

**Perception of professionalism among first year medical students in OIU**

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**Abstract:**

**Background:** Since days of Hippocrates, and passing through the Geneva Declaration and Helsinki Convention the eve of the 21<sup>st</sup> century guidelines and mission statements dominated the medical education and practice. Giving and receiving feedback are critical skills and should be taught early in the process of medical education, yet few studies discuss the effect of feedback curricula for first-year medical students.

**Aim:** To evaluate the concepts of professionalism among the first year medical students.

**Set up:** The Faculty of Medicine and Health Sciences, Omdurman Islamic University where students are taught

**Material and methods:** The first year medical students at the Faculty of Medicine and Health Sciences, Omdurman Islamic University were taught the Human Rights declaration issued by the United Nations in Dec 1948, The Principals of Islamic Human Rights, basics of medical ethics and the Doctors Figh and University Requirement course of Islamic studies. A pretested questionnaire, self-administered questionnaire with five Likert scale was distributed.

**Results:** The total number of the first year medical students was 257 but 207(80.5%) successfully completed the questionnaire. A total of 98% strongly agreed that the doctor must be truthful. 90% of the students and agreed that the doctor must be caring, kind and empathetic, respect the others, skilful, dedicated and Also, should comply with the patients' needs (One sample *t*-test 2-tailed  $P = 0.0001$ ). However, 23(13.8%) students disagree on the role of the doctor as an advocate for the patient. The students strongly agreed for the importance of working as a team and sparing the patient not to be harmed had any conflict raised (one sample *t*-test 2-tailed  $P = 0.0001$ ).

**Conclusion:** The first year medical students seem to have benefited of the Human Rights declaration issued by the United Nations in Dec 1948, The Principals of Islamic Human Rights, basics of medical ethics and the Doctors Fight and university requirement course of Islamic studies. About 9(5.4%) -24(12.4%) are not clear about the role of the medical professional in the society in advocating for patients.

**Key words:** Medical students, Human Rights, medical ethics, professionalism.

**T**hroughout the history of medicine, physicians' organizations have made efforts to propose the physician's

professional values, societal commitments, and personal aspirations in oaths, declarations, conventions, contracts, guidelines, and mission statements<sup>1-5</sup>. Methods of learning have been classified in the Bloom's Taxonomy of Educational Objectives<sup>6</sup> as knowledge, comprehension, application, analysis and synthesis. It has been established that certain important clinical skills of professional communication do not develop spontaneously

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with exposure to clinical environments<sup>7</sup>. For this reason early installation of professional values and orchestrating them in the attitudes, behaviours and deeds of the medical students' daily activities is a challenge that needs to be tackled appropriately. Hence, the research unit in the Faculty designed series of research raise the awareness in aspects of professionalism to augment the main objectives of medical education which are clinical competence, professional socialization, and personal image characterization.

**Objectives:**

To assess the first year medical students' concepts on professionalism.

**Methods:**

**Set up:** Omdurman Islamic University, Sudan was established in 1902. The Faculty of Medicine and Health Sciences was inaugurated 1989. The Faculty implements community oriented, problem-based curriculum.

**Methodology:** The first year medical students were taught the Human Rights declaration issued by the United Nations in Dec 1948, the principals of Islamic Human Rights, basics of medical ethics and the Doctors Figh and university requirements course of Islamic studies. Then a pretested questionnaire with five Likert scale was distributed to them. The scale considers strongly agree = 1 strongly disagree = 4 and do not know = 5. The questionnaire covers the following aspects of professionalism:

1. The personal image of the physician.
2. Responsibility of the physician towards patients.
3. The collegiality of the physician.
4. The social responsibility of the physician.
5. The professional behaviours and conflicts of interest.

**Statistical analysis:** The data was fed to statistical Package for Social Sciences (SPSS) Inc., Chicago, IL, USA; version 17.0. Frequencies, means, standard deviations, and correlation tests were conducted. Chi- square test was used to determine the significance of

correlation between categorical variables and One Sample *t*-test was used for correlations in the numerical data. Significance level was taken for values at  $P = 0.05$  with 95% confidence interval.

**Results:**

The total number of the first year medical students was 257 but 207(80.5%) successfully completed the questionnaire. (The sample size of 207 students gives results at confidence level 95% at confidence interval 3.01).

The student responses: **The personal image of the physician:** A total of 98% strongly agreed that the doctor must be punctual truthful and accountable.

**1- Responsibility of the physician towards patients:** 90% of the students agreed that the doctor must be caring, kind and empathetic, respect the others, skilful, dedicated and complies with the patients' needs (One sample *t*-test 2-tailed  $P = 0.0001$ ). See fig 2. On the other hand, 23(13.8%) students did not express frank agreement on the role of the doctor as an advocate for patients. This is reflected in table1.

Table 1: Student opinions on issue of advocacy

	Frequency	Percent
Strongly agree	62	37.1
Agree	81	48.5
Disagree	8	4.8
Strongly disagree	4	2.4
Don't know	11	6.6
Missing	1	0.6
Total	167	100

**2- The collegiality of the physician:**The students strongly agreed for the importance of working as a team to avoid negligence and patient suffering in spite of any conflict that may raised (one sample *t*-test 2-tailed  $P = 0.0001$ )

**3- The social responsibility of the physician:** Although 158(94.7%) students believe that the issues of responsibility is part of their devine belief, as shown in

table 2, about 40 students were reluctant to respond frankly to the social responsibility of the physician as illustrated in Fig 4.

Table 2: Student responses on professionalism being viewed as divine believe.

	Frequency	Percent
strongly agree	119	71.3
Agree	39	23.4
Disagree	3	1.8
strongly disagree	1	.6
Don't know	5	3.0
Total	167	100.0

**4- The professional behaviours and conflicts of interest:** Also, 119 students believe that the physician success depend cooperation with others including respect of the patient autonomy and respect of the patient companions as seen in Fig 5.

**Discussion:**

Behavioural skills are gained as either classical conditional reflex as in the Ivan Pavlov<sup>8</sup> (1849-1936) and John B. Watson<sup>10</sup> (1878-1958) or as Operant conditioning<sup>9</sup>. Operant conditioning can be described as a process that attempts to modify behaviour through the use of positive and negative reinforcement as in a school teacher who awards points to students who are calm and well-behaved. Students eventually realize that when they voluntarily become quieter and better behaved, they will earn more points. The term “operant conditioning” originated by the behaviourist B. F. Skinner<sup>9</sup>, who believed that one should focus on the external, observable causes of behaviour (rather than try to unpack the internal thoughts and motivations). However, with civilization, professional organisations had set protocols and guide lines for best practices. Yet, Physicians agree with the standards set for the acceptable professional behaviour, but, some of them behave in a way not conforming to the ideals of professionalism<sup>10</sup>.

In our study, the first year medical students had no significant contact with patients, however, their responses ranged from the minimum competencies required of all physicians to the highest aspirations and values of the ideal physician. However the inconsistency in issues like advocacy is probably because professionalism is an experience-based issue as stated by others<sup>11</sup>. In spite of the fact that medical and training organizations have issued updates and clarifications of professionalism<sup>12-15</sup> some evidence suggests that practicing physicians generally agree with modern professionalism statements but do not always practice in accordance with these norms<sup>15</sup>. In this era we witness medicine being transformed from moral act to a commodity. Probably this change explains the relatively high number of students who voted negatively for advocacy. The concept of professionalism is multifaceted and may be divided into three categories: professional parameters, professional behaviours, and professional responsibilities<sup>16</sup>.

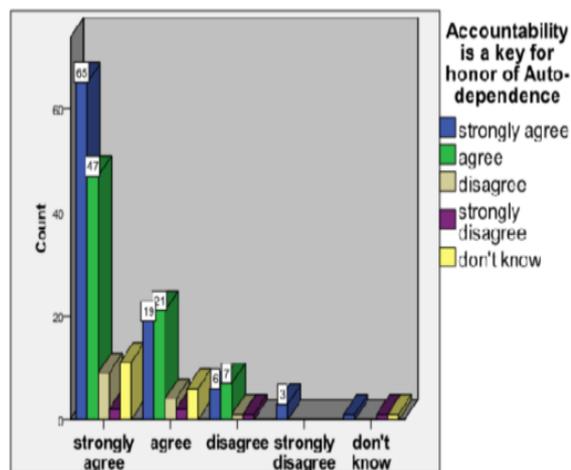


Fig 1: Student responses on the personal image of the physician

The professional parameters include legal and ethical issues. The professional behaviours refer to discipline-related knowledge and skills, appropriate relationships with patients

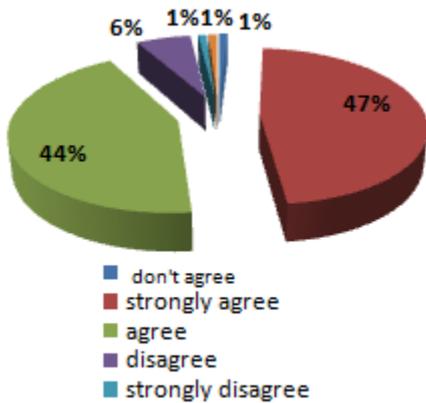


Fig 2: The students' opinion on doctors responsibility towards patients' needs.

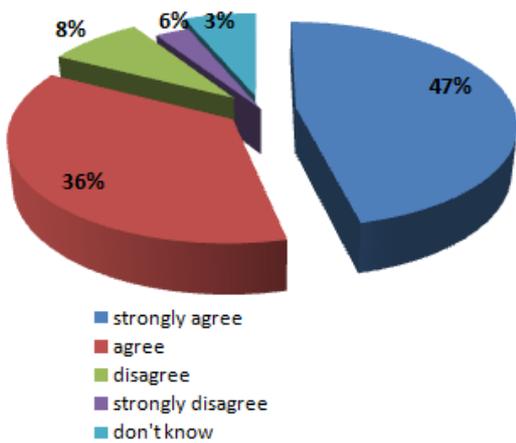


Fig 3: Student responses on collegiality of the physician

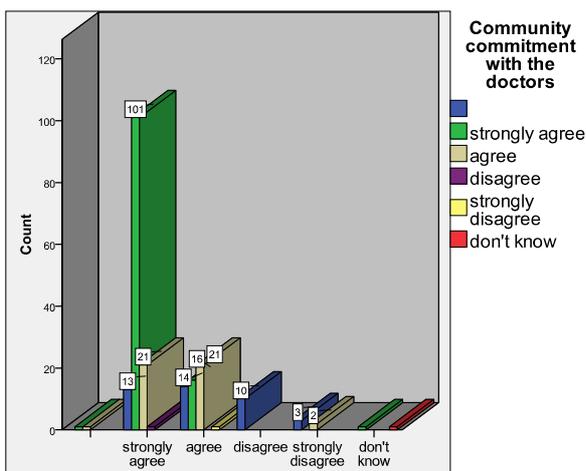


Fig 4: The student responses towards their social responsibility in the future.

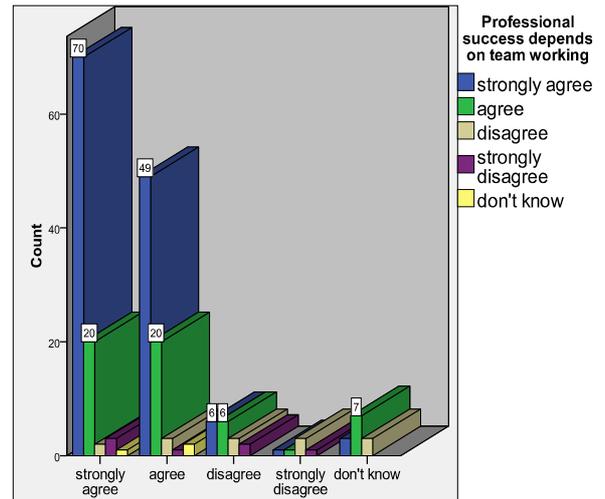


Fig 5: The student responses on the professional behaviors

and colleagues, and acceptable appearance and attitudes. The professional responsibilities include responsibility to the profession and to oneself, patients, other staff members, and community. Thus, students must develop a wide range of characteristics, attitudes, and behaviours as well as a lifelong commitment to professionalism<sup>17</sup>. Professionals are altruistic, have vital function in the community. They are seen as prestigious well educated with profound knowledge, and training. Yet they must be guided by a code of ethics; governed by peers; and represented by professional associations<sup>18-23</sup>.

**Conclusion:**

The first year medical students seem to have benefited of the Human Rights declaration issued by the United Nations in Dec 1948, The Principals of Islamic Human Rights, basics of medical ethics and the Doctors Figh and university requirement course of Islamic studies. About 9(5.4%) -24(12.4%) are not clear about the role of the medical professional in the society in advocating for patients. This is hoped to be rectified with further march along the problem based, community oriented curriculum to institute the goals of the Faculty.

### Limitations:

Our research instrument did not include skills of communication because the population of the study is mere beginners. Furthermore, the issues tested were self-reported, and the results may not be generalized to other senior medical students. However, these skills will be tested in our ongoing research including the fifth year medical students.

### References:

1. Edelstein, Ludwig; Owsei Temkin, C. Lilian Temkin. Owsei Temkin, C. Lilian Temkin. ed. *Ancient Medicine*. Johns Hopkins University Press. (1987) p. 6.
2. Declaration of Geneva. 2<sup>nd</sup> General Assembly of the World Medical Association, Geneva, Switzerland, September 1948, amended by the 22<sup>nd</sup> World Medical Assembly, Sydney, Australia, August 1968, the 35<sup>th</sup> World Medical Assembly, Venice, Italy, October 1983, the 46<sup>th</sup> WMA General Assembly, Stockholm, Sweden, September 1994, editorially revised by the 170<sup>th</sup> WMA Council Session, Divonne-les-Bains, France, May 2005 and the 173<sup>rd</sup> WMA Council Session, Divonne-les-Bains, France, May 2006
3. World Medical Association Declaration of Helsinki, Ethical Principles for Medical Research involving human subjects. Adopted by the 18th WMA General Assembly, Helsinki, Finland, June 1964, and amended by the: 29th WMA General Assembly, Tokyo, Japan, October 1975, 35th WMA General Assembly, Venice, Italy, October 1984, 1st WMA General Assembly, Hong Kong, September 1989, 48th WMA General Assembly, Somerset West, Republic of South Africa, October 1996, 52nd WMA General Assembly, Edinburgh, Scotland, October 2000, 53rd WMA General Assembly, Washington 2002, 55th WMA General Assembly, Tokyo 2004 and 59th WMA General Assembly, Seoul, October 2008 WFME. 2000.
4. Task force on defining international standards in basic medical education. Report of the working party, Copenhagen, 14–16, 1999. *Med Educ* 34:665–675.
5. WFME. 2003. Continuing Professional Development (CPD) of Medical Doctors. Global Standards for Quality Improvement. Copenhagen: WFME 2003.
6. Bloom B. S., Krathwohl D. R., Masia B. B. Taxonomy of Educational Objectives: The Classification of Educational Goals. New York, NY: D. McKay; 1956.
7. Aspegren K. BEME Guide No. 2: Teaching and learning communication skills in medicine - a review with quality grading of articles. *Med Teach*. 1999; 21:563–70.
8. Ivan Petrovich Pavlov, Morton H. Frank, and Joyce J. Weiss. General technique of physiological experimentation and vivisection. *Bull N Y Acad Med*. 1975 February; 51(2): 332–344.
9. Epstein, R. (1997) Skinner as self-manager. *Journal of applied behavior analysis*. 30, 545-569.
10. Campbell EG, Regan S, Gruen RL, et al. Professionalism in medicine: results of a national survey of physicians. *Ann Intern Med*. 2007; 147(11):795-802.
11. Wendell T Hill Jr. What are the pharmacist believe our profession to be determine what it is. *Journal of the pharmaceutical association*. 2000; 40(1): 96-102.
12. AMA. Declaration of Professional Responsibility Dec. 2001
13. Shane K. Green. Physician-Scientists and Social Responsibility. *Virtual Mentor*. 2004; 6 (9).
14. AMA's Principles of Medical Ethics. Adopted June 1957; revised June 1980; revised June 2001.
15. ABIM Foundation. American Board of Internal Medicine; ACP-ASIM Foundation. American College of Physicians-American Society of Internal Medicine; European Federation of Internal Medicine. Medical professionalism in the new millennium: a physician charter. *Ann Intern Med*. 2002; 136(3):243-246.
16. Inui TS. A Flag in the Wind: Educating for Professionalism in Medicine. Washington, DC: Association of American Medical Colleges; 2003.
17. Bossers A, Kernaghan J, Hodgins L, Merla L, O'Connor C, Van Kessel M. Defining and developing professionalism. *Can J Occup Ther*. 1999; 66:16-21.
18. Hammer DP, Berger BA, Beardsley RS. Student professionalism. *Am J Pharm Educ*. 2003; 67:1-29.
19. Parsons T. The Social System. *Glencoe, Ill: The Free Press*; 1951.
20. Greenwood E. Attributes of a profession. *Soc Work*. 1957; 2: 44-55.
21. Strauss G. Professionalism and occupational associations. *Ind Relations*. 1963; II: 8-9.
22. Wilensky HL. The professionalization of everyone? *Am J Soc*. 1964; 70:137-46.
23. Vollmer HM, Mills DL. Professionalization. 1st ed. *Englewood Cliffs, NJ: Prentice-Hall, Inc*. 1966:65.