Professionalism an Under Statement? Assessment of Ethical Outlook during Practice Amoung Dental Students.

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Abstract:

Background:

Character development and professionalism are important aspects required during clinical training periods, and the contemporary training of dental and medical principles for dental professionals focus on the theoretical and practical aspects leaving out the what patients expect from their doctors, good treatment by way of their character and in their skill.

Aim:

The objective of the study was to evaluate ethical outlook during practice among dental students.

Methodology:

This study was carried out through an online internet-based questionnaire involving dental schools from varying regions of south India and included under graduate and post graduate students. Participant's responses (Sample size -120) were collected via Google forms with 20 closed ended questions (Yes/No). Statistical analysis was carried out in SPSS software version 21.0 and student t-test was used here.

Result:

The unprofessional sanction was not opted for any of the 20 statements by majority of the students. The number of female participants (51.7%) were comparatively more than the male respondents (42.3%). In the first question majority of the students choose dentistry as a first choice (65%) and 80% of the students were satisfied being a dentist (question no-2). They thought that good attire (question no - 3) and punctuality (question no-13) is important. Students were satisfied being a dentist and showed knowledge on professionalism and ethics towards fellow students and staff. Students did see a need in teaching of the subject in lectures and seemed it would help a great way in their clinical practice.

Conclusion:

The majority of the students stated they had good knowledge about ethics and professionalism in dentistry, but it would be a further enlightenment if the topics were discussed both in lectures and clinics.

Keywords: Professionalism, Dental Ethics, Medical Ethics, Dentistry, Patient Perception

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I. Introduction

Ethics and professionalism are traits that need to be nurtured into a student right from their school. The literal definition of professionalism is the highest standard that is expected from a person who is trained in their duties. A dental professional therefore is expected to maintain the same level of standard not just while they perform their duties to their patients but during training and while interacting between colleagues, professors and staff as well, habits that would surely benefit the professional indirectly in his duties to the patients. Character development and professionalism therefore need to be an important aspect during clinical training periods, but the contemporary training of dental and medical principles for dental professionals do not visualize the need.

Many factors determine opinions of an individual's expected professional behavior such as the region of practice, cultural differences, the educational period and the ability of the individual to make strong commitments and judgments, to hold up values and relationships, that enlightens trust within the public eye towards dental care professionals, especially by disregarding one's own self interests. [4,5,6] It was in the late

20TH century when dentistry was seen into a category of medical sciences that required dedication, commitment and skill to eventually become an expert to form a social contract with the clients that is the patient. In the modern era where dentistry is now bound by regulations and educational institutions, professionalism is outlined by six key values- competence, fairness, integrity, responsibility, respect and service mindedness. The dentists in impoverished regions of Canada drummed up five faceted socio-humanistic approaches which involved understanding patient's social context, taking time and showing empathy, avoiding moralistic attitudes, overcoming social distances and favoring direct contact with patients. [9]

Dentists need to understand and embolden patients to provide information of past diseases and current disease status especially for HIV and hepatitis patients. Dentists provide a better approach while handling such patients as it's required to understand their emotional status and take adequate precautions. [10,11] Dentists are also required to be patient, gentle and have a sensitive approach to mentally challenged patients, who may find the experience new and uncomfortable and making the dental experience vibrant would be very considerate of the dental professional, rather than using brute force. [12]

Dental professionals are required to communicate and interact more with patients, especially patients who are mentally challenged and owing to this fact, every dental student and dentist, no matter how well skilled should have knowledge of the values of ethics and professional behavior in their daily practice. ^[13] Ethics and integrity are not qualities that are expected just to patients. Academic integrity, humanistic environment, plagiarism and misconduct ethical and behavioral are some other points of concern during dental training. ^[14,15,16] Medical knowledge and clinical skill are not the only requirements expected to be learnt during professional training, a moral standard to match the physical skill is also expected. Dentists like any learned professional need to understand the importance and need of honesty and integrity, critical ethical characteristics. They provide the foundation on which the dental practice rises tall, else a fall which would cost the person's time, effort and funding. ^[17]

Even to this day there is no standard test or scale that is considered to be a measure for professionalism. But there are a few that stand out in most literatures reviewed such as the one developed by DeLisa et al. termed Amsterdam Attitude and Communication Scale (AACS). Papadakis et al. developed the physician ship Evaluation Form in which 20 items, over four domains, are used by preceptors to assess student professionalism. Arnold et al. developed a self-assessment instrument constructed on the American Board of Internal Medicine (ABIM) definition of professionalism that focuses on specific negative behaviors as stated by ABIM domains of professionalism. The Penn State College of Medicine (PSCOM) Professionalism Questionnaire and the Jefferson Scale of Physician Empathy are less comprehensive and measure only certain specified facets of professionalism.

Highlighting the basic need for ethical and professional traits in a dental professional, the study aims to identify the various outlooks on the same of dental undergraduate and postgraduate students under various different dental institutes from varying regions of South India.

II. Materials And Methodology

This descriptive cross-sectional study was carried out through an online internet-based survey that included multiple dental schools from varying regions of south India. The sample size was collected using the formula:

Formula za²pq/l²

This study was conducted among 120 dentists (90 inters and 30 post graduates) through simple random sampling.

Inclusion criteria: Interns and postgraduate dental students, the participants active in social media.

Exclusion criteria: Dental students -1^{st} , 2^{nd} , 3^{rd} and 4^{th} year undergraduate students, Dental practitioners.

The self-explanatory online questionnaire, composed of 20 closed ended questions (Yes/No), was prepared using google forms to assess knowledge, observation, stimulation and experience among dental students towards professionalism. A link of questionnaire was forwarded to the intended population through various social media platforms and with instructions to the participants for honest responses. This study was conducted for a duration from 15 November 2020 – 15 January 2021. The data from the dental students was collected, organized and tabulated in excel sheets and analyzed using SPSS software 21.0.

QUESTIONNAIRE [ANSWER YES OR NO]

- 1. Dentistry first choice as a career?
- 2. Are you satisfied with being a dentist?
- 3.Do you consider good attire important?
- 4.Is learning about ethics in lectures important?
- 5. Have you recommended unnecessary treatments to patients to complete quotas?
- 6.Do you take written consent for each treatment?
- 7. Have you ever rejected treatment for mentally or physically challenged patients?
- 8.Do you explain treatment procedures to all patients?

- 9.Do you review every patient after treatment?
- 10. Have you performed treatment under the influence of alcohol or drugs?
- 11. Have you performed treatment without supervision or consent from attending clinician?
- 12. Have you knowingly disrupted a fellow student's treatment?
- 13.Do you think punctuality is important for a clinician?
- 14. Have you knowingly damaged/stolen instruments or equipment?
- 15.Do you smoke even though your advice to patients is against the habit?
- 16. Have you plagiarized work from other sources and submitted as your own?
- 17. Have you ever posted inappropriate pictures/videos of treatment/lectures on social media?
- 18. Have you manipulated test scores\results?
- 19. Have you disrespected fellow students/staff by physical or verbal insults?
- 20.Do you perform side jobs while on duty in the clinic?

III. Results

In Asan Memorial Dental College and Hospital the study was carried out among the dental students undergraduate and postgraduate with 120 students and the results were categorized as (Male/Female). The number of female participants (51.7%) were comparatively more than males (42.3%) as shown in the demographic details of the participants under table 1. The number of undergraduates were greater too (75.8%) than those of the postgraduate students (24.2%).

ITEMS	CATEGORIES	N (%)
AREA OF STUDY	DENTISTRY	120 (100%)
AGE GROUP	22-24	91 (75.8%)
	25-27	26 (21.6%)
	28-30	3 (2.5%)
GENDER	MALE	58 (42.3%)
	FEMALE	62 (51.7%)
CURRENT STUDY	INTERN	90 (75.8%)
YEAR		
	POST GRADUATE	30 (24.2%)

Table 1: Demographic data of the participants.

Majority of the students did not opt for the unprofessional sanction within the 20 statements used in the study. In the first question majority of the students chose dentistry as a first choice (65%) and 80% of the students were satisfied being a dentist (question no-2). They thought that good attire (question no - 3) and punctuality (question no - 13) is important. Table 2 summarizes the results of the questions that portray the perception of participants towards ethics and professionalism in dental schools. In the study, students (85.8%) stated that learning ethics through the lecture is important (question no -4). Data also showed that recommending and doing unwanted treatment to the patient for the sake completing quota was opted as unethical (question no - 5). Students had awareness on the importance of written consent (65.8%) and explaining the treatment procedures (88.3%) before starting any procedure.

VARIABLE	CATEGORIES	YES	NO	TOTAL	P VALUE
3.DO YOU CONSIDER GOOD ATTIRE IMPORTANT?	MALE	56	1	57	
3.DO YOU CONSIDER GOOD AT TIKE IMPORTANT:	FEMALE	56	7	63	0.064
4. IS LEARNING ABOUT ETHICS IN LECTURES	MALE	51	6	57	
IMPORTANT?	FEMALE	51	12	63	0.212
5. HAVE YOU RECOMMENDED UNNECCESARY	MALE	11	46	57	
TREATMENTS TO PATIENT TO COMPLETE QUOTA?	FEMALE	14	49	63	0.823
6.DO YOU TAKE RETURN CONSENT FOR EACH	MALE	22	35	57	
TREATMENT?	FEMALE	19	44	63	0.343
13. DO YOU THIN PUNCTUALITY IS IMPORTANT FOR A	MALE	55	2	57	
CLINICIAN?	FEMALE	56	7	63	0.168

Table 2: perception 0f participants towards ethics and professionalism in dental schools

Table 3 summarizes the results of the questions on the attitude front of the dental students in academics and in clinics. The knowledge on ethics and professionalism was shown by the students through questions 5, 7 and 8, where the majority of the students opted out of the unprofessional path. Question 9 had shown that most students preferred not to review every patient and for every procedure. On the front of discipline as portrayed by questions 12 and 19, students showed they had respect for each other and their staff as most participants opted "NO".

VARIABLE	CATEGORIES	YES	NO	TOTAL	P VALUE
7. HAVE YOU EVER REJECTED TREATMENT FOR	MALE	13	44	57	0.362
MENTALLY OR PHYSICALLY CHALLENGED PATIENTS?	FEMALE	10	53	63	
10.HAVE YOU PERFORMED TREATMENT UNDER THE	MALE	4	53	57	0.248
INFLENCE OF ALOCHOL OR DRUGS?	FEMALE	9	54	63	
15. DO YOU SMOKE EVEN THOUGH YOU ADVICE PATIENTS AGAINST THE HABIT?	MALE	4	53	57	0.000
	FEMALE	30	33	63	
16. HAVE YOU PLAGIARIZED WORK FROM OTHER	MALE	9	48	57	0.035
SOURCES AND SUBMITTED AS YOURS OWN?	FEMALE	21	42	63	
19.HAVE YOU DISRESPECTED FELLOW STUDENTS/STAFF BY PHYSICAL OR VERBAL INSULT?	MALE	3	54	57	0.001
	FEMALE	17	46	63	

Table 3: attitude of participants towards practicing ethics and professionalism

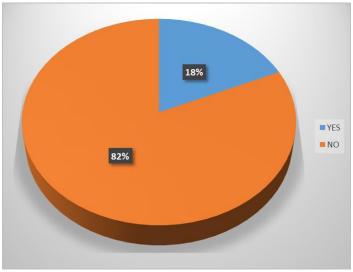


Figure 1: Pie chart representing result the q.no 7 have you ever rejected treatment for mentally or physically challenged patients?

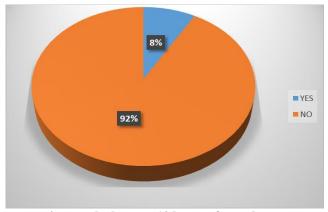


Figure 2: Pie chart representing result the q.no.10 has performed treatment under the Influence of alcohol or drugs?

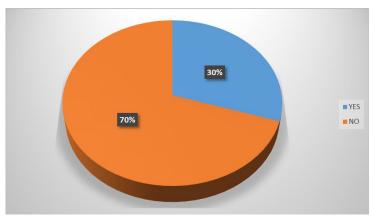


Figure 3: Pie chart representing result of q.no. 15 do you smoke even though you advice patients against the habit?

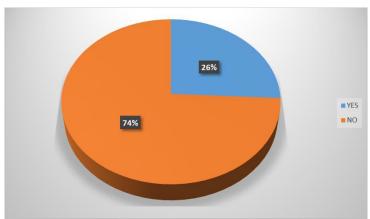


Figure 4: Pie chart representing the result of q.no 16 have you plagiarized work from other sources and submitted as your own?

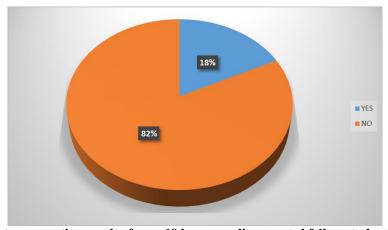


Figure 5: Pie chart representing result of q.no.19 have you disrespected fellow students/staff by physical or verbal insults?

IV. Discussion

Healthcare professionals whether physicians, surgeons or dentists have one thing is common, their patients as well as their titles. Just the way our patients address their surgeons and dentists as their doctors, the NHS of Sussex issued an order in 2006 that ordered staff not to refer to people seeking medical attention as patients but as clients. The combination of feedback and reflection support a professional development not just between patient and their doctor but as well as staff and student. Professionalism is complex and its measurement and understanding equally comprehensive. A substantial number of methods are available for its assessment, all that promotes personal and professional development. Professionalism can be gauged using a combination of observed clinical encounters, feedback, patients' opinions, tests, simulations, research,

educational activities, and reviewing self-assessments compared with assessments by others.^[25] Educating on ethics as protocol in a dental curriculum does have substantial effects on a dental graduates attitude and practice.^[26] A dental graduates social outlook towards the patient involving communication and ease of understanding both physical and mental health status of a patient colleague or other professionals, are important virtues or aspects that a majority of the studies on professionalism emphasis on.^[27] Apart from a curriculum, a dentist must be aware of the influence by the environment and culture and how to project their thoughts towards their patients or colleagues, in a manner that the person on the opposite end is not marred by the words or actions.^[28] Ensuring patient treatment quality and satisfaction requires interaction that is selfless, both in behavior and communication. ^[29]

The current cross-sectional study assesses the attitude and perception of dental interns and post graduate students towards how they perceive work ethics and professionalism during undergraduate and postgraduate education which would evaluate interactions between patients and faculty as well. The survey consisted of demographic data and behavioral dichotomous questions with "yes" or "no" options as sanctions. The present study had a total of 120 samples, where the female participants were higher in number (n= 62, 51.7%) than males (n= 58, (42.3%). These findings are similar to the study done by N. Amritha et al^[31], where out of 480 participants, 345 (71.9%) were female and 135 (28.1%) were male participants. A male-female ratio of 1.7:1 was found to determine perceptions of medical professionalism in a study conducted by Ojuka et al.^[32]

In the current study questions on the perception of participants towards ethics and professionalism in dental schools showed an almost similar trend of responses between male and female students. For the question "Do you consider good attire important?", the number of participants who selected "yes" was equal between males and females at 56, but slightly higher the number of participants in females (7) than males (1) marked "no" regarding attire while attending classes or handling patients. However, there was a major difference in the numbers to make it statistically significant. Similar responses were seen for all the other questions under perception of professionalism, with 51 male and female participants responding "yes" to the question "Is learning about ethics in lectures important?". Here the negative responses between males and females were direct halves with 6 males and 12 females responding with "no". However, as a whole we understand that students do hope for formal training in the subjects of ethics and professionalism from the classrooms. The remaining question on perceptions of professionalism- "Have you recommended unnecessary treatments to patients to complete quotas?", "Do you take written consent for each treatment?" and "Do you think punctuality is important for a clinician?" have mixed results with the majority of the participants responding positively to the questions. Here too there were no remarkable differences in numbers between the males and females making It statistically insignificant but morally significant as the participants were aware of the qualities that a dental professional is expected off. Similar results were observed in the study by

Nasr M. A. Elsheikh et al^[18] where in a comparison of the knowledge of professionalism between private and public dental school students, majority of students from both educational backgrounds responded positively to questions assessing their perceptions of ethics and the importance of teaching ethics in classrooms.

The second part of the survey assessed the attitude of the dental students during training both in the classroom and in the clinical setting. The questions were directed towards their behavior and moral spirit and making the questionnaire anonymous seemed to have helped provide real world responses without the participants having pressure of guilt or malpractice. The first question on the attitude of participants practicing ethics and professionalism was "Have you ever rejected treatment for a mentally or physically challenged patient?" for which a majority of the students both male (44) and female (53) responded with "no" fortunately with no statistical significance (p Value= 0.362). Patients need not have mental disability as such to oppose or disregard treatment. Younger patients and patients with anxiety also require attention and empowerment on the dental procedure and on the dental student performing the procedure. In the study by Yedavelli Srivastav et al^[2] 77.1% people deal with anxious patients and 89.1% people communicate with the patient about their problem. In the study by Nasr M. A. Elsheikh et al^[18] students showed a positive approach toward the path of treatment of unusual cases with 95.33% of the dental students choosing to consult or refer patients with unexpected conditions. The question "Have you performed treatment under the influence of alcohol or drugs?" also showed a similar response with majority of the participants responding negatively and with a p value of 0.248 was statistically insignificant too. However, the questions "Have you disrespected fellow students/staff by physical or verbal insults?"," Have you plagiarized work from other sources and submitted them as your own?" show statistical significance with p vale = 0.035 and p value = 0.001 respectively. The results are similar in the study by Yedavelli Srivastav et al^[2] where maximum number of students (94.5%) said yes to following ethical principles in their profession whereas 11(5.5%) said no. Students have some prior knowledge about professionalism before entering medical curriculum, but the reality check is when they enter the clinical stage where their ethics can either make them or break them. A study by Zijlstra-Shaw et al^[33] showed higher mean scores of females compared to males in accepting responsibility and accountability for actions or behavior.

The study like any other has limitations. These study results cannot be generalized, as the sample size was quite inadequate. The number of the study participants were disproportionate with more females than males.

Studies with equal gender samples must be undertaken to eliminate this bias. In addition, this survey is designed to measure attitude, perception and beliefs not character of the students. It does not identify whether the participants would actually behave in the manner as in which they responded in reality. Behaviors and character are not independent of personal character but are subject to environmental and peer pressures, especially in student life. Future studies with an equal gender population and adapting to recent technological influences on the students could provide better insight on the subject and how professionalism is evolving with changing times.

V. Conclusion

This study discovered that the environment of professionalism is linked to academic integrity amongst undergraduate dental students. The study had students from varying colleges and backgrounds and to see consistency throughout in the attitude and perception on knowledge of medical ethics and awareness on important medical breaches showed the value of the study and its subject. The study's significance is that the majority of the students opted for the negative responses pertaining to attitude in academics and clinics. The fact that the majority of the students also support classroom-based education on ethics and professionalism is another significant result of the study. Recognizing and building a supportive environment, we think is what helps impart better health care services by the dental professionals beginning from school.

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