum, assessment, quality of student and medical education technology (teaching technology). The questions are shown in (Table 1, 2, 3 & 4). Quality of medical education that the medical

students receive will impact strongly on how well they will be equipped with the skills and attitudes to subsequently function as competent and caring doctors who can improve the health care delivered to their patients<sup>[15]</sup>. Medical teachers need to ensure that medical students should learn what they need to learn. This will prepare the students well for their future medical practice. And also medical students need to assure toward medical education. Medical education is changing rapidly, and more than half the Indian medical schools are engaged in curriculum reforms<sup>[15]</sup> but are not happened in Nepal yet. Basic science and clinical educators alike recognize the need for greater integration in the science of curriculum<sup>[14]</sup>. In the present study shows that maximum number of students agreed that medical students should be aware of the curriculum ( $5.96 \pm 0.78$ ). They also agreed on providing syllabus to students at the beginning of academic session ( $5.96 \pm 2.77$ ). Disagreement was found regarding exposing first year students to patients ( $1.85 \pm 2.78$ ) and present day curriculum stimulates research among students ( $3.62 \pm 3.12$ ). However, overall 71% of students agreed with the present day curriculum (summative mean  $27.05 \pm 9.25$ ). Decisions to use formative or summative assessment formats as evaluation methods and how frequently assessments should be undertaken remain challenging. Educators also face the challenge of developing tools for the assessment of qualities (that have been difficult to define and quantify), such as professionalism, teamwork, and expertise<sup>[9, 10]</sup>. A distinction should be made between assessment that are suitable only for formative use and those that have sufficient psychomotor rigor for summative use. Students tend to study topics for which they expect to be tested on. So assessment may influence learning even in the absence of feedback<sup>[3]</sup>. Most of the students disagreed that marks obtained in MBBS examinations should be considered in PG selection process ( $1.21 \pm 6.78$ ). Most of the students agreed that internal assessment examination is the cause of absenteeism in class ( $5.78 \pm 12.38$ ). However the students were not sure whether students are subjected to too many internal examinations and whether marks of

internal examinations should be added in final examinations ( $5.6 \pm 11.06$  and  $2.38 \pm 11.25$ ). Minimum score of 8 and maximum score of 22 was obtained in this area. Overall percentage of perception of medical students regarding assessment was found to be 78% (summative mean  $22.0 \pm 5.78$ ).

Recommendations for new curricula should foster in doctor the need to combine both scientific and humanitarian approaches to professional care. Continuous quality improvement and innovations are essential in a medical school with an aim to provide quality medical education to today's medical students to become competent and caring doctors of tomorrow. In this study perception of medical students regarding quality of medical students revealed that most of the students agreed that quality of students is deteriorating in medical colleges ( $4.98 \pm 7.56$ ). But the students neither agreed nor disagreed on awareness of students about clinical skills and medical ethics and whether sufficient attention is given to develop communication skills among students ( $4.53 \pm 10.78$ ). Most of them also agreed with the fact that taking attendance in class is relevant and necessary in a professional course ( $5.75 \pm 8.96$ ) and that one year of internship is sufficient for training of undergraduate (UG) students ( $3.74 \pm 10.24$ ). Overall percentage was found to be 73% (summative mean  $22.14 \pm 12.45$ ). In conclusion, awareness of medical students regarding medical education technology shows that maximum number of students agreed with the necessity of upgrading students about recent trends in medical education technology. Maximum numbers of students agreed regarding importance of awareness of curriculum for a medical students and providing syllabus to students. Students are disagreed that marks obtained in MBBS examinations should be part of PG selection process and taking attendance in class is relevant. Most of them agreed that the quality of student is deteriorating in medical colleges. Maximum students were in favor of upgrading medical teaching with the help of Medical Education Technology Unit.

**Table 1: Likert and Rensis Scale for assessing consciousness of medical students regarding medical education curriculum**

1. A medical teacher should be aware of contents of latest undergraduate (U G) medical education curriculum of TUTH.
2. Current time span of your (UG medical education) curriculum is adequate.
3. The syllabus of the UG curriculum should be provided to students at the beginning of the academic session.
4. Students are fully aware about recommended books and resource material.
5. In your view exposing students of first year to the patient will benefit them.
6. Our present curriculum stimulates research among students.
7. Medical students are made aware regarding current National Health Programs.

**Table 2: Likert and Rensis Scale for assessing consciousness of Medical Students regarding Assessment of Students**

1. Students are subjected to too many internal exams.
2. Internal exams are leading to absenteeism in class.
3. Current assessment system at the end of academic session should be the criteria to pass or fail to student.
4. The marks of internal exam (formative) should not be taken in the consideration in final exam (summative).
5. Marks obtained in Exam should be part of PG selection process.

**Table 3: Likert and Rensis Scale for assessing consciousness of Medical Students regarding Quality of Medical Students**

1. The quality of student is deteriorating in medical college.
2. Our students are aware of medical ethics.
3. Taking attendance in a class is relevant and necessary in a professional course.
4. One year of internship is sufficient for training of UG students.
5. At the end course the student posses sufficient clinical skills to independently perform his duties.
6. Sufficient attention is given to develop communication skills (affective domain) among UG students.

**Table 4: Likert and Rensis Scale for assessing consciousness of Awareness of medical Students to Medical Education Technology**

1. Teachers are taking interest and efforts to give competent physicians to society.
2. There is need for a teacher in medical college to upgrade himself /herself not only in subject itself but also about emerging trends in medical education.
3. Basic workshop on medical education technology has added value in teaching skills.
4. OSPE /OSCE has to be added with traditional practical Exams in UG.
5. Teachers pay adequate attention to use of different Teaching Learning methods in UG medical education.

## ACKNOWLEDGEMENT

The authors would like to thank Chitwan Medical College, Bharatpur, Chitwan, Nepal for providing research facilities.

## REFERENCES

1. General Medical Council. Good medical practice. London: General Medical Council, 1998.
2. Rennie SC and Rudland JR. Differences in medical students' attitudes to academic misconduct and reported behaviour across the years—a questionnaire study. *J Med Ethics* 29:97-102; 2003.
3. American Board of Internal Medicine, Project Professionalism, ABIM Committee on Evaluation of Clinical Competence, Philadelphia PA, 1995.
4. Baldwin DC Jr, Daugherty SR, Rowley BD, *et al*. Cheating in medical school: a survey of second year students at 31 schools. *Acad Med* 71:267–73; 1996.
5. Rennie SC and Crosby JR. Are —Tomorrow's Doctors honest? A questionnaire study exploring the attitudes and reported behaviour of medical students to fraud and plagiarism. *BMJ* 322:274–5; 2001.
6. Kalichman MW and Friedman PJ. A pilot study of biomedical trainees' perceptions concerning research ethics. *Acad Med* 67:769–75; 1992.
7. Anderson RE and Obenshain SS. Cheating by students: findings, reflections, and remedies. *Acad Med* 69:323–32; 1994.
8. Dans PE. Self reported cheating by students at one medical school. *Acad Med* 71:70–72; 1996.
9. Petersdorf RG. A matter of integrity. *Acad Med* 64:119–23; 1989.
10. Simpson DE, Yindra MS, Towne JB, *et al*. Medical students' perceptions of cheating. *Acad Med* 64:221–222; 1989.
11. Rennie SC and Rudland JR. Differences in medical students' attitudes to academic misconduct and reported behaviour across the years—questionnaires study. *J Med Ethics* 29: 97-102; 2003.
12. American Association of Medical Colleges. Physicians of the 21st Century. Report of the Working Group on Personal Qualities, Values and Attitudes. *Journal of Medical Education* 59:177-189; 1984.
13. Metz JCM, Pels Rijken-Van Erp Taalman Kip, EH and Van den Brand-Valkenburg, BWM. *Blueprint 1994: Training of Doctors*.
14. Kaplan SH, Greenfield S and Ware J. Assessing the Effects of Physician-Patient Interactions on the Outcomes of Chronic Disease. *Medical Care* 27(3): 110-127; 1989.
15. Bensing J. Doctor-Patient Communication and the Quality of Care. An Observation Study into the Affective and Instrumental Behavior in General Practice. *Dissertatie: Deben*, 1991.