

Challenges and Prospects of Professionalism in the Private Medical Colleges of Bangladesh: A Study on Rangpur

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Abstract- The study attempts to investigate prospect of professionalism among private medical colleges of Bangladesh. In addition, the study concentrated on the resolve of general stream turn for the education, determination of time obligatory for learners to be directed and realize the professionalism of the students as well. Three private medical colleges from Rangpur City Corporation namely Rangpur Community Medical College, Prime Medical College, Rangpur and Northern (Pvt.) Medical College, Rangpur were purposively selected for the research. Altogether one hundred and fifty samples were collected from the students of different years and education standard of each sample was drawn. The collected samples were verified for education by means of research methodology. Moreover, the professionalism of the students was assessed through formal and casual survey. There null hypothetical associations were tested with comparing results among variables. There was a range of report under each professional quality distinguished. The factors representing mean value of the professionalism of the participants as a whole. In result, medical students practice professionalism in their educational institutions. The governing bodies of the institutions are also aware about the education pattern and professional standard of their educational institutions. For the future advancement in their professional career, they should emphasis on the essential features of professionalism more in terms of promoting professional characteristics of sustainable future medical experts. Hence, there will be more community oriented holistic medical doctors in Bangladesh having extensive knowledge of science and technology and can deal with any crisis. They will ensure the good ensure of the general people of the country on the basis of science and humanity but not biased information.

Index Terms- Professionalism, education, government initiatives, patients, service etc.

I. INTRODUCTION

Professionalism means collaborative effectively and appropriately and always finding ways to be more productive. Employers want new employees to be responsible, ethical and job-oriented, and to have strong communication, interpersonal and problem solving skills. In this context, an investigation has been done on the medical students and exploring their perception of professionalism. All medical colleges from the Rangpur City Corporation were not selected. There is a survey was conducted on three medical colleges namely Rangpur Medical College, Prime Medical college and Northern (Pvt.) Medical College located in Rangpur City.

II. OBJECTIVES OF THE STUDY

The main objective is to study about the medical education system in Bangladesh.

For achieving the general goal of the study the following specific objectives have been signified:

- to inspect the admission systems of the three private medical colleges in Rangpur and to maintain the standards by the government of Bangladesh;
- to determine the education pattern of the three private medical colleges in Ranpur;

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- to define the time required for a student to get fully educated in MBBS;
- to study the professionalism achieved by the students after course completion; and
- to explore the challenges and future potentials in the field of medical professionalism.

III. METHODOLOGY

The study population was all from Year-I, Year-II, Year-III, Year-IV and Year-V medical students of academic session 2012~13 to 2017~18 at Rangpur Community Medical College, Prime Medical College, Rangpur and Northern (Pvt.) Medical College, Rangpur. The sample size comprised 150 current medical students. The 50 students were from Rangpur Community Medical College, 50 students were from Prime Medical College, Rangpur and 50 students were from Northern (Pvt.) Medical College, Rangpur. Rangpur Community Medical College and Northern (Pvt.) Medical College, Rangpur is situated at Medical East Area, Rangpur City Corporation and Prime Medical College, Rangpur is situated at Badarganj Road, Rangpur City Corporation. All types of medical studies are controlled under the strict supervision of the MHFW, Government of Bangladesh and BMDC. Convenient sampling technique has been applied. The period of study was from opening of February 2019. Under each professional attribute was a range of statements of that were measured by a 5-point Likert Scale. The mean (average) of all thirty features represents the professionalism of the respondents as a whole. Data were then compiled and analyzed using SPSS. The independent Chi-Square Test, Cross Tables and Correlation Analysis are measured by this software. Null Hypotheses are (from $H_{01} - H_{030}$) showed the relationships in Table 3.

IV. LITERATURE REVIEW AND RESEARCH GAP

Bangladesh is the most densely populated nation state in the world. It is a solitary state and legislative democracy. Health and education ranks are comparatively low, although they have improved recently due to declining poverty levels. Most Bangladeshis make a living farming in rural areas. Bangladesh is meeting a number of main challenges, including poverty, corruption, over population and the risks of climate change. However, it has been praised by the worldwide civic for its progress in the Human Development Index. With per capita incomes like India and Pakistan, Bangladesh has gained significantly more in many indices than some of its neighbors (Adams et al, 2013). The joint donor Health, Population and Nutrition Sector Development Program (HPNSDP) has donated significantly to a number of health educators, including under-five humanity reduction, inoculation coverage, maternal mortality and total fecundity. The country has increased women's education, economic status and longevity. In spite of recent economic growth, poverty and pay inequality continue to be a challenge in Bangladesh. With demographic change, Bangladesh is undergoing health transformation and is doubling the burden of diseases responsible for the emergence of non-communicable diseases (Adkoli, 2006). Bangladeshi's healthcare system is a pluralistic system with four key actors defining the structure and functioning of the system: government, private sector, non-governmental organizations (NGOs) and donor organizations. The government or the public sector is the first major actor who, according to the constitution, is responsible not only for policies and regulations but also for the provision of comprehensive health services, including funding and employment of health workers. The Ministry of Health and Family Welfare manages the dual system of general health and family planning services through two hospitals, the Director General of Health Services (DGHS) and Family Planning (DGFP), the District Hospital, the Upazila Health Complex (with 10-50 beds). At subdivision level, union health and family welfare center at union level, and community clinic at ward level. In addition, the Ministry of Local Government, Rural Development and Cooperatives administer the provision of urban primary care services. However, due to inadequate allocation of resources, institutional constraints and absence or negligence of the providers, the quality of service in these facilities is quite low (Ahmed et al, 2005). Since 1976, the private sector and NGOs have set up a network of facilities to provide health and family arrangement services, to supplement the government's partial capacity and resources to provide elementary health facilities. The isolated sector which offers western and outdated (Unani and Ayurvedic) service through various facilities ranging from hospitals to clinics, laboratories and drug stores; and the informal sector, which consists mainly of untrained suppliers of Western, homeopathic and traditional (Kabiraj) medicines. Though, individual facilities are out of sorts regulated. The official sector is focused in urban areas, and the casual sector is a main benefactor in rustic areas (Ahmed and Hossain, 2007). In response to the poor quality of public services and their inability to reach the entire population, especially the poor, and a vibrant and large NGO sector as the "third sector" of the healthcare provider in Bangladesh. The role of NGO is growing because donors are reaching out to significant and growing amounts of funds directly to them. In 2007, 7.9% of total health expenditure was managed by NGOs, compared to 6% in 1997 (Ahmed & Chowdhury, 2009). According to the latest BNHA- Bangladesh National Health Accounts spends US \$ 16.20 every year on healthcare, of which 64% arises through out-of-pocket expenditures. Consistent with the WHO, Bangladesh presently employs about 26.70 billion a year on health. Public funding for health is the main repayment method, including danger pooling prospects, which institutes 26% of total health disbursement. Another main source of subsidy is worldwide development allies. Long-term budget

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expenditures of the MHFW indicate inadequacy in the consumption of properties detected in the public sector review of the health sector (Ahmed, Chowdhury & Bhuiya, 2011). Except concluded the public budget, prevailing funding organisms in Bangladesh discourse little of the pre-payment method (0.2% of total health expenditure), such as secluded or community started health insurance. A number of community initiatives exist to ensure low charge services, while a number of private coverage corporations afford individual and clutch insurance to individuals and communal clients. This wellbeing insurance inventiveness covers a very small portion of the total inhabitants (Ahmed and Islam, 2012). Constitutional health care, in principle, shelters all citizens with a range of services. But, every year many sick people are not cured in practice. In response to insufficient and substandard services in the civic sector, private enterprises have been taken since 1980. The rate of services in remote health facilities is unaffordable for many reasons. So, Bangladesh still has a long way to go to reach worldwide shape coverage (Alam et al, 2013). In the state-owned, the Central Medical Store (CMS) is responsible for the assembly and quantity of medical and clinical apparatus and products, including drugs. Many lower-level amenities, lack of elementary instruments such as clocks and heights-measuring measures. The supply of medicines is also inadequate and the supply chain is often interrupted. Alternatively, the private segment, particularly the only just evolving high-value hospitals and clinics in municipal areas, have all the foremost public- of- the-art investigative tools and services (Alam, 2014). As revealed by an estimated 62% of medical doctors working in the private sector in sector in 2013, the involvement of health workers in the private sector has increased year by year. The formal health workforce (doctors, dentists, nurses) is mostly concentrated. In the urban areas there is a variation among the services. Retention and absence are the major problems in rural areas (Alam et al, 2011).¹⁰ The nation has a large number of healthcare cadres or medical workers in the casual sector. These include semi-qualified allopathic benefactors (such as community health workers, medical assistants, trained midwives), unqualified allopathic providers (drug store retailers, rural doctors etc.), traditional healers (Ayurvedic, Unani and homeopathic practitioners) and practitioners of homeopathic medicines. Financially drawbacks people use these medicines from the providers (Alamgir & Mahmud, 2006). Healthcare is provided in Bangladesh in both government and non-government sectors. In the public sector, the MHFW is the key support that provides public well-being services, together with health upgrade and anticipation services/ programs such as HIV, Malaria. These programs are supported by NIPH while health advancement is well thought-out by devoted branch of DGHS and DGFP (Ali, 2008).

Due to epidemics and demographic changes, Bangladesh is facing a double burden of infectious and non-communicable diseases, including the emergence and re-emergence of other diseases. Moreover, with the recent developments in the garment industry, the focus is one the occupational health and safety of the garment workers. Public health programs need to be reconsidered and reformed to successfully address developing challenges (Ali & Parvin, 2010). Bangladesh has prepared substantial growth in the development of its domestic medication sector through the overview of National Drug Policy (NDP) in 1982. Domestic companies currently supply 75% of the total pharmaceutical sales and the export market is expanding to develop (AMRC, 2013). Latest health improvements in Bangladesh instigated in 1987 with the Health and Population Sector Strategy (HPSS) established by the supervision and contributors. This approach maintained a figure of official and authority reforms, mainly the transition from a project base to an integrated sectoral program (Amzad, 2013). Other key reforms include: setting up community clinics for residential visit replacement; their extraction when attention of major packages is reduced, and their restoration with the housing program by the new regime; the integration of DGHS and DGFP in 2000, and following re-separation in the face lowly performance of DGFP executives; efforts to decentralize health services at the upaliza level, albeit with limited vested authority; and the current MHVP-Maternal Health Voucher Project (Applebaum, 2006). During the 20-year execution period, the tactic aims to reduce out-of-pocket expenditures from 64% to 32% of overall health outlay, intensification government expenses from 26% to 30% , and upturn social security by less than 1%, 32% and reliance on outdoor funds has been reduced from 8% to 5% (Arfina, 2005).

The purposes set out in the 2011 National Health Policy are: (i) to reinforce primary health and substitute care for all, (ii) to expand the accessibility of client-centric, equity-centric and quality healthcare services, and (iii) to motivate people based on their right to health. Though tentatively all Bangladeshi people have the right to right of entry healthcare as obligatory, less government outlay in public conveniences, some consumer concerns and expenditures for treatments, and higher use of the private area have begun in significant dissimilarities an entrance to services. Prevailing improvements such as community clinics and maternity care vouchers only provide access to incomplete services, while the health assurance offer for workers in the formal sector will not discourse the mainstream of those engaged in the casual and rural segments (Arifeen, 2005). The same trend was observed in terms of SES differential in the case of infant nutrition. Families in the lowest quintile were equitably more stunted (54% compared to 26% for the highest quintile family), skinny (50% compared to 21% for the highest quintile family) and lost (17% compared to 12% for the highest wealth quintile family) were assisted during deliver by a qualified physician or a medical-trained worker, compared to only 5% and 11% of the bottom affluence quintile family correspondingly (Demographic 2011) (Axon, 1994). The quality of care in both public and private services is poor, with little evaluation of provider quality of care, low level of professional knowledge and poor application (BBS, 2000). Bangladesh has set a great example of achieving good health at very low cost

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and has been proposed as a role model for other developing countries in the region. Although health benefits have been credited to the MHFW, the improvement of other agencies related to community health has catalyzed the achievement of the government's overall health program (BBS, 2007). Bringing together massive comfortable health teams outside the administration allopathic system could be an operative approach to strengthen manpower in the field of health, specifically in distant and remote zones of the nation and to achieve worldwide health treatment (BBS, 2011). The earlier studies were focused on the different medicines providers in various locations of the country. The present study has given the attention on the professionalism and its challenges and prospect in the context of medical colleges.

Table 1: Demographic Profile of the Respondents

Variables	Particulars	Freq. (%)
1. Name of the Medical Colleges	Rangpur Community Medical College	50 (33.3%)
	Prime Medical College, Rangpur	50 (33.3%)
	Northern (Pvt.) Medical College, Rangpur	50 (33.3%)
2. Year of Study	1st Year	28 (18.7%)
	2nd Year	33 (22%)
	3rd Year	33 (22%)
	4th Year	31 (20.7%)
	5th Year	25 (16.7%)
3. Home Location of the Respondents	North of Bangladesh	47 (31.3%)
	South of Bangladesh	26 (17.3%)
	East of Bangladesh	27 (18%)
	West of Bangladesh	33 (22%)
	Out of Bangladesh	17 (11.3%)
4. Admission Procedure in Selected Medical Colleges	No admission test	01 (0.7%)
	Few by admission test, mostly random	02 (1.3%)
	Some by admission test, some randomly chosen	06 (4%)
	Most by admission test, few randomly	51 (34%)
	All by complete admission test	90 (60%)
5. Enrollment of Selected Medical Colleges	According to merit list of admission test	98 (65.3%)
	Merit list followed but little irregularity	39 (26%)
	Both merit list and irregularity	09 (6%)
	Mostly irregularity but following merit list	02 (1.3%)
	Fully irregular and not according to merit list of admission test	02 (1.3%)
6. Male and Female Ratio of the Respondents	Male 30 : Female 70	07 (4.7%)
	Male 40 : Female 60	81 (54%)
	Male 50 : Female 50	51 (34%)
	Male 60 : Female 40	08 (5.3%)

	Male 70 : Female 30	03 (2%)
7. Percentage of Classes Held	0% ~ 20%	01 (0.7%)
	21% ~ 40%	05 (3.3%)
	41% ~ 60%	21 (14%)
	61% ~ 80%	36 (24%)
	81% ~ 100%	87 (58%)
8. Regularity of Class Students in attending the Classes	Fully irregular	03 (2%)
	Irregular mostly but sometimes regular	07 (4.7%)
	Some are regular some are irregular	25 (16.7%)
	Regular mostly but a few absence	43 (28.7%)
	Fully regular	72 (48%)
9. Overall Marks Got by Students in the Examinations	0 ~ 20	06 (4%)
	21 ~ 40	27 (18%)
	41 ~ 60	36 (24%)
	61 ~ 80	80 (53.3%)
	81 ~ 100	01 (0.7%)
10. Satisfaction Level of the Students in Education Systems	Unsatisfactory	03 (2%)
	Mostly unsatisfactory	05 (3.%)
	Both satisfactory and unsatisfactory in different cases	10 (6.7%)
	Mostly satisfactory	31 (20.7%)
	Satisfactory	101 (67.3%)
11. Business Policy of the Authority Concerned in Medical Colleges	Profit maximization	13 (8.7%)
	Mainly profit maximization but some wealth maximization is seen	22 (14.7%)
	Both profit and wealth maximization	35 (23.3%)
	Mainly wealth maximization but a bit of profit maximization	41 (27.3%)
	Wealth maximization	39 (26%)
12. Particular Classes Held	0 ~ 50	04 (2.7%)
	51 ~ 100	10 (6.7%)
	101 ~ 150	83 (55.3%)
	151 ~ 200	45 (30%)
	More than 200	08 (5.3%)
13. Number of Teachers	0 ~ 25	03 (2%)
	26 ~ 50	62 (41.3%)
	51 ~ 75	57 (38%)
	76 ~ 100	25 (16.7%)
	More than 100	03 (2%)
14. Number of Patients	0 ~ 100	07 (4.7%)
	101 ~ 200	52 (34.7%)
	201 ~ 300	63 (42%)
	301 ~ 400	21 (14%)
	More than 400	07 (4.7%)
15. Patients Management	Minimum supervision	03 (2%)
	More than minimum but below normal	18 (12%)
	As usual super vision	33 (22%)
	Good but not too high	61 (40.7%)
	Constant supervision	35 (23.3%)
16. Patients' Satisfaction Level	Not satisfied	07 (4.7%)
	Little satisfied	18 (12%)
	Well satisfied	45 (30%)
	More than satisfied	44 (29.3%)
	Highly satisfied	36 (24%)
17. Timely Classes Held	Never	01 (0.7%)
	Rarely	03 (2%)
	Sometimes	06 (4%)
	Mostly	75 (50%)

	Always	65 (43.3%)
18. Hostel Facility	Very bad	04 (2.7%)
	Bad	19 (12.7%)
	Medium	54 (36%)
	Good	63 (42%)
	Very good	10 (6.7%)
19. Transport Facility Provided to the Students	Very bad	20 (13.3%)
	Bad	24 (16%)
	Medium	32 (21.3%)
	Good	52 (34.7%)
20. Food Facility Provided to the Students	Very bad	16 (10.7%)
	Bad	21 (14%)
	Medium	43 (28.7%)
	Good	39 (26%)
21. Library Facility	Very bad	05 (3.3%)
	Bad	09 (6%)
	Medium	25 (16.7%)
	Good	70 (46.7%)
22. Cost of Admission in Colleges	Very good	41 (27.3%)
	Less than 10 lacs BDT	03 (2%)
	11 ~ 15 lacs BDT	16 (10.7%)
	16 ~ 20 lacs BDT	80 (53.3%)
23. Benefit from Admission Cost	21 ~ 25 lacs BDT	32 (21.3%)
	More than 25 lacs BDT	19 (12.7%)
	Not benefitted	03 (2%)
	Little benefitted	05 (3.3%)
24. Human Resources Supplied	Partially benefitted	18 (12%)
	Mostly benefitted	46 (30.7%)
	Fully benefitted	78 (52%)
	Less than 50 persons	03 (2%)
25. Development of Medical Colleges	51 ~ 100 persons	15 (10%)
	101 ~ 150 persons	38 (25.3%)
	151 ~ 200 persons	52 (34.7%)
	More than 200 persons	42 (28%)
26. Extra-Curricular Activities	Very low	04 (2.7%)
	Low	11 (7.3%)
	Medium	45 (30%)
	High	53 (35.3%)
27. Quality of Internship	Very high	37 (24.7%)
	No activity	02 (1.3%)
	Few activities	47 (31.3%)
	Medium in number	57 (38%)
28. Awareness of Governing Body	More than normal	28 (18.7%)
	Very much in number	16 (10.7%)
	Fully unsatisfactory	06 (4%)
	Unsatisfactory	13 (8.7%)
29. Difference between Private and Public Medical	Average satisfaction	22 (14.7%)
	Satisfactory	49 (32.7%)
	Fully satisfactory	60 (40%)
	Completely aware	31 (20.7%)
	Partially aware	36 (24%)
	Average awareness	46 (30.7%)
	Partially unaware	22 (14.7%)
	Completely unaware	15 (10%)
	A lot of differences	52 (34.7%)
	Many of differences	48 (32%)

Colleges	Some differences	25 (16.7%)
	Little difference	18 (12%)
	No difference	07 (4.7%)
30. Perception of Professionalism	Improvement of theoretical knowledge	13 (8.7%)
	Improvement of practical techniques	13 (8.7%)
	Improvement of team working skills	32 (21.3%)
	Improvement of communication system	15 (10%)
	Everything is improving continuously	77 (51.3%)

Source: Field Survey

V. RESULTS, FINDINGS AND DISCUSSION

Brief 1: In Table 1 the 150 numbers of respondents were chosen from three renowned medical colleges of Rangpur namely Rangpur Community Medical College, Prime Medical College, Rangpur and Northern (Pvt.) Medical College, Rangpur. For avoiding the bias the average number of respondents in each medical college were equal as 50. **Brief 2:** The respondents were selected from different years ranging from 1st year to 5th year randomly. Here, responds of 2nd, 3rd and 4th year students are slightly higher as because they are just at the middle of their course. Being not so new and not too old, they were confident to response. **Brief 3:** Maximum respondents were from north of Bangladesh as because they get more transport and communication facility with their family. There are also some foreigners in a few. They are from Nepal, Maldives, Bhutan and India. **Brief 4:** According to the respondents, they got chance by complete fair admission test. A little number of respondents answered negatively as because they were chosen from different quotas and through liaison. **Brief 5:** The enrollment procedure of the selected private medical colleges was described almost according to merit list of the medical admission test. Very less amount of irregularity is seen by them as because all the students were not admitted at the same time of the session. Few were admitted while session has already started. **Brief 6:** Most of the respondents told about the male female ratio as it is 10%~20% higher in female. They think that due to furthermore admission chance in engineering and military, the male are less interested in medical science. Here some hidden social factors like arrange marriage of the females are also applicable. **Brief 7:** The respondents said that the classes are held according to medical curriculum most of the times. All the selected medicals strictly follow the rules and regulations prepared by Bangladesh Medical and Dental Council. **Brief 8:** All the respondents were not completely regular in attending class. Some of them having a little bit of absenteeism due to home sickness or other factors. **Brief 9:** As the pass marks of medical colleges is 60% in all subjects, most of the students carry out 61 to 80 percent marks. But a few were failed in one or two subjects. That's why their average marks gone below 60. **Brief 10:** Most of the students were highly satisfied by their education system. They think that the practical patient oriented procedure of their teaching is the most precious factor for their satisfaction. **Brief 11:** According to the respondents, the medical college authorities mainly focus on the wealth maximization with a little bit of profit maximization. Wealth maximization is necessary for them as because here is question for student admission every year and patient admission constantly. **Brief 12:** The practical classes which respondents get is adequate than the medical curriculum. This is the main factor of satisfaction for the medical students as well as their rate of success in examinations. **Brief 13:** The number of teachers is not adequate in the selected private medical colleges. The respondents think that the more opportunity of government job and fewer patients in private medical colleges are responsible for this phenomenon. Hence, the private medical teachers have to take more responsibility in maintaining the class curriculum. **Brief 14:** The total number of patients admitted into the private medical college hospitals is satisfactory according to their seat capacity. But the respondents think that facility of resident is too high but cost of treatment is much more than the government medical college hospitals. **Brief 15:** According to the respondents, the method of patient management in their hospitals is quite satisfactory. As there is less number of patients and manpower is supplied adequately, the supervision got by the patients is good. **Brief 16:** The satisfaction of patients in the selected medical college hospitals is satisfactory as the authority provides better residential quality and expert human resources. By the sides, doctors recruited in these medical colleges are experienced and dedicated for treatment. **Brief 17:** According to the respondents, their teachers are very much punctual about their class time. All the classes held timely in the selected medical colleges. **Brief 18:** The hostel facility that is provided to the respondents is good according to their opinion. Though the cost of living is a little bit high, but almost all of them they are satisfied by the residential allocation. **Brief 19:** The respondents showed mixed reaction about the transport facility of their respected medical college. One of the three private medical colleges does not have their own bus service. That's why the result came out as a mixed one. **Brief 20:** The food facility of the respondents is medium in comparison to other private universities. As some of the hostels have no dining facility of their own, that's why the students have to depend on the local food suppliers. They are not as good as dining foods. **Brief 21:** The library facility of the selected medical colleges is very good according to the respondents. All three private medical colleges have their own well decorated, furnished and rich library having nice sitting arrangement and wifi facility for the students and the teachers separately. **Brief 22:** The cost of

admission of the selected medical colleges are near about 16~20 lacs in BDT. Some students were admitted in less than 10 lacs as because of the poor meritorious quota. Some students have to pay more than 25 lacs BDT as they followed some broker service or got admitted after the session has expired. **Brief 24:** The students told that they are satisfied by the amount they given while admission. As because they have calculated the return through income when they will be professional physicians. **Brief 24:** The human resources supplied for the education of the students is near about 150~200 persons from 1st year to 5th year. It is adequate enough for the maintaining quality of the education according to medical curriculum. **Brief 25:** The speed of development of the respective medical colleges of the respondents is good enough as an educational institute. They think that not so slow and not so fast speed of development is required for their education. **Brief 26:** The extra-curricular activity which is done by the respondents is medium in number as they voted. They think that they find a little time in between their study. What they do besides their study is enough for them as a medical professional. **Brief 27:** The respondents are satisfied with their internship quality. Although some of them showed negative reaction in comparison to government medical colleges, but according to their hospital patient capacity, they get good number of patients. **Brief 28:** The students told various opinions about the awareness of their governing body. On an average, the result showed that they are aware about their students and maintaining quality of medical education. **Brief 29:** In this point of survey, the students showed negative opinions as they think that there are a lot of differences between government and private medical colleges. This needs further investigation for surveillance. **Brief 30:** The respondents think that their perception of professionalism is good enough for being a medical physician in future. Most of them told that everything of their medical colleges is improving continuously.

Table 2: Mean, Standard Deviation (S.D) and Variance of the Variables

SL	Variables	Range	Mean	S.D	Variance	
1	Medical colleges	2	3.00	.067	.819	.671
2	Year of study	4	2.95	.111	1.360	1.849
3	Home location	4	2.65	.115	1.410	1.988
4	Admission test	4	4.51	.057	.702	.493
5	Enrollment	4	1.47	.064	.783	.613
6	Male female ratio	4	2.46	.062	.756	.572
7	Percentage of classes	4	4.35	.073	.891	.794
8	Regularity in attending class	4	4.16	.081	.997	.994
9	Overall marks in examinations	4	3.29	.074	.907	.823
10	Satisfaction of education System	4	4.48	.074	.910	.828
11	Policy of Authority	4	3.47	.103	1.262	1.593
12	Number of Practical Class	4	3.29	.064	.780	.609
13	Number of Teachers	4	2.75	.068	.827	.684
14	Number of Patients	4	2.79	.074	.907	.823
15	Patient management	4	3.71	.083	1.019	1.038
16	Patient satisfaction	4	3.56	.091	1.120	1.255
17	Class timing	4	4.33	.058	.711	.506
18	Hostel facility	4	3.37	.072	.886	.786
19	Transport facility	4	3.21	.103	1.262	1.592
20	Food facility	4	3.32	.102	1.250	1.561
21	Library facility	4	3.89	.081	.987	.974
22	Admission cost	4	3.32	.073	.900	.810
23	Benefit from cost	4	4.27	.077	.940	.885
24	Human resource supplied	4	3.77	.084	1.032	1.066
25	Development of College	4	3.72	.082	1.004	1.008
26	Extra-curricular activities	4	3.06	.081	.991	.983
27	Internship quality	4	3.96	.092	1.123	1.260
28	Awareness of Governing Body	4	2.69	.101	1.237	1.529

29	Difference between private and government medicals	4	2.20	.096	1.176	1.383
30	Perception of Professionalism	4	3.87	.111	1.359	1.848

The **Table 2** indicates the mean, standard deviation and range of the factors whereas perception of medical professionalism is good enough for the learners in future.

Table 3: Summary of Chi-Square Tests and Results of the Relationships

SL	Medical Colleges with Variables	X ² (Calculated Value @ 5% LS)	X ² (Tabulated Value @ df 8)	Relationship	Decision (Null Hypothesis)
1~2	Year of study	12.938	15.507	CV<TV	Accepted
1~3	Home location	5.218	15.507	CV<TV	Accepted
1~4	Admission test	7.184	15.507	CV<TV	Accepted
1~5	Enrollment	7.621	15.507	CV<TV	Accepted

1~6	Male female ratio	3.713	15.507	CV<TV	Accepted
1~7	Percentage of classes	9.098	15.507	CV<TV	Accepted
1~8	Regularity in attending class	2.940	15.507	CV<TV	Accepted
1~9	Overall marks in examinations	10.797	15.507	CV<TV	Accepted
1~10	Satisfaction of education System	2.747	15.507	CV<TV	Accepted
1~11	Policy of Authority	4.890	15.507	CV<TV	Accepted
1~12	Number of Practical Class	16.539	15.507	CV>TV	Rejected
1~13	Number of Teachers	12.631	15.507	CV<TV	Accepted
1~14	Number of Patients	34.886	15.507	CV>TV	Rejected
1~15	Patient management	21.722	15.507	CV>TV	Rejected
1~16	Patient satisfaction	53.049	15.507	CV>TV	Rejected
1~17	Class timing	17.129	15.507	CV>TV	Rejected
1~18	Hostel facility	5.054	15.507	CV<TV	Accepted
1~19	Transport facility	13.357	15.507	CV<TV	Accepted
1~20	Food facility	9.008	15.507	CV<TV	Accepted
1~21	Library facility	14.077	15.507	CV<TV	Accepted
1~22	Admission cost	8.737	15.507	CV<TV	Accepted
1~23	Benefit from cost	6.038	15.507	CV<TV	Accepted
1~24	Human resource supplied	61.232	15.507	CV>TV	Rejected
1~25	Development of College	16.494	15.507	CV>TV	Rejected
1~26	Extra-curricular activities	5.936	15.507	CV<TV	Accepted
1~27	Internship quality	9.084	15.507	CV<TV	Accepted
1~28	Awareness of Governing Body	10.154	15.507	CV<TV	Accepted
1~29	Difference between private and government medicals	3.141	15.507	CV<TV	Accepted
1~30	Perception of Professionalism	9.593	15.507	CV<TV	Accepted

Chi-Square Test Results and Null Hypotheses Relationships (from Table 3)

H₀₁: Since, the table value at 5% level of significance and degree of freedom (df) 8, is 15.507 and the calculated value is 12.938. That means; calculated value < tabulated value. That's why, null hypothesis (1~2) is accepted. Therefore, there is no relationship between medical college and year of study. **H₀₂:** Since, the table value at 5% level of significance df 8, is 15.507 and the calculated value is 5.218. Here, calculated value < tabulated value. Thus, there is no relationship between medical college and home location. **H₀₃:** Since, the table value is 15.507 and calculated value is 7.184. Thus, there is no relationship between medical college and admission test. **H₀₄:** Since, table value is 15.507 and the calculated value is 7.621. Therefore, there is no relationship between medical college and enrollment. **H₀₅:** Since, table value is 15.507 and the calculated value is 3.713. Hence, there is no relationship between medical college and male female ratio. **H₀₆:** Since, table value is 15.507 and calculated value is 9.098. So, calculated value < tabulated value. Thus, there is no relationship between medical college and percentage of classes. **H₀₇:** Since, table value is 5.507 and the calculated value is 2.940. Therefore, there is no relationship between medical college and regularity in attending class. **H₀₈:** Since, table value 15.507 and calculated value is 10.797. Therefore, there is no relationship between medical college and overall marks in examination. **H₀₉:** Since, table value is 15.507 and the calculated value is 2.747, i.e., calculated value < tabulated value. Therefore, there is no relationship between medical college and satisfaction of education system. **H₀₁₀** Since, table value is 15.507 and calculated value is 4.890 meaning that calculated value < tabulated value. Therefore, there is no relationship between medical college and policy of authority. **H₀₁₁:** Since, table value is 15.507 and calculated value is 16.539. Therefore, there is relationship between medical college and number of practical classes. **H₀₁₂:** Since, table value is 15.507 and calculated value is 12.631, i.e., calculated value < tabulated value. Therefore, there is no relationship between medical college and number of teachers. **H₀₁₃:** Since, table value, is 15.507 and the calculated value is 34.886. That's why, null hypothesis (1~14) is rejected. Consequently, there is relationship between medical college and number of patients. **H₀₁₄:** Since, table value 15.507 and calculated value is 21.722, i.e., calculated value > tabulated value Hence, there is relationship between medical college and patient management. **H₀₁₅:** Since, table value and calculated values are 15.507 and 53.049 respectively. Therefore, there is relationship between medical college and patient satisfaction. **H₀₁₆:** Since, table value is 15.507 and the calculated value is 17.129. Consequently, there is relationship between medical college and class timing. **H₀₁₇:** Since, the table value is 15.507 and the calculated value is 5.054. Therefore, there is no relationship between medical college and hostel facility. **H₀₁₈:** Since, the table value is 15.507 and calculated value is 13.357. Therefore, there is no relationship between medical college and transport facility. **H₀₂₀:** Since, the table value

is 15.507 and calculated value is 9.008. Thus, there is no relationship between medical college and food facility. H_{021} : Since, the table value is 15.507 and calculated value is 14.007. Therefore, there is no relationship between medical college and library facility. H_{022} : Since, the table value is 15.507 and calculated value is 8.737. Consequently, there is no relationship between medical college and admission cost. H_{023} : Since, the table value is 15.507 and calculated value is 6.038. i.e., calculated value < tabulated value. Therefore, there is no relationship between medical college and benefit from cost. H_{024} : Since, the table value is 15.507 and the calculated value is 61.232. Therefore, there is relationship between medical college and human resource supplied. H_{025} : Since, the table value is 15.507 and the calculated value is 16.494, therefore, there is relationship between medical college and development of college. H_{026} : Found that the table value is 15.507 and the calculated value is 5.936. The null hypothesis (1~26) is accepted. Therefore, there is no relationship between medical college and extra-curricular activities. H_{027} : The table value is 15.507 and the calculated value is 9.084, so, calculated value < tabulated value. Therefore, there is no relationship between medical college and internship quality. H_{028} : The table value is 15.507 and the calculated value is 10.154. Therefore, there is no relationship between medical college and governing body. H_{029} : The table value is 15.507 and the calculated value is 3.141, i.e., calculated value < tabulated value. Therefore, there is no relationship between medical college and difference between government and private medical colleges. H_{030} : The table value at 5% level of significance and df 8, is 15.507 and the calculated value is 9.593. Here, calculated value < tabulated value. That's why, null hypothesis (1~30) is accepted. Consequently, there is no relationship between medical college and perception of professionalism. It may establish (Table 3) that there are connections among the variables number of patients, patients management, satisfaction level, class timing and human resources supplied. And no relationships found among year of study, home location of the students, admission test, enrollment, gender ratio, percentage of classes, regularity in attending the class, getting marks in the examinations, authority policy, number of teachers, hostel, transport, food, library facility, awareness of governing body, extra-curricular activities, internship, private and government medical colleges, and perception regarding professionalism.

VI. KEY FINDINGS, CHALLENGES, AND FUTURE PROSPECTS

A number of critical and sensitive subject areas, such as ethics, occupational health and safety, and the doctor-patient relationship, are taught in the 3rd year when they should have been addressed in the 3rd year. In addition, medical science is a multifaceted discourse with tremendous potential that is prone to radical changes, given that it is dynamic in nature. But sadly, the labs in medical colleges are often found to be impractical, focusing on the bookish knowledge of students to the point that they are becoming relegated to cramming. Another drawback for the recently graduated doctors is that they are absolutely deprived of hands-on training. This accounts to be a crucial factor that limits a doctor's potential to a lower parameter. As opposed to this, doctors in our neighboring country, India, receive rigorous medical training and possess many technical advantages. Identifying the training adequacy for a particular set of health professionals implies the importance of the health organization as a significant body belonging to a coherent organization. The interrelations need to be articulated particularly according to training or vocational identities to create a diversity of the health system. Thus, the planning of training becomes a challenge since it has to be coordinated between different professionals and integrated into the plans of the health-related bodies. Educated people are more likely to know about health and health risks, improving their literacy and comprehension of issues that are critical to their well-being. Health education campaigns are more effective when they are tailored to educate more educated populations. In addition to learning more about health and making healthier lifestyle choices, education can lead to better skills and greater self-advocacy. Financial support is one the remaining challenges. Bangladesh should take lessons from countries with similar levels of informality and low government funding to develop its own strategy. Policymakers will also be able to use implementation and operations research to help guide their decisions. Considering the irrefutable facts that better health accelerates inclusive growth, enlightened leadership must acknowledge health as a source of employment. Implementation of online healthcare in Bangladesh entails developing a network of technologies that enable individuals to securely connect and exchange their health information with a network of approved health providers. It is increasingly providing tools and information to help people better understand and manage their health. Bangladesh has devised a strategic plan to enhance this industry, which is critical to the country's economy.

VII. CONCLUSION

It can be concluded that the healthcare sector's willingness to embrace digital transformation is inconsistent. In this context, service providers must create a high-quality ICT-based health service that is accessible and widely available across the country. This study does have some limitations such as data collection, dissimilarity of perceptions of respondents etc. However, this effort will be fruitful and effective for the policy makers, administration, learners as well as health sector of Bangladesh.

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