

# Research Journal of Pharmaceutical, Biological and Chemical Sciences

## Teaching Professionalism in Personal and Professional Development: Views of Medical Students in Malaysia.

Aye Aye Mon\*, Halyna Lugova, Adlina Suleiman, and Muhamed T Osman.

Faculty of Medicine and Defence Health, National Defence University of Malaysia, Sungai Besi Prime Camp, 57000 Kuala Lumpur, Malaysia

### ABSTRACT

Professionalism is an important issue among the academics, practitioners and professional bodies. The study was conducted to quantify the extent to which professional attitudes would predict the personal and professional behaviors. A structured self-administered questionnaire related to students' experience of medical professionalism was distributed to medical students of the National Defence University of Malaysia. Data were analyzed descriptively. The preclinical students felt that screening of movie sessions (N = 69/80; 86.3%) and small group discussion sessions (n = 71/81; 87.7%) can help in developing professionalism. More than half (n = 43/77; 55.9%) agreed that someone can be a good physician even if someone is not a very good person. Most of the clinical students perceived that they encountered individuals who displayed and promoted professional behavior (n = 84/116; 72.4%) and other indications of positive role modeling in clinical settings. A majority of both pre-clinical and clinical students had positive perceptions regarding character-focused medical education. Bivariate analysis showed that 81.8% of clinical students appreciated the role of mentor-mentee sessions in developing professionalism compared to 64.2% of pre-clinical students. This difference was statistically significant ( $p = 0.004$ ). The findings showed that character-based approach towards professionalism is an appropriate strategy. The lecturers should be encouraged to give some advices on personal attributes of professionalism during mentor-mentee sessions.

**Keywords:** professionalism, personal and professional development, medical students

*\*Corresponding author*

## INTRODUCTION

Professionalism is an important issue among the academics, practitioners and professional bodies [1]. Teaching medical professionalism is a part of the module of personal and professional development (PPD) curriculum that emphasizes humanistic values and ethics in medical education (ME). In order to evolve into good physicians, medical students have to present high quality of professionalism together with the skills in biomedical and clinical sciences [2-5].

The medical educators have proposed curricular exercises that are designed to train the students with a “skill set” for resolving ethical or professional issues and becoming a virtuous physician through character development [6-9]. The medical professionalism module is one of the components of PPD curriculum in Faculty of Medicine and Defence Health (FMDH), National Defence University of Malaysia (NDUM). A majority of medical schools have incorporated instructional methods and evaluation process addressing professionalism into their curriculum. Currently, there is a lack of data on how professionalism is addressed and evaluated among Malaysian medical schools. In our FMDH, the early clinical exposure (ECE) session has been implemented since preclinical years to introduce the development of professional characters. Both pre-clinical (year 1 and 2) and clinical year (year 3-5) lecturers are appointed as mentors and the students would demonstrate a commitment to carry out professional responsibilities such as passion, integrity, sensitivity and responsiveness to a diverse patient population and respect for others. There are separate movie sessions for pre-clinical and clinical medical students for their professional development in our curriculum. The study was conducted to quantify the extent to which professional attitudes would predict the personal and professional behaviors. Medical students are expected to acquire a conception of professionalism and to improve the teaching-learning environment.

## MATERIALS AND METHODS

The survey design was used and the data were collected from 197 medical students (first- to fifth-year) of the NDUM. A structured self-administered questionnaire was designed based on previous research [10, 11] and revised by the expert assistance of the professional medical educators. The questionnaire included three dimensions related to students' experience of the professionalism program: (1) professionalism in personal and professional development; (2) environment related to medical ethics and professionalism; (3) professional character development. For the PPD relating questions, “Yes” or “No” type of response was suggested. The questions on professional environment included the following response categories: “Never”, “Once or twice”, “Few times”, “Several times” and “Numerous times”. The 4-point Likert scale was used for responses addressing professional character development including “Strongly agree”; “Somewhat Agree”; “Somewhat disagree” or “Strongly disagree”. Data were analyzed descriptively using IBM SPSS Statistics for Windows, version 21 [12]. Chi-square test was used to compare the answers between pre-clinical and clinical students. Significance level of  $p < 0.05$  was used.

## RESULTS

The socio-demographic characteristics of the respondents are shown in table 1.

**Table 1. Socio-demographic characteristics of the participants**

Characteristics	Mean ( $\pm$ SD)	Frequency	Percentage
Age (year):	21.47 ( $\pm$ 0.76)		
Gender:			
Male		113/196	57.6
Female		83/196	42.3
Ethnicity:			
Malay		125/196	63.8
Indian		48/196	24.5
Chinese		23/196	11.7
Religion:			

Islam	126/194	64.9
Hinduism	40/194	20.6
Christianity	21/194	10.8
Buddhism	7/194	3.6
Year of study:		
Year 1	45/197	22.84
Year 2	36/197	18.27
Year 3	41/197	20.81
Year 4	61/197	31.4
Year 5	14/197	7.2

**Professionalism in personal and professional development**

Most of the preclinical students felt that PPD module including screening of movie sessions (N = 69/80; 86.3%) and small group discussion sessions (N = 71/81; 87.7%) can help in developing professionalism. The ECE small group sessions were also perceived as helpful in developing personal attributes of medical professionalism (N = 76/81; 93.8%). However, more than one-third of preclinical students (N = 29/81; 35.8%) disagreed that mentor-mentee system can assist their development of professionalism. Nearly all respondents from clinical years stated that their PPD module during pre-clinical years focused on professionalism, and felt that screening movies assists in developing personal attributes of medical profession (N = 115/116; 99.1%). The vast majority (>90%) reported that the faculty has a process of the professionalism program evaluation and noted the positive role of small group sessions, as part of PPD and ECE, in developing medical professionalism. Almost one-fifth (N = 21/116; 18.1%) of the students thought that mentor-mentee program does not assist in teaching professionalism (Table 2).

**Table 2. Teaching personal and professional development**

Questions	Pre-clinical				Clinical			
	Yes N	%	No N	%	Yes N	%	No N	%
Does your PPD module focus on professionalism and prof values?	79/81	97.5	2/81	2.5	115/116	99.1	1/116	0.9
Does your faculty have a process of evaluation regarding students' professionalism?	77/81	95.1	4/81	4.9	110/116	94.8	6/116	5.2
Do you think that mentor-mentee system assists in developing professionalism?	52/81	64.2	29/81	35.8	95/116	81.9	21/116	18.1
Do you think that screening movies assists in developing professionalism?	69/80	86.3	11/80	13.8	115/116	99.1	1/116	0.9
Do you think that PPD small group sessions assist in developing professionalism?	71/81	87.7	10/81	12.3	109/116	94.0	7/116	6.0
Do you think that ECE small group sessions assist in developing professionalism?	76/81	93.8	5/81	6.2	107/116	92.2	9/116	7.8
Do you think that ECE small group sessions assist in developing attitudes concerning sexual harassment, honesty and confidentiality?	69/80	86.3	11/80	13.8	115/116	99.1	1/116	0.9

**Environment related to medical ethics and professionalism**

More than half of preclinical year students at least several times encountered individuals who displayed and promoted professional behavior (N = 44/78; 56.4%), received positive feedback from attending

faculty regarding character traits (N = 42/79; 53.1%) and observed doctors placing the patient needs ahead of their own interest (N = 43/78; 55.2%). The majority reported that they have never been treated with disregard, or few times only at the worst, during their pre-clinical years (N = 65/77; 84.5%). Only 11.3% (N = 9/80) received negative feedback from attending faculty regarding character traits at least several times during pre-clinical years.

Most of the clinical students reported that they encountered individuals who displayed and promoted professional behavior (N = 84/116; 72.4%) and observed physicians who placed the patient's needs ahead of their own interest (N = 84/115; 73.0%) from several to numerous times. The majority stated that they observed doctors educating their patients numerous times (N = 79/116; 68.1%). The majority (N = 95/116; 81.9%) revealed that they had been instructed from at least a few times to numerous times to withhold data from a patient's chart without being given an explanation by attending physician. Less than half (N = 49/116, 40.2%) reported observing at least once or twice physicians lying to their patients and one-third (N = 35/116; 30.2%) observed physicians revealing private information about their patient to other people.

**Professional character development**

More than half of clinical students (n = 64/116; 55.1%) and preclinical students (N = 43/77; 55.9%) also somewhat to strongly agreed that someone can be a good physician even if someone is not a very good person. However, around half of the preclinical students disagreed with this statement. Nearly all respondents from clinical year (n = 112/116; 96.6%) agreed that medical lecturers are responsible for training medical students to have good character. Around one-third (n = 42/116; 36.2%) of clinical students agreed that medical lecturers should focus on their teaching of medical subjects rather than trying to shape students' characters while the preclinical students (N = 25/77; 32.5%) agreed as same but the majority of the participants from year 1 and 2 (N = 71/78; 71%) felt that medical lecturers are responsible for training medical students to have good character (Fig. 1).

Bivariate analysis showed that 81.8% of clinical students appreciated the role of mentor-mentee sessions in developing professionalism compared to 64.2% of pre-clinical students. This difference was statistically significant (p = 0.004).

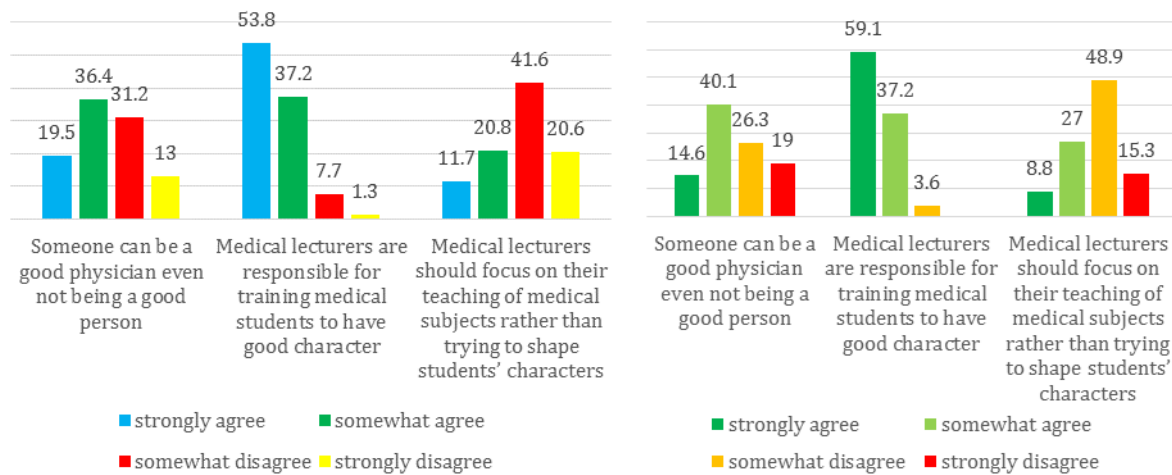


Figure 1: Preclinical and clinical students' views on professional character development

**DISCUSSION**

According to our results, most of the students felt that PPD module and the process of professionalism evaluation at FMDH are focused on the development of professional values. The students thought that screening of movies relating to professionalism help their affective domain improvement. This is

supported by the recent studies that speak of the importance of movies in motivating applicability of medical professionalism [13-14].

Byszewski et al. state that a lack of formal teaching on personal attributes of medical profession during clinical years remains a challenge due to dispersion of learners in clinical areas, so that role modeling carries almost exclusively the burden for learning professionalism [11]. Similarly, to other medical schools, most of the professionalism curriculum at FMDH is being delivered in pre-clinical years as part of PPD and ECE modules to improve PPD.

Previous studies on personal development have tended to emphasize the use of narrative [15], the creation of a community of learners [16], and “lived experiences of mentors and learners with an interdisciplinary set of didactic materials” [17]. However, more than one-third of preclinical students in our study disagreed that mentor-mentee system assists in developing of professionalism. This could be possibly explained by the fact that lecturers (mentors) are more focused on students’ academic performances and remedial actions than on ingraining core ethical values of medical profession and shaping students’ characters. Clinical students demonstrated more positive attitude towards mentor-mentee sessions than pre-clinical students. This could be possibly explained by more efficient role that clinical lecturers play in shaping of their professional characters.

According to Sulmasy, medical educators have noted the moral development as a cornerstone of medical profession. The author poses a question about the possibility of transforming medical schools into “schools for virtue” despite the opposing views on students being predisposed to certain virtues before they join medical schools and incapable of change [7]. With regard to this idea, our findings are contradictory. On the one hand, around half of the students thought that medical lecturers should focus on teaching of medical subjects rather than trying to shape students’ characters. On the other hand, the students agreed that medical lecturers are responsible for training of medical students to have good character and medical school is an appropriate setting for efforts aiming at character development

Our study demonstrated that students have positive opinions regarding character-focused medical education. Similarly, Carey et al., [18] revealed that students perceived medical school as an appropriate setting for professionalism development. The support of the character development agenda in medical education by the students is crucial for the effective implementation of the professionalism program.

There were certain limitations in this study. We asked pre-clinical medical students questions with regard to medical ethics and professionalism whereas they have little exposure to clinical experiences and hospital environment. Another limitation is related to asking the students for their opinion on the character development in their medical training without providing a definition of “character” in our survey. The experiences of clinical year students in the beginning of their clinical years would have been different had they been surveyed at the end of their clinical rotations. Some of the samples of year 5 students were not included because some year 5 students were outside the campus for their training. A replication of the study with larger and more representative samples of medical students from other institutions will strengthen the reliability of our findings.

## CONCLUSION

The findings suggest that medical students have positive experiences on the professionalism program. Our study suggests that character-based approach towards ethics and professionalism is an appropriate strategy in nurturing of the empathic medical doctors. Both positive and negative role modeling are common in the clinical settings. The lecturers(mentors)should be encouraged to give some advices on personal attributes of professionalism during mentor-mentee sessions concurrently assisting in academic performance of the students and helping in solving psychosocial problems. Medical students generally support the idea of medical professionalism for their personal and professional development as a part of medical training.

## ACKNOWLEDGEMENT

The study was supported by Grant (UPNM/2015/GPJP/2/SP/26) from the National Defence University of Malaysia. The authors would like to thank all the respondents who participated in this survey project.



REFERENCES

- [1] Dhai A, McQuoid-Mason D. (Editorial): SAJBL J 2008; 1: 2-3.
- [2] Bhutto, S. N., Asif, M. & Jawaid, M. J Postgrad Med Insti 2014; 29 (1): 3-8.
- [3] Swick HM, Szenas P, Danoff D, Whitcomb ME. JAMA. 1999; 282(9):830-2.
- [4] Eckles RE, Meslin EM, Gaffney M, Helft PR. Acad Med J. 2005; 80(12):1143-52.
- [5] Kinghorn WA. J Perspect Biol Med. 2010; 53(1):87-105.
- [6] Miles SH, Lane LW, Bickel J, Walker RM, Cassel CK. Acad Med.J 1989; 64(12):705-14.
- [7] Sulmasy DP. J Gen Intern Med. 2000; 15(7):514-6.
- [8] Wong JG, Cheung EP. J Med Teach. 2003; 25(1):5-8.
- [9] Morihara, S. K., Jackson, D. S. & Chun, M. B. J Medical Teacher 2013; 35 (11), 908-914.
- [10] Ahadi, T., Mianehsaz, E., Raissi, G., Moraveji, S. A. & Sharifi, V. Medical Ethics and History of Medicine J 2015, 8:3.
- [11] Byszewski, A., Gill, J. S. & Lochnan, H. J BMC Medical Education 2015; 15: 204.
- [12] IBM Corp. Released 2012. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp.
- [13] Klemenc-Ketis, Z. & Kersnik, Z. J BMC Medical Education 2011; 11: 60.
- [14] Suleiman, A., Mon, A. A., Lugova, H., Bakar, E. A. (2015). In Education, Power and Empowerment: Education as an Instrument of Global Transformation. Paper presented at the Asian Conference on Education & International Development (Japan), Osaka, March 29 – April 1 (pp. 253-259). Naka Ward, Nagoya, Aichi: International Academic Forum.
- [15] Coulehan J. Acad Med. J 2005; 80(10):892-8.
- [16] Remen RN, Rabow MW. Med Educ. J 2005; 39(11):1167-8.
- [17] Daaleman TP, Kinghorn WA, Newton WP, Meador KG. Fam Med. 2011; 43(5):325.
- [18] Carey, G. B., Curlin, F. A. & Yoon, J. D.: a national survey. BMC Research Notes; 2015; 8: 455.