

An Exploratory Study on the Adequacy of Internship Program Duration in Medical Colleges of Bangladesh

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Abstract

The internship period provides the first level of postgraduate medical training and serves as one of the fundamental strides in every doctor's career. An inadequate internship program in terms of duration, skills and quality may pose serious concerns on the overall healthcare sector. Hence, the aim of this study was to explore the adequacy of the duration of internship program in medical colleges of Bangladesh. Till date, any significant study has not been reported to address the issue. A cross-sectional descriptive study with pre-tested self-administered questionnaires was performed. The study was carried out in 8 medical colleges (4 public and 4 non-government; 4 inside Dhaka and 4 outside). 300 completed questionnaires (250 interns, 50 supervisors) were statistically analyzed with SPSSv20 software. Majority of the interns and teachers voiced that the current duration of One-year Internship Program was inadequate and they further suggested that the duration can be revised to at least a year and half. Further opinions were put forward to modify the community placement duration period from two weeks to at least three weeks as the current duration was also deficient. These findings thus can help the policy makers, medical practitioners and academicians to review the current structure and duration of the internship program in medical colleges of Bangladesh for the betterment of the undergraduate medical education as well as the overall healthcare system.

Keywords: *Internship Duration, Community Placement, Healthcare, Upazilla Health Complex.*

Introduction

Internship is the training phase of a medical graduate wherein one is expected to perform actual healthcare practice and

attain proficiency under supervision so that one may become capable of functioning independently (Faculty of Medical Sciences, University of Delhi, 2008).

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Internship is a prerequisite for obtaining a license to practice. Generally, internship should be accomplished in tertiary level medical institutions having sufficient resources in terms of personnel, skills and

training opportunities so that the interns can develop their medical knowhow (DMCRI, 2014).

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Worldwide the structure of internship varies, but mostly all include minimum a year of practice and training.

In Bangladesh, after passing the Final Professional Bachelor of Medicine and Bachelor of Surgery (MBBS) Examination, medical students must enroll for One-year log book based rotatory internship program; specifically, 11 months and 15 days at medical college hospital and 15 days at Upazilla Health Complex (UHC). To avail permanent registration for practicing independently, completion of internship as designed by Bangladesh Medical and Dental Council (BM&DC) is a mandatory prerequisite (BM&DC, 2012).

An intern is posted on a rotation basis in all the clinical departments of the hospital that gives him/ her the basic skill set to work as a General Physician. Compulsory Rotatory Residential Internship in India is a One-year compulsory work in a medical college hospital (Medical Council of India, 2010). In Ireland, similar time frame is allocated for clinical service and training that is supported by a structured education and training program (Medical Council of Ireland, 2012). In addition, the General Medical Council (GMC) in the UK is the regulatory body that set a 2-year duration of internship program (Condon *et al.*, 2013). On the other hand, interns go through a 12-month period of internship in Israel (State of Israel, Ministry of Health, 2013). In contrast, internship is an 18-month period in the Republic of Iran at the end of the 7-year medical education (Couper, 2004). Furthermore, the internship duration varies from 1.5 years to 2 years in Brazil (Santos *et al.*, 2009). Moreover, in South Africa, an internship is a compulsory requirement in which a

recently qualified doctor works under expert supervision in a selected hospital for two years (Health Professions Council of South Africa, 2016).

An intern doctor builds up the expertise to address the patients, comprehend and handle the medical problems under direct supervision of the seniors. These invaluable experiences facilitate the intern to discover his/her field of interest to pursue in future (Dangol, 2008). Thus, the internship period plays a vital role in every doctor's life. Despite the importance, some interns neglect their duties intentionally. On the other hand, some interns are unfortunate enough due to lack of proper internship structure, resource and guidance (Giri & Parhar, 2012). If an intern doctor is unable to receive the training properly during the internship period, he/ she may fail to diagnose illnesses or conditions, fail to perform clinical examinations competently, fall short to prescribe correct medication, make mistakes during operations or other medical emergency or procedures such as cardiopulmonary resuscitation, acute respiratory failure, and shock etc. This might result in physical or psychological injury, damage, disability or impairment and even death. This in turn may drastically impact the overall healthcare system. Hence, proper and adequate training in terms of duration and skill is of utmost importance.

In this context, the exploration of the duration of the internship program in medical colleges of Bangladesh is a timely concern as inadequate internship program can have drastic impact on the overall healthcare sector. Hence, the study aimed to reveal the interns' and teachers' views and opinions about the duration of internship program and community placement at UHC covering medical colleges from in and outside of the Dhaka

city and public and non-government

Methodology

The study was a cross-sectional descriptive study. Study data were collected from 4 public medical colleges and 4 non-government medical colleges over a year. Out of total 8 medical colleges, 4 were from Dhaka city and 4 were from out of Dhaka city. Sample size was 250 intern doctors and 50 teachers. Data collection instruments were pre-tested self-administered semi-structured. Ethical clearance of this research was given by ethical review board of Centre for Medical Education. Necessary permission was taken from the concerned authority of the respective medical colleges to obtain views of teachers and interns. Additionally, voluntary participation of the

The distribution of respondents can be found in Table 1. The total number of respondents were 300 in which students and teachers were 250 and 50 respectively. Gender distribution was almost balanced

medical colleges.

questionnaires for both interns and teachers. Adequacy about internship duration and community placement duration related data were collected by using 2 point scale (1= Yes, 2= No). Collected data were analyzed using descriptive statistics (Mean, Standard Deviation) and statistical test (independent sample t- test). SPSS v20.0 software was used to analyze data.

teachers and interns were assured. Furthermore, total confidentiality and anonymity were ensured in presenting data in data analysis section. Moreover, individual teacher and intern identities were not used in analyzing data.

Results

as 48% were male respondents whereas 52% were female. Furthermore, more than 54% respondents belonged to public medical colleges and the rest were from private medical colleges.

Table 1: Distribution of respondents.

Respondent Type	Male n (%)	Female n (%)	Public n (%)	Non-Govt. n (%)	Total n (%)
Interns	122 (48.8)	128 (51.2)	128 (51.2)	122 (48.8)	250 (100)
Teachers	22 (44)	28 (56)	36 (72)	14 (28)	50 (100)
Total	144 (48)	156 (52)	164 (54.7)	136 (45.3)	300 (100)

Students and teachers were asked to opine about the adequacy of current internship program duration of one year. Majority of the interns (M =1.77, SD = 0.420) and teachers (M = 1.63, SD = 0.487) responded that one-year duration of internship program was not adequate. In addition, according to Table 2, $p > \alpha = 0.05$ which implies that there was no significant difference between interns' and teachers' responses, i.e., agreement in

responses about the adequacy of duration of internship training program (One year).

Table 2: Adequacy of duration of internship training program (Independent Samples Test).

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Do you feel that total time of internship training program (one year) is adequate?	Equal variances assumed	11.349	.001	2.074	285	.039	.140	.068	.007	.274
	Equal variances not assumed			1.880	63.496	.065	.140	.075	-.009	.290

Furthermore, interns and the teachers, who responded negatively about the adequacy of internship program, were asked to comment on the revision of the internship program duration. Figure 1 shows the views of interns and teachers about the modified internship duration. About 64%

interns and 53% teachers gave their opinion that the internship duration should be of one and a half year. The second majority (32.6% interns and 41.2% teachers) opined that the duration may be of two years. The other three groups were insignificant.

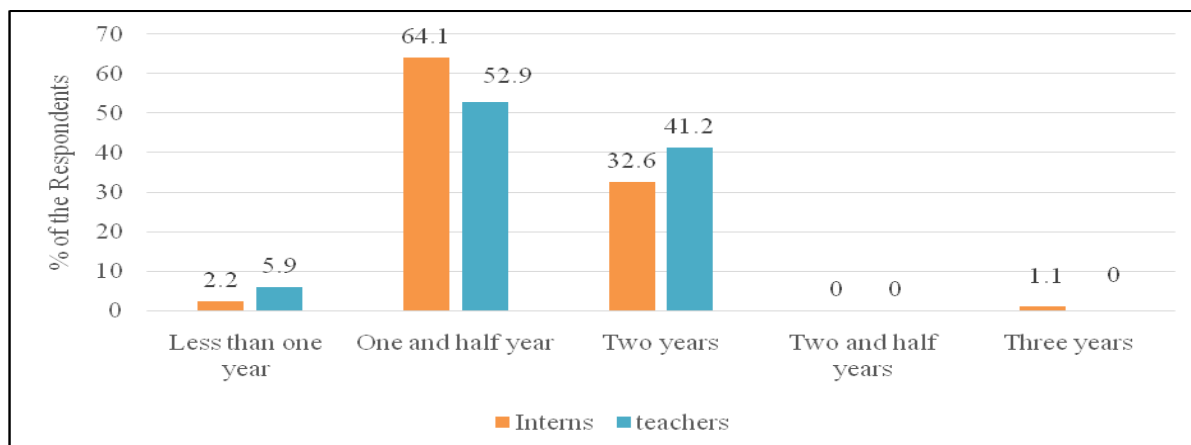


Figure 1: Views of interns and teachers about the revision of internship duration.

Additionally, teachers and interns were asked about the adequacy of two-week duration of community placement at UHC. Similar negative responses were found in this case also. Majority of the interns (M = 1.65, SD = 0.477) and teachers (M = 1.52, SD = 0.505) responded that two-week duration of community placement at UHC

was not sufficient. Besides, according to Table 3, $p > \alpha = 0.05$ which implies that there was no significant difference between interns' and teachers' responses, i.e., agreement in responses about the adequacy of duration of community placement (2 weeks).

Table 3: Adequacy of duration of community placement at UHC (Independent Samples Test).

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Do you think duration (2wks) of Community placement at UHC is sufficient for you?	Equal variances assumed	4.678	.031	1.722	279	.086	.132	.076	-.019	.282
	Equal variances not assumed			1.659	65.448	.102	.132	.079	-.027	.290

Moreover, interns and the teachers, who responded negatively, were further asked to opine about the change of duration of community placement at UHC. Figure 2 shows the responses of interns and teachers about the modified duration of community placement at UHC. About 60% interns opined that the duration should be more than two weeks but less than one month. The second and third

majority groups were one month and less than two weeks respectively. The rest were insignificant. On the contrary, about 47% doctors gave their opinion that the duration should be of one month. The second and third majority groups were more than two weeks but less than one month and less than two weeks respectively. The other groups were insignificant.

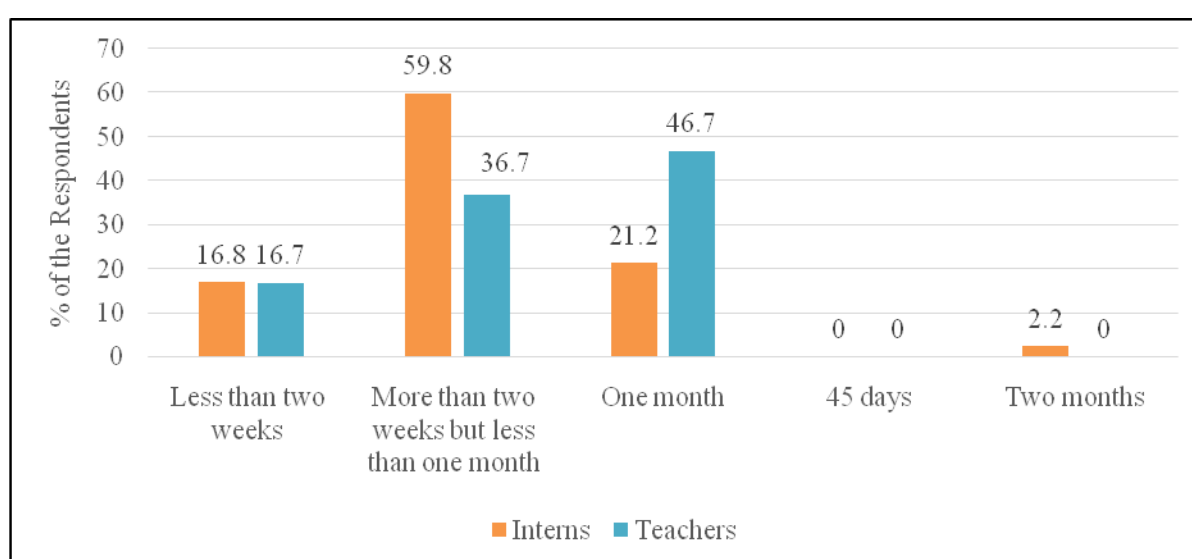


Figure 2: Responses of interns and teachers about the modified duration of Community Placement at UHC.

In this context, the teachers were called on to comment about the areas of improvement required in the current internship program. Table 4 shows the suggested areas of improvement in internship program by the teachers. The most crucial area was identified as the

assessment of trainees and an elaborate study regarding this aspect can be found in the works of Noman *et al.* (Noman *et al.*, 2017). The two other significant factors suggested by the teachers were the total duration of the internship program and the community placement duration at UHC.

Table 4: Suggested areas of improvement in internship program by teachers.

Areas of Improvement	Percentage (%)
Assessment of trainees	73.3%
Total duration (1 year)	40.0%
Community placement duration (2 weeks)	26.7%
OPD placement	20.0%
Hospital environment	20.0%

Discussions

According to the findings, the current internship program duration requires a change. Majority of the students and the teachers expressed that the current duration was insufficient for proper training in Table 2 and the teachers advised for a major change in internship duration for the betterment of internship program in Table 4. Both interns and

teachers opined that the duration of the internship can be increased from one year to at least one and half year as in Figure 1. This is worthwhile to mention that internship training program with duration more than 1 year is present in many other countries, such as the UK, Netherlands, Australia, New Zealand, Iran, Brazil, South Africa and Ghana (Condon *et al.*, 2013; Couper, 2004; Santos *et al.*, 2009).

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In addition, the current community placement duration at UHC needs modification also. Majority of the students and the teachers voiced their dissatisfaction about the deficient community placement duration at UHC in Table 3. Furthermore, teachers felt that a change in community placement at UHC can be a crucial factor to improve the overall internship program in Table 4. According to Figure 2, more than 80% students and teachers feel that it can be increased from two weeks to at least 3 weeks or a month. This is pertinent to mention that the community placement duration is about 2 months in internship program according to Medical Council of India (MGIMS, 2019). However, opinions were divided between students and teachers. Students were in favor of a relatively shorter duration of 3 weeks whereas teachers were in favor of a longer duration of one month. Lack of proper accommodation, meal facilities, transportation and security, especially for female interns were primary reasons for advocating shorter community placement durations by the intern students. Researchers Bailey and Pit reported similar issues like anxiety, fear of performance, lack of focused learning and collaboration opportunities faced by young doctors in rural community placements in their research work (Bailey & Pit, 2020).

Conclusion

Internship can be physically, intellectually and emotionally challenging as well as there are concerns in terms of training duration, skills, assessment etc. on the preparedness of medical graduates (Australian Medical Council, 2013; Prince *et al.*, 2005). In this context, this is probably the first research activity reporting the status of the internship program in medical colleges of Bangladesh in terms of duration. The study

revealed that the current duration of internship program was inadequate according to the majority of the interns and teachers. They further suggested that the duration can be revised from one year to at least a year and half which is in congruence with the practices in some of the most advanced countries. Further opinions were put forward to modify the community placement duration period at UHC from two weeks to at least three weeks as the current duration was insufficient. These findings thus can help the policy makers, medical practitioners and academicians to review the current structure and duration of the internship program in medical colleges of Bangladesh and enhance the internship program to a world-class level.

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