



A study regarding student satisfaction on medical graduate license examinations and career guiding sessions around the globe including the NEXT (National Exit Test) exam of India using qualitative and quantitative methods in a medical college of North Maharashtra, India

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ABSTRACT

Context:The National Medical Commission of India in the year 2019 recommended the National level licenses exam for medical graduates. Around the world similar exams are getting conducted. The students are usually aware of foreign license exams and their typology.

Aim:1. To assess student satisfaction after the career counselling session on medical license exams conducted across the globe.
2. To study the Knowledge, Attitude and Perceptions of students regarding the NEXT exam and USMLE (for USA).

Settings and Design:This mixed method study was conducted in a medical college of North Maharashtra.

Methods and Material:The Qualitative study was conducted using focus group discussions. Total 35 participants were present in the 5 focus groups. In the cross sectional survey randomly 164 MBBS students were enrolled.

Statistical analysis used:Descriptive analysis and Chi-square test was used. Content analysis was done for qualitative data.

Results:Lack of knowledge about the legalities, residency rotations, internship rotations for license exams poses a challenge to students. 44.6% participants think that a competency based medical education pattern will be enough to appear for the exam. A significant difference was obtained for NEXT exam difficulty level when compared with foreign medical license exams. ($P < 0.001$, $\chi^2 = 24.2$, $df = 4$). A significant difference was also noted when NEXT exam Marks distribution was compared with the NEXT exam pattern. ($P < 0.001$, $\chi^2 = 65.0$, $df = 4$).

Conclusions:The career guiding sessions on license exams including NEXT should be regularly conducted by Health Universities.

Keywords: NEXT Exam, Career Guiding Sessions, Mixed method study, License Exams, student satisfaction.

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INTRODUCTION

The National Medical Commission Act 2019 had asked to establish a common national level undergraduate medical examination that will replace the existing examinations for post-graduation in India.¹ This will be conducted as a licensing exam after the completion of phase 3 of medical undergraduate competency-based education (CBME). The NEXT exam is expected to commence in the year 2024.¹ All over the globe, to ensure the quality and minimum standards of education and medical practice various national license examinations are conducted. The medical license exam is an indicator of a competent medical graduate. It has been now agreed that it is important for students to have knowledge about the various license exams. Many medical colleges in India have started arranging career guidance sessions for national level examinations occurring in foreign countries.² Research on the performance of Indian medical graduates (IMG) in license examinations worldwide has provided statistically significant differences. Indian medical graduates face challenges of eligibility, competency, and lack of knowledge about the medicolegal environment and linguistic regulations. IMGs have been migrating to Western countries for better financial outcomes. In a few studies however, it has been observed that the examination passing rate has been affected due to lack of adequate career guiding sessions, lack of mentorship, and poor knowledge about the mandatory requirements before appearing for the examination itself. This results in a loss of academic and economic year for the students.^{3,4} We have planned this study to understand the importance of career guiding sessions and perceptions about the NEXT exam among the students of a medical college of North Maharashtra.

Aims-

1. To assess student satisfaction after the career counselling session on medical license exams conducted across the globe.
2. To study the Knowledge, Attitude and Perceptions of students regarding the NEXT exam and other exams.

Methodology

Study design: A Mixed method study.

Study tool – for cross-sectional survey a modified career guidance feedback form was utilized. For Focus Group Discussions semi-structured guidelines were utilized. Feedback forms as well as FGD guidelines were pilot tested on five students.

Study Setting: Medical College in Maharashtra

Sample size and Sampling: Sample size – 168. Considering the proportion of students who are satisfied with the counseling session to be 50% for the calculation of optimal sample size, at a 90% Confidence Interval, using Epi Info Statistical software version 7.2, the sample size was calculated as 168. A roll number-wise list of students was available at the department office. Systematic random sampling was done.

Five focus group discussions (FGD) were conducted in the demonstration room of community medicine after the permission from the institutional Dean and Head of the Department of Community Medicine. Total number of participants in FGD were 35. Two researchers participated in the FGD, they are MD (Community Medicine). Dual moderator led FGDs were conducted. They were trained in conducting FGDs with prior experience in conducting FGDs. Convenience sampling was done. Sampling was done till saturation is achieved, that is until no new information is generated.

Study duration: Present study was conducted between June 2023 to July 2023

Statistical Analysis: Descriptive data were summarized as frequency. Chi-square test was used as the test of significance for categorical variables. P value less than 0.05 was statistically significant. Content analysis was done for qualitative data.

Written Informed consent was taken before the study.

Results- A total of 35 students from all the phases of MBBS (1st phase to 3rd Phase) participated in five focus group discussions (Table 1). A total of 4 domains were identified. 7 subdomains and 27 core ideas were listed (Table 2).

Table 1: Distribution of participants for focus group discussion (n=35)

Groups	Phase of MBBS			Gender		Total number of sessions attended for Career Guidance and Medical exams	
	First	Second	Third	Male	Female	Less than or equal to 2	More than 2
Group 1	2	2	3	3	4	4	3
Group 2	2	3	2	4	3	4	3
Group 3	2	3	2	4	3	5	2
Group 4	2	3	2	4	3	5	2
Group 5	2	3	2	4	3	5	2
Total	10	14	11	19	16	23	12

Table 2: Frequency of the domains, subdomains and core ideas identified in FGDs (n=35)

Domain	Subdomain	Core idea	Frequency					Total frequency
			FG1	FG2	FG3	FG4	FG5	
Motivation to join specialty	Factors for choice of practice areas across globe	Rank-wise selection through counselling	1	0	0	3	1	Typical
		Subject fondness	2	3	1	2	2	General
		Glamour associated with field	1	2	1	2	1	General
Awareness of various license exams other than NEXT	Abroad practice	Financial prospects	3	2	3	2	3	General
		Wants to settle abroad	1	0	1	0	0	Variant
		Wants better income	3	2	2	2	2	General
		Wants to pursue advanced courses as post-graduation specialty	1	0	2	2	0	Typical
		Wants to gain	1	1	0	0	0	Variant

		experience for few years before practicing inland							
	Challenges of licensing exams	Absence of guiding mentor	3	3	2	2	2	2	General
		Financial limitations	4	4	4	4	4	4	General
		Different typology of exam in various countries	5	3	3	3	3	3	General
		Limited knowledge about the eligibility pattern	3	2	3	2	2	2	General
		Limited knowledge about the residency program	4	4	4	4	4	4	General
		Legislative requirements or actions	4	4	4	4	4	4	General
	Existing guidance sessions	Propaganda oriented agency discussion	3	5	5	5	5	5	General
		Limited options and guidance information through universities	4	3	4	5	5	5	General
		Parental and peer discussion	1	0	0	0	0	1	Variant
Awareness about the NEXT exam	Challenges	Poor understanding of syllabus and marks distribution	3	3	3	3	3	3	General
		Limited knowledge about the pattern of OSCE	4	5	5	4	4	4	General
		Assessment challenges	3	4	0	0	0	0	Variant
		Self-practice and assessment challenges	3	0	0	0	0	3	Variant
Career counselling program	Expectations from the program	Mentor necessity	4	4	4	5	5	3	General
		Peer connectivity	2	0	3	5	5	5	Typical

Contents and procedure	Suitability customized format	with	4	4	4	4	4	General
	Adequacy number of sessions	of	2	0	0	2	2	Typical
	Financial guidance		4	4	4	4	4	General
	Visa and legislative guidance	and	3	0	3	4	4	Typical
	Parental guardian involvement	and	3	4	4	4	4	General

FG- Focus Group, General - all groups (five) groups, Typical-More than half (three groups) of the total groups, Variant- Less than half (two or less) of the total groups

In the cross-sectional survey, 168 students participated, the mean age of participants was 21.14 ± 2.34 years. 84 (50%) were male and the rest 50% were female. Majority of students have attended at least one session on career guidance and the mean was 1.77 with S.D. of 0.922. The students rated the sessions as worth of time and the mean rating was 3.80 with SD of 0.988 (on Numeric Rating scale of 0 to 5) More than half 55.4% of students do not understand the NEXT exam typology. 27.4 % of students believe the NEXT exam's difficulty level will be hard. 31.0% of participants did not understand the marks distribution of the NEXT Exam. 35.7 % of participants were not sure if they must appear for NEXT exam or NEXT will be applicable from their batch.

29.8% of participants stated that the NEXT Exam assessment should be like the USMLE exam. More than one third of participants (44.6%) considered the current CBME education pattern to be enough for the NEXT exam. Around 60% of participants reported that NEXT will be similar or will follow the medical license exam pattern of foreign countries. More than half (54.2%) of participants were aware of USMLE as a medical license exam. Only 44% participants are aware of research requirements for medical license exams across the globe. Almost Half of participants (49.4%) are aware of mandatory internship requirements for medical license exams. 69.6% of participants are unaware of mandatory and compulsory residency programs for medical licenses in foreign countries. Nearly two third (65.55) participants do not have any legal information for the medical license exams.

Table 3 – Comparison of participants as per the difficulty level of NEXT exam and other exams

NEXT Exam difficulty level	NEXT and USMLE			Total
	NEXT is similar	NEXT will follow same pattern	NEXT is totally different	
Hard	26	9	11	46
Moderate	8	23	9	40
Easy	22	26	34	82
Total	56	58	54	168

$\chi^2 = 24.2, df=4, p < .001$

In our study we found a statistically significant

difference between the medical license exam



awareness and residency awareness for these exams ($P < 0.001$, $\chi^2 = 52.2$, $df = 4$). (Table 3) We also observed a statistically significant difference between medical license exams and legal knowledge about them ($P < 0.001$, $\chi^2 = 39.0$, $df = 4$). A significant difference was also obtained when the NEXT exam difficulty level was compared with other medical license exams. ($P < 0.001$, $\chi^2 = 24.2$, $df = 4$). A significant difference was also noted when NEXT exam Marks distribution was compared with the NEXT exam pattern. ($P < 0.001$, $\chi^2 = 65.0$, $df = 4$).

Discussion

The results obtained through qualitative and quantitative components of this study are important to establish the role of early exposure to counseling and guiding services. In our study, we observed that participants of FGD (Focus Group Discussion) had general agreement toward the subject fondness and better financial prospects to get the medical license exam. This also directs their choice of field for post-graduation. We observed that all the groups had a general agreement that there is a lack of mentorship and guidance programs for various license exams and careers abroad as medical graduates among the medical institutes. The current pattern of career guidance sessions in medical colleges is more propaganda oriented than helpful as the participant quoted.

"I do not feel my queries getting addressed by the speaker who is talking on the podium and telling me about the Canada medical license Exam. The speaker is either projecting about the agency which can help and all ...they are not talking about the concerns. I feel they are doing publicity for their agency I am not comfortable expressing my financial status and asking concerns in front of many people. I feel these sessions should be one on one to be more effective."

The other participant from FGD quoted **"The career guidance program should be through university and should be through mentor-mentee program rather than a third agency coming to institute and telling me about my options"**

The results of this study showed that there is a lack of knowledge about the structure, legalities, and typology of other medical license exams. These findings are similar to the results of study by Singh T

et al done in the year 2017.³ They reported that medical universities and medical institutes need to sensitise undergraduate medical students about the various medical license exams and medical courses for post-graduation and practice. The single license exam structure needs to be revised further and should be matched with the global standards of medical education.

A study done in Japan in the year 2010 by Tokuda Y et al. observed that the undergraduate educational environment condition was responsible for the choice of post-graduate courses.⁴ They reported that national medical license examination awareness was on a higher level and students were guided through career counselling sessions for its typology and assessment pattern. This resulted in a better pass rate among the students.

In our study, we obtained student ratings towards the session for its worthiness for their time. The mean rating was 3.80. This finding is similar to the study in Thailand by Attaphut J et al in the year 2020 with a mean of 3.93 and S.D. of 0.79.⁵ They reported a high level of satisfaction in career guidance sessions.⁵

A study done in 2014 by Swanson DB et al reported that the incorporation of clinical skill assessment should be uniformly implemented in the typology of the national license exam to ensure the competent graduate is created and hence assessment methods to be devised in a manner to cover all the domains of learning.⁶ This should be done by creating a nationwide exam after medical graduation.

In the year 2019, Mahajan et al reported that the introduction of the national license exam amidst the implementation of competency based medical curriculum (CBME) is going to create the quality of Indian medical graduates as siever method.⁷ However the assessment methods and typology of examination should be reassessed to include the overall educational impact of the CBME.

In our study, we observed that students don't understand the typology of the exam and the assessment method was also not clear to them. This has been also reported by Dashputra et al in the year 2023.⁸ They reported that implementation of NEXT



exam has challenges in setting the uniform distribution of marks and assessment standards. They further reported that the ambiguity of the application of the NEXT exam to the MBBS phase has resulted in the creation of confusion among students hampering their career choices. Similar findings are reported by Ranjan P et al in their article in the year 2020.⁹ They reported that among the doubts about the implementation of the national license exam across India, the pattern, and typology of the exam has been turning more difficult to understand and to make an informed decision.

This study reported that many students are aware of the USMLE license exam and they are aware of the exam typology and assessment methods of this exam. The awareness about the other license exam includes PLAB, Emirates Exam, MRCP, and license exam of Canada. The students reported that the assessment method of NEXT should be like USMLE as it is a mixed approach. Similar findings are reported by Tabish SA.¹⁰ Tabish SA in the year 2008 has discussed the various assessment methods such as license exams to practice across globes.¹⁰ They stated that a stepwise approach with consideration of mixed methodology of assessment is a better approach to permit a medical graduate to practice in an area.

In the present study, we noted that almost a similar number of students have reported that the difficulty level of NEXT will be similar to USMLE, or it can get more difficult. This finding was similar to Archer J et al.¹¹ Study by Archer J et al in 2017 also discussed the advantages and disadvantages of national license exams across the globe.¹¹ It was observed that the difficulty level of various exams is usually compared with the license exams of the USA, such as USMLE. The requirement of language, legalities, and residential programs across the globe is least discussed unless the student has made the choice to appear for the exam of that region.

In our study, we observed a statistically significant difference in the awareness of internship and residency rotation policies for USMLE license exams than other exams. Studies done by Leitch S et al (2010) and McGrath P et al (2011) on medical license exams getting conducted in New Zealand, Australia, UK, Canada and Ireland reported the licensing

policies of these countries require mandatory completion of the internship, residency rotations, language certification, and understanding of the legal practice of these countries.^{12,13} The financial and Visa policies for foreign graduates are usually discussed with students through agencies as per government policies. In our study during focus group discussions poor knowledge about the mandatory requirements for license exams other than USMLE was found.

A comparative study done by Wen D et al in the year 2021 reported that South Asian countries have a brain drain due to the migration of medical graduates.¹⁴ They also reported that the University's initiative to sensitize medical license exams has been successful to prevent the loss of the academic year gap in students' resumes. In our study, we also found that participants wanted career guidance programs to be run by universities and should include details about license exams.

Conclusion

The results of our study show that a designed program for career guidance from universities will be helpful to meet the demands of Indian Medical Graduates to get global recognition. The students are aware of the foreign license exam patterns but other aspects like linguistics and laws need to be addressed through career guidance programs. The NEXT exam pattern and assessment format need to be modified to address all the domains of learning. A nationwide license exam will be helpful to ensure the quality of medical education.

Recommendation

In the present study, career guiding sessions were helpful to guide the students for medical license exams including NEXT. Medical Colleges should encourage students to take part in career guidance sessions. Medical institutions should take a lead in conducting the counselling sessions instead of third party organizations.

Limitations

Further longitudinal and prospective studies are to be planned to see the impacts of career guiding sessions. The pattern of the NEXT Exam is under modification by the regulating body. A follow-up study will bring more clarity to the perceptions and



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attitudes of students toward NEXT and medical license exams.

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Key message

Career guidance sessions from medical colleges for students are helpful to address the concerns of students for their eligibility and license of practice in India through NEXT Exam, and other medical license exams across the globe.



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