Review Article

# Strengthening the Component of Teaching and Assessing Attitude in the Medical Curriculum

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## Abstract

In any field, learning among learners happens in all three domains, namely, knowledge, skill, and attitudes. In contrast to knowledge and skill domains, "attitude domain" is difficult to teach and even more difficult to assess. The purpose of the current review was to explore the different ways in which attitude domain can be taught and assessed during the medical education training. An extensive search of all materials related to the topic was carried out in the PubMed search engine, and a total of six studies were selected based on the suitability with the current review objectives and analyzed. As learning should happen in attitude domain as well, it is a must that we should orient the students about the same and accordingly formulate learning objectives and employ appropriate learning and assessment tools. Even though it is a challenging task, nevertheless, training can be given to medical students with regard to the development of positive attitudes. In conclusion, the presence of positive attitude is an indispensable component to improve learning and patient care. However, considering that the training and assessment of attitudes are often undermined, there has to be a conscious attempt from the medical educators to improve the existing scenario and eventually improve the patient outcomes in the long run.

**Keywords:** Assessment, attitude, medical education, teaching

## Introduction

In any field, learning among learners happens in all three domains, namely, knowledge, skill, and attitudes. However, with regard to medical education, realizing the importance of doctor–patient communication, communication has been added as the fourth learning domain.[1] We must accept that to become a successful clinician, a medical student should show progress in all the learning domains and the same has to be assessed as well periodically to measure learning progression. In order to ensure that the process of teaching–learning and assessment targets all the levels in the learning domains, taxonomic classification has been developed and that has significantly aided in streamlining the entire process.[1] The purpose of the current review was to explore the different ways in which attitude domain can be taught and assessed during the medical education training.

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## Materials and Methods

An extensive search of all materials related to the topic was carried out in the PubMed search engine. Relevant research articles focussing on attitude and medical education published in the period 2002–2020 were included in the review. A total of seven studies similar to current study objectives were identified initially, of which one was excluded due to the unavailability of the complete version of the articles.

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Overall, six articles were selected based on the suitability with the current review objectives and analyzed. Keywords used in the search include attitude and medical education in the title alone (viz. attitude [ti] AND medical education [ti]). The articles published in only the English language were included for the review. The collected information is presented under the following subheadings, namely, peculiarity of attitude domain, attitude and medical education, need to strengthen attitude domain, teaching and assessing attitude domain, and implications for practice and implications for research.

## Peculiarity of Attitude Domain

In general, knowledge and skill domains are easy to teach and assess, owing to their observable and measurable nature. In fact, for knowledge and skill domains, it is quite easy to frame specific, measurable, achievable, relevant, and timely learning objectives.[2] The same does not stand true for the "attitude domain," which is difficult to teach and even more difficult to assess. On a positive note, the human values actually define attitude, which in turn is expressed in terms of human behavior in different settings. It has been time and again reinforced that a person who has lost attitude has lost almost everything.[1,2]

## Attitude and Medical Education

Attitude refers to the general tendency of an individual to feel, think, or act in a specific way in response to any form of stimuli or situation.[2] The general view is that once a student joins the medical profession, they have limited knowledge about medicine, but they do possess humane qualities. However, by the time they complete their education, they acquire knowledge in medicine, but lose their humane values.[3] From the medical education perspective, it becomes extremely crucial that we should provide adequate number of learning opportunities to the students during the training period and also assess the same. As learning should happen in attitude domain as well, it is a must that we should orient the students about the same and accordingly formulate learning objectives and employ appropriate teaching–learning and assessment tools.[1,2]

## The Need to Strengthen Attitude Domain

The presence of positive attitude among medical students plays an important role in improving patient outcomes, enhances patient safety, and minimizes the risk of hospital-induced errors.[2-4] This calls for the need to incorporate psychosocial aspects of medical care within the undergraduate curriculum, including covering non-cognitive skills such as communication skills, professionalism, etc.[3] The findings of a study done in a medical school in Texas revealed that a structured program played an important role in improving the attitude and behavior of students pertaining to reporting of medical events.[4] On a similar note, improvement in attitude toward mobile learning was reported among postgraduate students in a medical college in Delhi.[5]

## Teaching and Assessing Attitude Domain

Even though it is a challenging task, nevertheless, training can be given to medical students with regard to the development of positive attitudes. This training has to start right from the foundation course, wherein students can be made to understand the meaning of attitude and the ways in which it can impact patient care or even learning. In fact, the training with regard to attitude domain has to spread across all the professional years and the best way to systematically deliver the same is by means of covering Attitude-Ethics and Communication (AETCOM) module. During these sessions, the students can be given ethical scenarios or case vignettes that highlight either the hidden part of the curriculum or the non-cognitive aspects of learning. We must advocate that none of the proposed solution by students is wrong, but we have to go for such a solution that is right from the society perspective. The students can discuss with other colleagues and eventually reach the correct decision under the guidance of the teachers.

Further, the training can continue as a part of clinical posting sessions, wherein students observe their role model (teachers) while they interact with their patients either in ward or outpatient settings. The training for attitudes has to continue even during the internship, and all efforts should be taken so that students are given adequate number of learning opportunities. The opinion of members of the Curriculum Committee and the Medical Education Unit (MEU) can also be taken with regard to teaching attitude. As far as assessment is concerned, appropriate tools (viz., checklists, rating scales, standardized patients, questionnaire, etc.) can be used.[1,2] In order to eliminate the subjectivity, specific rubrics can be defined and that will also make the assessment uniform. However, the success of the overall program depends on the faculty involvement, and thus they have to be sensitized about different aspects of teaching and assessment of attitude.[6]

## Implications for Practice

The need of the hour is to develop a systematic framework to train students on attitude and assess the same on a periodic frame. The opinion of members of the Curriculum Committee and the MEU can also be taken with regard to teaching attitude. In fact, capacity building programs can be organized by the MEU to sensitize the staff about AETCOM module and how to go about the same. The teachers from each professional year can then decide about the scheduling of classes covering AETCOM module to cover the allocated number of hours. For the assessment of attitude, appropriate tools, including workplace-based assessment tools, can be

used. It is also essential to provide appropriate constructive feedback to the students to help them expedite their learning. Further, the students have to be encouraged to reflect upon their learning to accomplish deep learning. At Shri Sathya Sai Medical College and Research Institute, a constituent college of the Sri Balaji Vidyapeeth, Deemed to be University, Puducherry, faculty members have been gradually trained by the Medical Education Unit of the institution pertaining to teaching and assessment of attitude domain. The AETCOM module has been formally introduced and all the undergraduate students enrolled from 2019 batch onwards have been exposed to different aspects of the attitude and ethics by the trained medical teachers.

## Conclusion

In conclusion, the presence of positive attitude is an indispensable component to improve learning and patient care. However, considering that the training and assessment of attitudes are often undermined, there has to be a conscious attempt from the medical educators to improve the existing scenario and eventually improve the patient outcomes in the long run.

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### Conflicts of interest

There are no conflicts of interest.

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