INTRODUCTION

The word professionalism is derived from the root word 'profess' which means 'to proclaim something publicly'. This public proclamation leads to a social contract between health professional and the public as an essence of professionalism in health profession. Thus, professionalism commits a health professional to an ideal behavior with an essential and mandatory attribute of humanism. The social contract highlights that professionalism values will not be the same for all societies; and each society will need to customize these values to their local perspective. At a personal level, one professes to be competent to help patients and to consider their best interest. Accordingly, professionalism has been described by the American Board of Internal Medicine (ABIM) as "constituting those attitudes and behaviors that serve to maintain patient interest above physician's self-interest".

Advancing societal expectations and professional introspection have drawn public's attention towards medical professionalism. Mostly the complaints against the doctors involve issues of conduct and not competence. Problematic behavior during studentship has also been associated with future professional misconduct. Accordingly, professionalism is now an essential competency in health education curricula. Knowledge of how the students develop professionalism are important for understanding their professional development needs; it may also help in determining an appropriate curricular initiatives like designing instructional plan and assessment methods. Most literature about medical professionalism is from the Western world hence calling for a need to look into the development of professionalism among undergraduate students in the local perspective to assist in suggesting curricular reforms to foster professionalism.

Considering the above, this study was designed to explore how the students in different years of BDS program have developed various elements of professionalism? Furthermore, how can professionalism be further improved in them? Various elements of professionalism include: altruism; accountability; excellence; duty and service; honor and integrity; and respect for all as defined by ABIM.

Based on the stated research questions, the purpose of this qualitative phenomenological study was to explore undergraduate dental students' insight of development of professionalism among them.
METHODOLOGY

This study involved students enrolled in all 4 years of BDS program at Fatima Memorial Hospital - College of Dentistry, Lahore from April to June 2011 following an approval from Institutional Review Board (IRB). Four semi-structured audio-recorded FGDs of 1st, 2nd, 3rd and 4th year BDS classes were conducted after participants' informed consent by a qualified medical educationist, not directly involved in teaching of undergraduate students in order to ensure un-restrained responses. FGDs were used to explore the subjective experiences of dental students to understand the phenomenon of professionalism development in them and how it can be further improved; and data analysis with interpretation led to the construct of this phenomenon. Accordingly, this is a phenomenological study design in constructivist paradigm.10

Purposeful maximal variation sampling was used for each FGD.11 Equal coverage of variables like gender and pre-dental school educational background (Pakistani and Cambridge Systems of Education) and individuals with good communication skills were selected to facilitate the discussion. Small FGDs with 8 students for 1st year and 6 for other 3 classes each were conducted to encourage the participation from each individual.12 One participant from the third year and the first year each opted out of FGDs; and both were replaced by the participants fulfilling the inclusion criteria.

The participants were given pseudonyms of A, B, C and D to the female and W, X, Y and Z to the male participants for each FGD to conceal their identities in the audio recordings and transcription verbatim. FGDs were conducted and moderated by a medical educationist with past experience in qualitative data collection. The moderator was unknown to the participants to encourage students express fully and in anonymity. Basic concept and information about ABIM’s six essential elements of professionalism4 were given to FGD participants before the session and were explained again before discussing each of the elements to ensure in-depth exploration of professionalism development among them. Every FGD started with a similar opening question: how they have developed various elements of professionalism? This was followed by separate discussion on each of ABIM's six elements. The question “how professionalism can be further improved” was explored by discussing professionalism as a whole. Both English and Urdu were used in FGDs to ensure in-depth exploration of the phenomenon.

Qualitative thematic analysis was done through data reduction by transcribing audio recordings of focus group discussions, followed by data display in matrices by identifying themes and trends (Table I) and calculation of their frequencies, as they appeared in the text, represented in Tables II and III. The transcriptions were checked by the participants of respective FGDs for confirmation of correct transcription and translations where applicable. Words consisting of answers to both research questions with similar inferences were grouped under one theme with minimum overlap, representing gist of the ideas. Triangulation of themes and trends was done with their respective frequency of quotes to confirm accuracy of information presented to the readers in a descending order of frequency of ideas (Table II and III) appearing in transcripts. Finally, conclusions were drawn by adopting a constant iterative process by re-visited research questions, transcriptions and matrices by a set of researchers (member checking) by putting each other’s interpretations to the test of plausibility, sturdiness and confirmability.13 The comments verbatim (Labenswelt) related to each theme are in Table I to support interpretations.

RESULTS

Thematic analysis identified six prevalent themes of role models; social responsibility; personal virtues and reasons; punishment and reward; religious beliefs and training. Data is displayed in Tables I, II and III.

Table I showed prevalent themes and identified trends within the themes with corresponding comments verbatim.

Table II depicts the frequency of various trends as they appeared under each theme in response to the first research question, representing numerous data chunks in the transcript, providing data triangulation to verify interpretations flowing from two researchers' consensus.

Table III represents themes, along with their frequencies, emerged from transcriptions of second research question-how professionalism attributes can be further improved?

DISCUSSION

The phenomenon of professionalism development in healthcare is a complex process. Students enter undergraduate education with idealism and a degree of naivity.14 Personal virtues and reasons, family values and religion, all play different roles in the improvement of professionalism, according to this study. Results vindicate importance of certain pre-requisites for growth of desirable professional attitudes such as: good morals, upbringing, and educational experiences before coming to medical school, supported by other studies as well.7 Profession is held responsible for transforming students' ignorance and inexperience to appropriate practical wisdom through positive influences and for keeping conscientiousness alive by limiting unfavorable experiences.14 Likewise, role modelling, training, reward and punishment, social responsibility and religion, all influence development of professionalism in undergraduate students to a varying degree in both positive and negative manner. In a comprehensive systematic review, Passi et al. identified curriculum...
### Table I: Comments of the students regarding the themes and major trends

#### Theme 1: Role Models

**Trend 1: Good Role Models:**

1. If you have been brought up in an environment where parents show altruism, you will practice the same.

**Faculty:**

2. The way teachers behave with each other, patients and with students, will eventually be followed by us consciously or sub-consciously.
3. Whenever we see such high level of excellence in others (demonstrators and professors), we feel if they can perform it so can we.
4. Teachers selected should have professionalism qualities.

**Trend 2: Bad Role Models:**

5. If we go to a doctor as a patient and doctor does not even listen to us properly, we don't consider him a good doctor.
6. Finding out that what is being preached is not being practiced!

**Trend 3: Educational Environment:**

7. We the humans, being social animals, see and do things going around us.
8. In one department, we are given respect and told about our duties as doctors; and we do our work with full responsibility and duty. On the other hand, some departments treat us badly; and there we really don’t care for the patient and only care for ourselves.
9. We demonstrate responsibility in performing their duties in departments where there are proper protocols to follow in addition to conducive working environment.

#### Theme 2: Social Responsibility

**Trend 1: Professional Requirements:**

10. I now feel more dutiful because of the thought that I will be a dentist after 1 year.
11. Honor and integrity is gifted to us by the profession.

**Trend 2: Patient Related Factors:**

12. When you get patient's respect, you automatically want to reciprocate it.
13. I feel pity on patients with a low socio-economic background.
14. To avoid embarrassment in front of patients or relatives.

#### Theme 3: Personal Virtues and Reasons

**Trend 1: An Inborn Quality:**

15. Everyone is born with altruism; it is up to individual to discover and polish it.
16. One radiates respect instinctively once in communication with the patient.

**Trend 2: Competition:**

17. Developed excellence because of the competitive nature that I have.

**Trend 3: Reflection:**

18. Developed altruism more because of contemplation and not due to observing others.
19. I will think about how I performed a task; if it would have been better differently. I will do it that way.

**Trend 4: Past Experience:**

20. An internship experience at a kidney hospital assisted in developing duty and service.

**Trend 4: Choice of Right Profession:**

21. At times, students don’t know the reasons for choosing the profession.
22. They may take admission on parent’s choice of profession.

#### Theme 4: Punishment and Reward

23. One only does well if someone is monitoring; self consciousness and self accountability works for a limit.
24. At this stage it is to get good comments and numbers.
25. In this world, only those get honored who are outstanding in their work.
26. Encouragement with awards and reprimand with threats of informing parents.

#### Theme 5: Religious Beliefs

27. Every religion preaches us altruism.
28. Our religion emphasizes a lot on honesty. If we are to deal with a person, we must deal honestly with him.
29. The fear of Allah is what develops accountability in us.

#### Theme 6: Training

**Trend 1: Teaching / Training:**

30. I don’t think that we as students have developed this concept of duty and service because of the pressure of quota (required clinical work) completion.
31. Unless students are told clearly as to what should be done, they will not take up those attributes.
32. The teaching of clinical scenarios should always mention that how we should behave with patients.
33. Everybody comes and gives lectures but not all listen; I am one to do things practically rather theoretically and if hands-on experience is given, one will definitely learn.
34. Workshops can help in developing some attributes in students and workshops for teachers will also assist.

**Trend 2: Workload / Working Condition:**

35. Learning should be fun and not a punishment! Friendly and secure learning environment will nurture respect for others.
design, student selection, teaching and learning methods, role modelling and assessment methods responsible for shaping-up professionalism among the students.15

“Role modelling is in the eyes of the beholder - the student, not the teacher”.16 Students internalize and further disseminate patterns and behaviors that are modeled for them.17 Role modelling was identified as one of the most important factor not only in re-enforcing but also in improving desirable attributes of professionalism amongst students (Table I, comments 1, 2, 3, 4 and 8). On the other hand, in-effective role models (Table I comments 5, 6 and 7) displaying clinical incompetence and wrong attitudes may play a role in fostering required attributes by presenting examples not to be followed and be mindful of.9 Learning from bad examples was considered useful by senior students mainly, indicating maturity with progressive years. However, such examples also had the potential to impede professionalism development. In fact, both effective and ineffective role models from faculty and students have a strong influence on the hidden curriculum (set of traditions implicitly communicated and practiced in an organization or an institution) of an institution, classifying it as a place promoting or not professionalism in its graduates.15 This suggests the importance of educational environment in improving professionalism. Supportive environments (Table I, comment 9) help in raising self-esteem of students, helping them become intrinsically motivated learners, striving to achieve greater academic heights in a profession.14,15

Training (Table I, comments 30-35) was found out to be least influential in nurturing professionalism so far (Table I), nonetheless, its significance cannot be underestimated in refining professionalism (Table II). This indicates absence of any effective learning

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**Table II: Frequency of themes and trends identified in “how have the students developed professionalism” among four BDS classes.**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Trends</th>
<th>1st year</th>
<th>2nd year</th>
<th>3rd year</th>
<th>4th year</th>
<th>Total quotes (344)</th>
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<tr>
<td>Social responsibility</td>
<td>Patients related</td>
<td>13</td>
<td>10</td>
<td>16</td>
<td>16</td>
<td>105</td>
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<tr>
<td></td>
<td>Professional requirement</td>
<td>11</td>
<td>19</td>
<td>13</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Role models</td>
<td>Family</td>
<td>28</td>
<td>10</td>
<td>6</td>
<td>5</td>
<td>100</td>
</tr>
<tr>
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<td>7</td>
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<td>5</td>
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<tr>
<td></td>
<td>Environment</td>
<td>9</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bad role models</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Personal virtues and reasons</td>
<td>Inborn</td>
<td>6</td>
<td>10</td>
<td>8</td>
<td>13</td>
<td>49</td>
</tr>
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<td></td>
<td>Competition</td>
<td>1</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self reflection</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Past experience</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Religion</td>
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<td>18</td>
<td>13</td>
<td>6</td>
<td>5</td>
<td>42</td>
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<tr>
<td>Punishment and reward</td>
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<td>12</td>
<td>11</td>
<td>6</td>
<td>7</td>
<td>36</td>
</tr>
<tr>
<td>Training</td>
<td>Workload / work condition</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Teaching / training</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

**Table III: Frequency of themes identified from “how can professionalism be developed further” responses of 4 BDS classes.**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Trends</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>Total quotes (98)</th>
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<tr>
<td>Training</td>
<td>Teaching / training</td>
<td>8</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Workload / working conditions</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Feedback</td>
<td>5</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Research</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Internship / part time job</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Student responsibilities</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Role models</td>
<td>Professional role models</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Environment</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Bad role models</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Family</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Personal virtues and reasons</td>
<td>Inborn</td>
<td>4</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Self-reflection</td>
<td>1</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Motivation / satisfaction</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Competition</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Choice of profession</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Punishment and reward</td>
<td>-</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>16</td>
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<tr>
<td>Religion</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>5</td>
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<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>2</td>
</tr>
</tbody>
</table>
opportunities related to professionalism in the implemented curriculum despite presence of behavioral sciences as a subject, which is meant to address various aspects of professionalism and is officially taught through lectures in pre-clinical years. Nevertheless, effectiveness of lectures in transferring and promoting characteristics of professionalism remains debatable and underscores the significance of actually witnessing examples of inspirational practices, demonstrating professionalism in real life situations.15 Reflective learning exercises (Table I, comments 18, 19), as explained by Passi, are considered useful in nurturing professionalism and can be added in the operational curriculum as a regular feature.15 Moreover, scenario-based learning, use of simulators to display a variety of clinical situations, timely and specific feedback and progressive and reassuring educational environment were identified as more useful methods to encourage professionalism (Table I, comments 5, 6, 7).9 In designing and implementing curriculum on professionalism, role of academic institutions cannot be ignored as acceptance of greater responsibility to monitor professionalism can actually bridge the gap between what is being practiced and what is desirable through accountability.15 However, need for the presence of a formal curriculum on professionalism with emphasis on interactive and practical experiences as instructional strategy (Table I, comments 31-34) remained the highlight of this study, urging the fraternity to address it properly.

Personal characteristics such as self-awareness, interest to learn, accurate self-evaluation and ability to derive useful lessons from bad examples, competitiveness, initiative and personal choice in selection of profession, altogether have a potential share in creating a professional, who has most appreciated qualities of professionalism (Table I, comments 15 - 19). This emphasizes the importance of selection criteria in identifying prospective students with qualities warranting development of professionalism among future dentists. Nevertheless, practicing such a selection criteria is not without major challenges. Literature suggests use of Personal Qualities Assessment tool or the Multiple Mini Interviews (MMI) to identify relevant attributes.15 Religious beliefs (Table I, comments 27-29), like in other studies, was another common feature of this study, helping to acquire professionalism,18,19 signifying the place of spiritual element in the evolution of a professional.20 Faith’s role in medical curriculum has been considered as a source of learning, framework for values; and an outstanding context for appreciation of human diversity.19 Religious studies (e.g. Islamiyat), as being part of BDS curriculum, can be used to foster this aspect of professionalism through specific outcome based curricular initiatives in strong faith societies.20,21 “Assessment drives learning” was further substantiated through this study in terms of punishment and reward (Table I, comments 23-26), steering students’ learning towards the desired direction as established through other published evidence as well.22 On the other hand, feedback as a tool for formative assessment, also has a strong role to play in this context.18

Demands of a profession and sensitivity to patients’ needs to constitute social responsibility (Table I, comments 10-14), which is more to do with being humane rather than following formal guidelines and are present as inherent characteristics among students.2,14 Students acknowledged presence of high level of humanism in them, which at times succumb to academically challenged situations (Table I, comment 8). This spirit of humanism can be maintained by controlling the negative impact of hidden curriculum and educational environment.14 There were a few limitation of this study. The results are from one private dental college and may only be transferrable in similar contexts and comparable socio-cultural background. Faculty’s and patients’ perspective regarding the development of professionalism and proposed ways and means to foster can further verify or negate students’ perspective and present a more holistic view with stronger implications for curricular change. Nevertheless, students remain important stakeholders and their educational needs hold great importance in any educational activity.

**CONCLUSION**

Lack of effective professionalism curriculum has been highlighted despite presence of subjects to address this need, justifying the need for a formal curriculum on professionalism. Formal planning and implementation of professionalism curriculum, selection of students with appropriate attributes, control of hidden curriculum along with educational environment and congenial working environment will foster professionalism among dental students maximally. Effective role modelling stays the corner stone for professionalism development.

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