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Comparative Study of Professionalism of Future Medical Doctors Between Malaysia and Bangladesh

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ABSTRACT

Every profession has its particular social responsibilities. Thus, professionalism is the foundation of medicine's indenture with humanity. The schooling and refinement of professionalism has long been part of medical education. Recently professionalism is recognized as a fundamental qualification in both developed and developing countries. The objective of this study was to scrutinize and compare the professionalism of medical students of Malaysia and Bangladesh. This was Cross-sectional study conducted on 1208 Year-I to Year-V MBBS students of session 2011-2012 and 2012-2013, from Malaysia and Bangladesh. Data was collected using a validated instrument. Only 42% respondents were male and the rest 58% were female. Total mean professionalism scores for male was 177.57 and female was 175.82. Again total score of professionalism of Malaysia and Bangladesh were 175.50 and 177.14 respectively. Significant differences observed between gender (p=0.026) and country (p=0.044) in total scores of elements of professionalism. The present study found there has almost equal level of understanding on principal humanistic concerns of professionalism. Between gender and country there are significant differences. Professionalism should be incorporate in undergraduate and postgraduate medical course curriculum. Henceforth, communities will have rational prescriber for the common marginalized people.

INTRODUCTION

'Medical professionalism is evolving-from autonomy to accountability, from expert opinion to evidence-based medicine, and from self-interest to teamwork and shared responsibility' (AMPIHC, 2013). Thus researchers believe 'medical professionalism is the heart and soul of medicine' (AMPIHC, 2013). The words 'profession' and 'professionalism' came from the Latin word 'professio' which means a public declaration with the force of promise (Faiz, 2009). A group of international experts recommended 'altruism, honor & integrity, caring and compassion, responsibility, respect, accountability, excellence and scholarship and also leadership' as the fundamental elements of professionalism (Maryland, 2002).

Actually these elements of professionalism are talking more of the humanistic values and art of medicine than science of medicine. Thus these humanistic issues make medical professionalism forms concrete relation between doctors and society (Irvine, 2003; Hilton and Slotnick, 2005). Those works like medicine, law, etc. needs formal education and training and controlled by codes of ethics by the government bodies are considered as professional and they dedicate for the betterment of the people (Cruess *et al*., 2004). Professional must consider and serve their patient or client with topmost priority even more than his/her self-interest (Brown *et al*., 2009; Hafferty, 2000). Again other scholars believe reported jobs with high risk especially for 'medicine, aviation, and military' professionalism is a multidimensional concern (Holtman, 2011). In this earth nobody born as medical doctor or as pilot or military commando officer (Stevens, 2002).

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Henceforth proper training is absolutely necessary to attain these skills and to stop and reduce the number of errors (Holtman, 2011). A number of published reports describes that it is compulsory to conserve and protect professionalism in medicine (Woolf, 2009; ACGME; Swing, 2007). Thus relation with medical doctor and community not only will improve but it will achieve to an extraordinary dimension. Therefore medical educationist suggested professionalism should be extensively taught as part of curriculum in medical school (Irvine, 2003; Hilton and Slotnick, 2005). Therefore teachers of medical school will be more responsible and act more properly as a part of their job for the better development of professionalism of medical students (Passi *et al*., 2010). Incorporating professionalism in the curriculum will make new opportunity for medical school to improve the humanistic quality among young, energetic medical students still not exposed to aggressive industrial promotional activity (Francis, 2004). Medical educationist believes, for better development of professionalism among future medical doctors, medical teachers need to collaborate more within and also with other department (Passi *et al*., 2010). Researchers believe "Professional education is above all a shaping of the person" (Sullivan, 2005). The last few decades, the relation between doctors and patient has been changed dramatically because of basic changes in health and medical care. This is due to addition of new concepts "cost management by insurers" in traditional age-old holistic health care system that is much eroded. Therefore, doctors are losing their liberty and independence as because they are governed by insurance company. Finally, due to these detected policies from insurance company, present day doctors do not feel or own any 'personal responsibility' and 'promotes deprofessionalism' (Bhugra and Gupta, 2010). Thus new doctrine of economic order of corporate transformation of health care has battered 'public trust in medicine' and 'traditional values and behaviour' (Woolf, 2009; WPRCP, 2005; Chiu *et al*., 2010); causing extensive injury to medical professionalism (Sullivan, 1999; Swick *et al*., 1999). These reforms in health care especially in modern world and slowly developing countries generate a requirement for curricular modification to promote professionalism among medical students (Arnold and Stern, 2006; Sullivan, 2000; Cruess and Cruess, 2000). Common people think and expect that a good doctor means not only his/her academic qualifications and experiences but high quality of behavioural sense; effective communication skills; must understand socio-cultural diversities, values and prejudices. These qualities will make a doctor to provide effective medical and health care (Salam and Rabeya, 2009; Litzelman and Cottingham 2007). At many occasion poor communication skills ended with much unhappiness and poor compliance of patients and relatives (Salam *et al*., 2008). Communication and behavioral skill is sometime more important than clinical competencies of doctor, as they are not able judge academic and professional aspect. Attitudes and behaviors of medical doctors are not up to the mark, especially practicing faculties, which raises concern of medical educators (Swick *et al*., 1999). Throughout the world there has been corporate transformation of education including medical education; resulting in enormous growth of private medical school. It is reported that these medical educational industry consider their students as customers. Consequently, medical-students are hardly ever conscious about humanistic issues of professionalism (Project Professionalism, 1995). These troubles although present in public medical school. Corporate transformation has lead to different scenario in class room and in real-life thus medical students acquire inconsistent messages (Inui, 2003; Hafferty and Franks, 1994; Reynolds, 1994). This is more dangerous if students notice their faculty members practicing different in classroom and actual practice. Therefore, poor role modeling causes less dedicated future medical doctors as students follow their teachers (Hilton and Slotnick, 2005; Hafferty and Franks, 1994; Christian *et al*., 2008; Feudtner *et al*., 1994). Therefore medical educators are in agreement to promote and expand professionalism especially coring humanistic issues (Litzelman and Cottingham, 2007). The purpose of this study to ascertain and compare the conceptual understanding of professionalism with emphasis on its core issues among the medical students of Bangladesh and Malaysia so that professional development programme can be initiated. Thus medical students will be competent enough to cope with all real-life situations when they are graduated as doctor and started working in the community.

MATERIALS AND METHODS

This was a cross-sectional study conducted on medical students of Malaysia [Universiti Kebangsaan Malaysia (UKM) Medical Centre, Universiti Sultan Zainal Abidin (UniSZA)] and Bangladesh [Eastern Medical College (EaMC), Central Medical College (CMC), AK-Modern Medical College (AKMMC), Gonoshashthaya Samajvittik Medical College (GSSVMC) and Enam Medical Colleges (EnMC)]. The study population was all of Year-I to Year-V medical students of academic session 2011-2012 and 2012-2013. Stratified random and convenient sampling technique was used to select the sample. The period of study was from June 2010 until January 2013. An instrument on professionalism was developed through extensive review of literature and validated (Salam *et al*., 2012), which contained nine core professionalism attributes such as honesty, accountability, confidentiality, respectfulness, responsibility, compassion, communication, maturity and self-directed learning. There were a range of statements under each professionalism issues which was assessed using a 5-point Likert scale giving a maximum score of 220. Mean of all nine attributes' scores represented the professionalism of respondents as a whole. The instrument also contained four open-ended questions exploring about respondents' opinion on what professionalism meant to them, how professionalism should be taught, how they learnt professionalism and how professionalism should be assessed. The data was then compiled and analyzed using SPSS version-16. This study was approved by research and ethics committee of UKM Medical Centre.

RESULTS

Total study population was 1208. Among them 431 (36%) was from Malaysia and rest 777 (64%) from Bangladesh. Among Malaysian students 34% was male and rest 6% was female. Bangladeshi medical male students were 37% and female were 53%. Males were 509 (42%) and females were 699 (58%). Among Malaysian 431 respondents, UKM contributed the major share 323 (75%) and UniSZA have 108 (25%). Bangladeshi 777 respondents were from 5 medical schools. Schools were EnMC, GSSVMC, EaMC, AKMMC and CMC; and numbers of students participated in this study were 245 (32%), 200 (26%), 133 (17%), 106 (13%) and 93 (12%) respectively. Total participants of the study were from Year-I, Year-II, Year-III, Year-IV and Year-V and number of students according to the year was 109 (9%), 113 (9%), 369 (32%), 441 (36%) and 146 (14%) respectively. Mean (SD) professionalism score of Malaysian respondents was 175.50 (13.70) and Bangladeshi was 177.14 (13.35). Bangladeshi students score was significantly (Table 1) higher (p=0.044) than Malaysian medical students. Mean (SD) professionalism score of male respondents was 177.57 (13.93) and female was 175.82 (13.13). Thus male were significantly (Table 2) higher than female respondents (p=0.026). There was no significant (p=0.176) difference between Malaysian institute UKM versus UniSZA (Table 3).

But significant (p=0.004) differences were observed among Bangladeshi medical schools EnMC versus EaMC (Table 4). There were significant difference observed UniSZA versus EnMC (p=0.043) and EaMC versus EnMC when compared between all schools of Malaysia and Bangladesh (Table 5). Study result with open-ended question on what professionalism is meant to the study sample, how it should be taught, how they learnt and how professionalism should be assessed are shown for Malaysian (Table 6) and Bangladeshi (Table 7) students. Sixty four percentage of Malaysian medical students expressed professionalism as positive attitude and behavior towards job. Again 37% students opined that professionalism should be taught through experience. Similarly 39% Malaysian medical pupils respectively felt professionalism is learnt by experience. Almost equal figure (35%) students' impression was that professionalism should be assessed formally (Table 6). About 59% of Bangladeshi medical students did not responded at all to open ended questions. Only 27% Bangladeshi medical students thought professionalism as positive attitude and behavior towards job. It should be taught through experience (16%) and role model (17%). Similarly Bangladeshi medical students' opted professionalism was learnt through experience (12%), formal education (11%) and role model (10%). Finally, 27% thought that professionalism should be assessed through formal examination (Table 7).

Table 1: Differences of professionalism domains based on country (n=1208).

Domains	Country, mean (SD)		95% CI	*t*-statistic (df)	*p*-value*
	Malaysia (n = 431)	Bangladesh (n = 777)			
Honesty	24.28 (2.71)	24.40 (2.61)	-0.43, 0.19	-0.76 (1206)	0.449
Accountability	19.55 (2.97)	19.72 (3.00)	-0.52, 0.18	-0.95 (1206)	0.345
Confidentiality	16.45 (2.45)	16.66 (2.47)	-0.51, 0.08	-1.45 (1206)	0.146
Respectful	24.61 (2.83)	24.83 (2.80)	-0.55, 0.11	-1.32 (1206)	0.187
Responsibility	23.31 (3.34)	23.63 (3.37)	-0.71, 0.08	-1.55 (1206)	0.122
Compassion	16.52 (1.84)	16.66 (1.87)	-0.37, 0.07	-1.33 (1206)	0.182
Communication	18.80 (2.89)	18.93 (2.85)	-0.48, 0.20	-0.80 (1206)	0.425
Maturity	23.49 (3.10)	23.69 (3.14)	-0.57, 0.17	-1.08 (1206)	0.281
Self-directed learning	8.51 (1.28)	8.61 (1.24)	-0.25, 0.04	-1.39 (1206)	0.166
Total scores	175.50 (13.70)	177.14 (13.35)	-3.22, -0.04	-2.02 (1206)	0.044

*Independent t-test

Table 2: Differences of professionalism domains based on gender (n=1208).

Domains	Gender, mean (SD)		95% CI	*t*-statistic (df)	*p*-value*
	Male (n = 509)	Female (n = 699)			
Honesty	24.55 (2.61)	24.21 (2.66)	0.04, 0.64	2.19 (1206)	0.029
Accountability	19.80 (2.94)	19.56 (3.03)	-0.11, 0.58	1.35 (1206)	0.177
Confidentiality	16.60 (2.47)	16.57 (2.45)	-0.26, 0.31	0.16(1206)	0.870
Respectful	24.73 (2.68)	24.77 (2.90)	-0.35, 0.29	-0.20 (1206)	0.845
Responsibility	23.65 (3.53)	23.41 (3.23)	-0.15, 0.62	1.20 (1206)	0.229
Compassion	16.67 (1.80)	16.57 (1.90)	-0.11, 0.32	0.97 (1206)	0.331
Communication	19.06 (2.92)	18.76 (2.82)	-0.02, 0.63	1.83 (1206)	0.067
Maturity	23.85 (3.17)	23.45 (3.09)	0.04, 0.75	2.18 (1206)	0.030
Self-directed learning	8.66 (1.24)	8.52 (1.26)	0.00, 0.29	1.96 (1206)	0.050
Total scores	177.57 (13.93)	175.82 (13.13)	0.21, 3.29	2.23 (1206)	0.026

*Independent t-test

Table 3: Differences of total scores between UKM and UNISZA (n=431)

Domains	Country, mean (SD)		95% CI	*t*-statistic (df)	*p*-value*
	UKM (n=323)	UNISZA (n=108)			
Total scores	175.92 (14.90)	174.27 (9.21)	-0.74, 4.04	1.36 (299.73)	0.176

*Independent t-test

Table 4: Differences of total scores between EaMC, EnMC, GSSVMC, CMC, AKMMC (n=777).

Domains	University	Mean Value	SD	*F* statistics (*df*)	p value
Total scores	EaMC	173.98	9.98	3.21 (4, 776)	0.004 (EaMC vs. EnMC)
	EnMC	179.06	16.11		
	GSSVMC	177.14	15.16		
	CMC	177.26	10.37		
	AKMMC	176.55	6.30		

*One-way ANOVA

Table 5: Differences of total scores between UKM, UNISZA, EaMC, EnMC, GSSVMC, CMC, AKMMC (n=1208).

Domains	Institute	Mean Value	SD	*F* statistics (*df*)	p value
Total scores	UKM	175.92	14.90	2.98 (6, 1207)	0.043 (UniSZA vs. EnMC) 0.010 (EaMC vs. EnMC)
	UNISZA	174.27	9.21		
	EaMC	173.98	9.98		
	EnMC	179.06	16.11		
	GSSVMC	177.14	15.12		
	CMC	177.26	10.37		
	AKMMC	176.55	6.30		

*One way ANOVA.

Table 6: Respondents' opinion through open ended questions at UKM & UniSZA in Malaysia.

What do you mean by professionalism?		How professionalism should be taught?		How do you learn professionalism?		How professionalism should be assessed?	
Opinion	**n (%)**	**Opinion**	**n (%)**	**Opinion**	**n (%)**	**Opinion**	**n (%)**
Positive approach to profession	272 (64)	Experience	158 (37)	Experience	166 (39)	FEx	152 (35)
Skillful	28 (6)	Role-model	99 (23)	Role-model	101 (23)	Feedback and Self-reflection	85 (20)
		FEd	92 (21)	FEd	76 (18)		
Others	84 (19)	Others	44 (10)	Others	54 (13)	Others	133 (31)
NR	47 (11)	NR	38 (9)	NR	34 (7)	NR	61 (14)
Total	431 (100)	Total	431 (100)	Total	431 (100)	Total	431 (100)

Not Responded = NR, Formal Education = FEd, Formal Examination = FEx

Table 7: Respondents' opinion through open ended questions at EMC, CMC, AKMMC, GSSVMC & EnMC (n=777) in Bangladesh

What do you mean by professionalism?		How professionalism should be taught?		How do you learn professionalism?		How professionalism should be assessed?	
Opinion	**n (%)**	**Opinion**	**n (%)**	**Opinion**	**n (%)**	**Opinion**	**n (%)**
Positive approach to profession	211 (27)	Role model	133 (17)	Experience	90 (12)	FEx	206 (27)
		Experience	121 (16)	FEd	82 (11)	Feedback and Self-reflection	61 (8)
		FEd	73 (9)	Role model	79 (10)		
Others	99 (13)	Others	36 (5)	Others	50 (6)	Others	38 (5)
NR	467 (60)	NR	414 (53)	NR	476 (61)	NR	472 (60)
Total	777 (100)	Total	777 (100)	Total	777 (100)	Total	777 (100)

Not Responded = NR, Formal Education = FEd, Formal Examination = FEx.

DISCUSSION AND CONCLUSIONS

It is actually commitment which changes in any profession and makes a professional successful. Doctors commitment to patient makes differences in practicing medicine on the basis of science, evidence based medicine (EBM) and rationality (Bryan *et al*., 2005; Patenaude *et al*., 2003; ABIM, 2002; Frader *et al*., 1989). Actually yet with all scientific development many diseases have no answer to their patient. Thus it is empathetic behaviour of physician gives 'comfort' to the patient beside doctors' high standard academic qualifications and clinical trainings. Therefore medical-doctors' primary responsibility is to ensure 'comfort' to their patient; relives regularly; and if possible 'cure' occasionally (Salam *et al*., 2008; Lloyd and Bor, 1996). Both the countries have higher number of female students. This is may be global trend. Bangladeshi (177.14) students' total mean score (Table 1) was significantly (p=0.044) higher than Malaysian medical students (175.50). Our study agrees with research conducted in east coast of USA reported core values of professionalism may vary widely with gender, study-year and socio-cultural background (Nath *et al*., 2008). Similar results observed (Table 2) irrespective of country as male (177.57) students significantly (p=0.026) higher than females (175.82). Although two Malaysian universities (UKM=175.92; UniSZA=174.27) situated more than four hundred kilometers away but there was no significant (p=0.176) differences between

total score (Table 3). This finding is in contrary to study done in USA (Nath *et al*., 2008). Among five Bangladeshi medical schools (Table 4) only significant (p=0.004) difference observed between EnMC (179.06) versus EaMC (173.98). There was significant differences observed between UniSZA versus EnMC (p=0.043) and EaMC versus EnMC (p=0.01) when compared among all 7 (Table 5) medical schools. Although there are plenty report published that environment has enormous influence for the development of professionalism especially in medical schools (Sullivan, 2005; Sullivan, 1999; Inui, 2003; Hafferty and Franks, ,1994; Cruess *et al.*, 2008; Freidson, 2001; Cohen, 2006; Fox, 2003; Hafferty, 1998). Our study not always coincides with mention research. This may be due to unique uptake system and unique state controlled curriculum of Bangladesh. Again there were no differences between UKM and UniSZA may be due to similar cultural and socioeconomic background.

Among Malaysian medical students 64% thought positive attitude and behaviour towards job is professionalism. But this figure is much lower (27%) in Bangladesh. Medical teachers must put emphasis here as good number students do not have clear understanding about professionalism. Researchers advised that faculty member must develop consensus among them to enhance professionalism to their students (Brown *et al*., 2009). Malaysian (23%) and Bangladeshi (13%) students thought that very low influence of role model to taught and learned. In contrary, earlier multiple researches recommended that professionalism is best learned by copying role model (Brown *et al*., 2009; Reynolds, 1994; Cruess *et* al., 2008; Salam *et al.*, 2010; Goldie *et al*., 2007; Côté and Leclère, 2000). Only 35% Malaysian and 27% Bangladeshi medical students felt that professionalism should be assessed formally (Table 6 and 7). This is a cross sectional study, thus it has its own limitations and just provides at a fixed point in time and relevant information is obtained about Malaysian and Bangladeshi medical students' view about professionalism. It is essential for medical faculty members to highlight the core issues of professionalism aiming to ensure effective health care system for the welfare of the society. Research on holistic aspects of medical professionalism among medical students of Malaysia and Bangladesh is reasonably important to ensure community oriented doctor. Therefore, they will be more holistic doctor for their country and also for the rest of the world. Thus, well-designed sponsored prospective study is suggested in this regard.

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