



## Affective Domain Related Instructional Methods in Dentistry - A Short Review

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### Abstract

Health care related professionals are expected to adhere to ethical and value systems meticulously. Their knowledge and skill levels were given maximum attention in the past but the behaviour and attitudes were not specifically instructed or evaluated. Role models were used in the instructions of affective domain. But the technological advancements compelled a great shift towards the competency-based instructions. In the present-day society, we have to catch up with instructions on behaviour and attitudes. In the assessments also ethical behaviour should be given sufficient importance so that our doctors will maintain the humaneness in professional life.

**Keywords:** Education in Human Values; Ethics; Dental Education; Doctor-Patient Relationship; Values; Communication; Professionalism; Role Model

### Introduction

Objectives of medical education were categorised by Benjamin Bloom and which were marginally modified in the later years. Presently the objectives are classified into three domains: 1. Cognitive (knowledge) 2. Psychomotor (skills) and 3. Affective (attitude). Discussions on cognitive and psychomotor domains were given comparatively more importance while specifying the teaching methods. How to teach and attain the objectives under the affective domain lacks clarity and teachers thought that students will learn the specifics of affective domain by following the teacher and observing the teacher's behaviour. For the present generation of students, this observational system may not serve the purpose fully.

Affective domain deals with values, interactions, doctor-patient relations, communication channels, the attitudes and behavioural changes. This is recognised at five levels.

- **Receiving:** The student should be willing to pay attention, listen carefully and should be open to receive the knowledge. Students should listen to teachers, colleagues and patients with respect. They should develop an attitude to understand the feelings of others.
- **Responding:** The students are expected to engage in the knowledge transfer process that is happening in the teaching sessions. Adhering to time tables, maintenance of punctuality, clarifying the doubts of the patients, asking the patient whether he is having any discomfort or pain are the char-

acteristics of the affective domain and will serve as the assessment norms of the domain. Participating in discussions, presenting seminars, ability to raise questions and accepting comments on strengths and weaknesses when pointed out by the supervising staff and colleagues gracefully, are additional characteristics that reveal the responding level.

- **Valuing:** Students should in the course of time attain maturity to evaluate the worth of learning and get motivated to pursue the learning. In discussions, when a point is raised by a colleague, the student should carefully listen, think and judge the value of it. Similarly, the treatment outcome should also be evaluated dispassionately.
- **Organising:** First the thinking process should be made systematic and the professional requirements should be prioritised and organised. Students should learn to create a balance between freedom and responsibility. Ethical behaviour, prioritising work-family-personal needs and time management will reveal the organised behaviour required for a professional
- **Characterising:** The student will internalise the knowledge obtained from the previous four steps and make them into a habit. All his/her actions will be transformed or upgraded to a visibly professional level. The student will show self-reliance, will be a good team member, try to solve problems and will show commitment. [1,2]

### Value system

Human interactions are governed by a value system or moral code of conduct. In India, the society gives great importance to traditional and cultural norms. The basic values are Truth (Sathya), Righteousness (Dharma), Peace (Shanthi), Love (Prema) and Non violence (Ahimsa). The higher values are – ability to renunciate something dear to us for others (tyaga), give liberally to the needy (daana), dedication to the work (nishitta) and compassion (daya). The society expects its members to be humane so that every one will feel confident, that they are cared. The cultural emphasis on caring for others is prominently displayed in the case of health professionals. In an individual, how these values get developed? The first and foremost instructors of values are the parents of an individual. Once an individual grows up, values are learned from the colleagues or peers. The educational process, a person undergoes and the media to which they are exposed also serve as instructors for values. Technology with its diversified dimensions are the instructors in the modern world. Religious beliefs can also mould an individual's value system. Value system makes a person do the right thing always. Some characteristics of value system expected from a health professional are given below

- **Honesty:** Honesty is the quality of telling the truth always, be sincere and refraining from misleading others. Honest person will not steal anything.
- **Integrity:** It is the quality to resist any type of pressure to do wrong things. Students should not indulge into malpractices in examinations. Dentists and Physicians should maintain medical records truthfully and honestly. Research workers should report the outcomes honestly.
- **Loyalty:** Stand by the family, friends, employers, community and country. Do not gossip or talk about people behind their back.
- **Responsibility:** Usually a person learns this in the schools and colleges. A responsible person will shed his ego and correct the errors. If a mistake is committed, own the responsibility. Knowing the rules of conducting the research is the responsibility of the research worker. Staying current is the responsibility of a professional. Pursue excellence with what facilities and capabilities you have. Once failed, do not quit easily.
- **Respect:** Respect and honour the worth of others. Health professionals should develop an understanding of the rights of the patients. Be ethical and protect the patients from harm.
- **Compassion:** Be kind and empathetic towards patients. In other words, put yourself in their shoes, how you would like to be treated if you were the patient. Try to alleviate the fears of the patient.
- **Excellence:** Maintain highest professional standards so that you can work with, commitment and offer excellent care for the patient.
- **Accountable:** Accountability is the hallmark of a professional. Being accountable means owning responsibility of mistakes or errors committed. This can build trust and credibility of a professional. [3,4]

### Professional

Professional is trained in a particular job to provide expert service to the society till he desires to do so. He receives the necessary knowledge and skill to perform that job. The trained person initially considers the work as an occupation. The professional status is gained not because of the qualification one obtains from a university but when his activities are governed by the ethical principles, humaneness, integrity, indebtedness to the profession and concern to the society. That is why, it is generally stated that professional status cannot be assumed by oneself but it should be assigned by the society. David Maister – former Harvard Business School professor and American writer wrote: "Professional is not a label you give yourself – it is a description you hope others will apply to you." The society should trust the professional. A patient's trust in a doc-

tor is no longer assumed; it is reached through the display of appropriate professional qualities: expertise, probity, integrity, compassion, altruism, continuous improvement, excellence and working in partnership with members of the healthcare team. [5,6].

Health professionals should have great commitment to the society and that is the reason why they take an oath before the start of practising. The ancient 'Charaka Sapath' and Hippocratic oath reminds health professionals on the importance of ethical behaviour. A professional is not a volunteer, he gets paid for the work; not an amateur but has the training and expertise and not a lay person but initiated into the guild that holds an exclusive monopoly on the particular line of work.

One example: While typing a letter, a mistake was made and it was found out after taking the printout. Will you scratch out the word and correct it with a pen or will you take out another printout after making changes in the computer? A professional stenographer would opt for the second choice. An anecdote given by Subroto Bagchi in his book "The professional" describes a driver who by mistake took a wrong route to the hotel and had to travel a little longer. When Bagchi paid the fare according to the meter, the driver returned some money equivalent to the distance they have travelled by mistake. The author was astonished at the professionalism and honesty showed by the driver. This has happened in Japan [7].

Former Vanderbilt University Dean of Students Madison Sarratt (1888-1978) once said "Today I am going to give you two examinations, one in trigonometry and one in honesty. I hope you will pass them both, but if you must fail one, let it be trigonometry, for there are many good men in this world who cannot pass an examination in trigonometry, but there is no good man in the world who cannot pass an examination in honesty." [8] (Figure 1).



**Figure 1:** Professionalism.

### Ethics for the health professional

Modern history of bioethics can be traced back to the oath of Hippocrates which postulated 'do no harm'. The four basic principles of ethics are: autonomy, beneficence (doing good), justice, and nonmaleficence (do no harm). Taking consent was identified as a legal problem long back in 1767 when a patient sued his surgeon for breaking his leg as a repair procedure but without taking consent. As years passed the ethical issues grew in size and encompassed hospital records, photographs, communications, research work, organ donations, experimental animals, human trials and scientific publications.

Health professional and the patient should have mutual trust. The doctor should behave in such a way that the patient develops trust in him and the treatment he provides. In the present times, doctors find it difficult to maintain their legal positions (fiduciary responsibility) to the patient and the employer and most of the time these are contradictory too. It is essential to explain the treatment plan to the patient to the utmost satisfaction of the patient and second opinions become very relevant [9-11].

### Ethical treatment plan?

William Ecenbarger visited fifty dental practices in different states of the United States to compare fees with the estimate already attained. His story appeared in an article in the February 1997 issue of the Reader's digest entitled "Exclusive Investigation: How Dentists Rip Us Off." He had a defect in the right mandibular first molar. One dentist advised him to have a crown on the first molar and that would cost \$450. Then he went to another dentist for a second opinion who suggested five crowns which included the tooth suggested by the previous dentist. The estimated cost was \$3110. A third dentist suggested four crowns (which did not include the mandibular tooth) and cosmetic work. The total cost went up to \$11282. Then he went to a fourth dentist, who suggested 28 teeth to be crowned and four impacted molars to be extracted. The total cost estimated was \$13440. The dentist assured him to finish the entire process in one day, and was kind enough to allow a ten percent discount if the amount is paid in cash on the same day. A fifth dentist suggested full mouth reconstruction at a cost of \$19402. A sixth dentist suggested twenty one crowns and veneers on six lower anteriors. The total cost was \$29850. For a considerable period of time this was a hot topic of discussion. The core matter was the trust patients lost in dentists. Many patients wrote to their dentists highlighting their concern. The importance of trust as an ethical problem is highlighted in this article. This does not mean that all the dentists are dishonest. The evidence-based practice has become relevant in this context [12].

The American Board of internal medicine has formulated a charter of professionalism which has included the following commitments expected from a professional.

“Commitment to

- Professional competence
- Honesty with patients
- Patient confidentiality
- Maintaining appropriate relations with patients
- Improving quality of care
- Improving access to care
- A Just distribution of finite resources
- Scientific knowledge
- Maintaining trust by managing conflicts of interest
- Professional responsibilities” [13].

### Evaluating professionalism and values

It is generally considered that professionalism and values of a student of the health sector cannot be graded because it is not observable and measurable. If the teacher rates a student as irresponsible or immature, he may not accept it and may question the decision. We should identify the behavior related to professionalism. A responsible student will carry out the tasks instructed by the teacher and will be punctual in attending the clinical and teaching sessions. It is better to point out the lapses in behaviour – not carrying out instructions and not punctual. Convince the student how this behavioural lapses are going to affect the final grade. A mature student will accept the blame for failure, does not make inappropriate demands (if I had that..., if the other person had reported earlier, then...) and at the time of stress he will not criticize and abuse others. Communication skills related good behaviour is listening, not making sarcastic or derogatory comments and will not be too loud. Respect for others will be manifested by the behaviour of patience, sensitivity to physical and emotional needs of others, not showing bias or discrimination and maintenance of confidentiality of patients. The institution should chart out the expected behaviour in relation to professionalism and values and should be brought to the notice of the students and staff. If a lapse is found in the student’s behaviour, feedback should be given to the student. This can be repeated till satisfactory corrections are obtained. Evaluation need not be restricted to one instructor. It can be a 360-degree evaluation obtained from instructors, other staff, peers and patients. Appropriate remedial measures should be taken to make the correction effective. Is it necessary to evaluate the professionalism of the student? It is highly essential to find out the lapses during the student days otherwise there is a probability that they may continue the habit in their professional career [14,15].

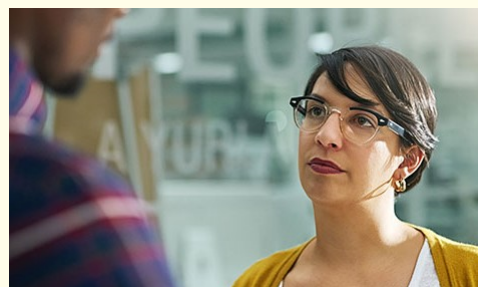
### Doctor-patient communication

A few decades ago, the doctor-patient relation had a paternal overtone and now it has changed to a partnership model. The patient expects the doctor to treat them equal and to listen and respond to their concerns. Doctors are supposed to share the necessary information about the patient’s health and help in deciding the necessary treatment and care. Communication skills play a larger role in building the doctor-patient relation. Doctors should be careful about their body language because eighty percent of the communication happens nonverbally. There should not be a mismatch between verbal and non-verbal communication to avoid strained relationships.

The consultation should start and end with eye contact because that makes the patient feel that the doctor is listening and showing interest. Attending the mobile, turning to the computer or instructing the assistant amounts to interruption and stops the patient from giving important information. It is estimated that majority of the doctors interrupt the patient’s opening statement within 18 seconds. Successful nonverbal communications will have the following characteristics: show respect to the patient, careful observation, patience, good posture, eye contact, assessment of the patient’s current mood and showing empathy [16] (Figure 2-4).



**Figure 2:** Dentist-patient communication.



**Figure 3:** Eye contact.



**Figure 4:** Gestures.

#### The elements of treatment as mentioned in the ancient texts

In the 9<sup>th</sup> chapter of Sutrasthana of Charaka Samhita, the basic elements of Ayurvedic treatment are clearly stated. Four elements are identified and they are 1.the physician 2. drugs 3.the attendant (nurse) and 4. the patient. These are considered as the four pillars of treatment.

The physician should be knowledgeable, should have extensive clinical and practical skills, capable of taking appropriate decisions while facing complications and emergency situations and he should observe the principles of physical, psychological and economic well-being.

The drugs should be available easily and in large quantities. Drugs (herbs) selected should be suitable for the disease to be treated and should be able to use in different forms and doses. The physician should be sure of the therapeutic effects of the drug selected and used.

The nurse (attendant) should be knowledgeable, caring, disciplined and compassionate. The nurse should have a superior sense of cleanliness, hygiene and purity.

The patient – it is desirable that the patient has reasonable memory and sense to understand the instructions given about the medicines and the life pattern. Patient should be obedient, disciplined and fearless to face the consequences. When asked, the patient should be able to express with reasonable precision and consistency about the sufferings he faces.

The four pillars must function in unison and no one can be avoided for the successful treatment and improvement of the

health of the patient. The professional student should be made aware of these factors and that these principles were followed in our society centuries ago. The four pillars should work, complementing each other for the smooth functioning of the maintenance of health of the people of the society [17-19].

#### Role of the gender of physicians in hospital mortality and re-admission rates

Gender of practicing doctors may have an effect on the mortality and readmission rates of the patients. In a thirty-day long study conducted on a hospital based elderly patients consisting of 1540797 members, it was found that patients treated by female doctors had lower mortality and readmission rates (Female to male doctors; mortality 11.07% Vs 11.49%; readmission 15.02% vs 15.57%). May be the practicing methods, adherence to clinical guidelines, meticulous way of implementing preventive measures, effective communication with the patients and counselling are the factors in favour of female doctors. The general impression is that female doctors do adhere to evidence-based practice and employ standardized examination systems. Female doctors provide more patient centred care. Possibly these factors might have influenced the results. While assessing the affective domain of health professionals, this factor has to be considered but within the frame work of the objectives to be achieved.

#### Students should also act professionally

Learning of professionalism should start in the class rooms and through experiences. That is the reason why discipline is enforced in class rooms, labs and clinics. Punctuality is a good behaviour for a professional to adhere. Insisting on attendance and coming to the class on time throughout the student career will make it into a habit and helps to internalize the preliminary lessons of professionalism. Teacher comes on time and starts the class will reinforce the message of professionalism. The student will feel bad to come to the class delayed. Teacher coming late for the class is a negative role modelling. Teachers should avoid such unprofessional acts.

Checking messages and emails during the class hour is unprofessional. From the student point of view, this may not be an act of indiscipline. A teacher spends much time to prepare for the class and delivers the lecture for the benefit of the students. By giving attention to the class the student learns to respect the effort of others and at the same time should realize the fact that the ultimate beneficiary is the student. The teacher should tell the student specifically to learn to listen; the most important component of communication which may help in the later years to become a good

doctor, a professional.

Skipping a class, whether attendance is compulsory or not is unprofessional. If the student is made aware of the relevance of professionalism and that it is considered for grading, the student will comply with the standard behaviour. If a questionnaire is distributed in the class, each student should meticulously fill it up sincerely. This is a lesson to keep the medical records of the patients later in the professional life. Professionalism starts from the class rooms.

## Discussion

Professionalism in dentistry is identified by the core human values related to patient care like honesty, altruism, empathy, motivation and updated expertise to manage disease conditions. The undercurrent of professionalism will be manifested in an acceptable doctor-patient relationship. The behavioral changes expected in dental education were imparted in the past by the apprenticeship model but in the recent times, competencies model superseded all other existing systems. The number of competencies required for the dentist has increased in explosive dimensions and which placed the training of professionalism and subjects of affective domain into an area of lesser importance. The attempt to master competencies has caused a deficiency in incorporating the cultural and philosophic values in the professional training [21-23].

The lecture classes and clinical and laboratory sessions do not particularly include instructions on professionalism, attitude and behaviour and the students are not evaluated for it particularly. If students are aware that professionalism will be evaluated as part of the formative and summative assessments, it will act as a matter of motivation [24-26].

In teaching professionalism, the major support should be provided by the institution. The staff from top to bottom should be involved so that they can successfully pass on the message of the importance of learning professionalism to the students. All the components of professionalism should be taught systematically to build a cognitive base and clarity. It must be explicitly stated that professional status is granted by the society which will judge each health professional from his/her activities. The instructions on professionalism should be given throughout the educational career and students should be given opportunities to discuss issues related to professionalism. Faculty should be equipped and upgraded through improvement programmes to impart the sense of professionalism amongst the learners. The students should feel that their teachers are role models worth emulating [22].

## Conclusions

Knowledge, skills and attitudes are the major components of

educational process related to health care. Knowledge and skills related training has always received priority and attitude was considered to be trained during the practice. Attitude and behavioural training should be incorporated during the student days. Students would like to understand what is professionalism with more specificity. They have their own ideas, expectations and perceptions on the behaviour associated with professionalism like respect, integrity, honesty, accountability, dedication etc. Health profession needs role models during the training phase. Professionals should practice what they preach.

## Author Contributions

Conceptualization-K. Chandrasekharan Nair; Viswanath Gurumurthy, Review of articles- Pradeep Dathan, Lovely Annamma; Initial draft preparation: Viswanath Gurumurthy, Pradeep Dathan; Review and editing- K. Chandrasekharan Nair; Supervision – K.Chandrasekharan Nair.

All the authors have read and agreed to the published version of the manuscript.

## Conflict of Interest

The authors have no proprietary, financial, or other personal interest of any nature or kind in any product, service, and/or company that is presented in this article.

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#### Figure credits

Figure 1: The circles <https://professionalleadershipinstitute.com/resources/a-guide-to-professionalism/>

Figure 2: Doctor-patient relationship - <https://www.septodont.co.uk/media-content/freemium-beyond-the-pill-essential-communication-strategies/>

Figure 3, 4: <https://cubicleninjas.com/7-facts-about-non-verbal-communication/>