Original Research

Prevalence of depression, anxiety and stress in Foreign Medical Graduates working as Interns in a Tertiary Care Hospital

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ABSTRACT

Introduction: Foreign Medical Graduates (FMGs) face numerous problems in their lives from constantly being looked down upon having done MBBS from a foreign country to the current changed guidelines of longer duration of internships in India. Keeping these points in mind, our study was to find the prevalence of depression, anxiety and stress amongst FMGs.

Method: The study was conducted in a Tertiary care hospital where FMGs were completing their internships. 44 participants who were willing to participate were recruited. They were screened with a semi-structured pro forma and DASS-21 scale and results were analysed.

Results: Depression, anxiety and stress was found in 40.9%, 45.5% and 34.1% of participants respectively. Many common stressors were also found in the lives of FMGs which were probably responsible for the results.

Conclusion: Very high presence of depression, anxiety and stress was found in FMGs working as interns in India. The problem needs to be addressed and immediate resolution is necessary in order to create a healthy work environment for them. Working on mental health of FMGs will be helpful for them to take keen interest in their medical practice which will further strengthen India's healthcare.

Key words: Depression, Anxiety, Stress, Foreign Medical Graduates

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INTRODUCTION

Depression is the feeling of persistent and pervasive sadness of mood and is one of the most common psychiatric disorders in the world. 5% of world population suffer from depression.¹ Anxiety is the feeling of apprehension of an unknown stimulus. Anxiety has been felt by almost everyone in day to day life. 4% of global population is known to have anxiety.² Current fast life has also led to a lot of psychogenic stress amongst everyone.

These aforementioned phenomena are more prevalent than general populations in healthcare workers especially doctors. Prevalence of perceived stress was found to be in 91% medical undergraduates and 82% in other professional courses in a study.³ Undergraduate students pursuing medicine have high risk of developing depression, anxiety and stress. One such category is that of Foreign Medical Graduates (FMGs).

FMGs go through a lot of stress since the time of their admissions in MBBS. From the stress of not being able to get through the NEET entrance exams to living away in a foreign country with completely different cultures, the stress pretty much becomes a part of an FMG's life. MBBS in foreign countries is usually longer than in India. The medical practice and guidelines in different countries is different and when

FMGs return home, this might lead to a challenge for them to settle down in India.

Many of the FMGs have witnessed wars in the past few years in the countries they were pursuing MBBS in. Some of them have also lived away from home during the trying times of COVID when everyone needed support of near and dear ones. They ones who returned to India had to attend even the practical classes online, which was unlike IMGs who were atleast able to attend practical classes and labs in groups in their medical colleges.

FMGs also read a completely foreign language in a foreign land with completely different forensic and medical rules and regulations making it difficult for them to adjust with Indian curriculum upon their return. After returning, they have to clear FMG exam in order to get an internship in India. Upon clearing the exam, they have to wait for a few months for the list of hospitals they are able to score an internship in unlike IMGs who immediately start internship after passing third year phase two in the same hospital their medical college is attached with. Limited number of seats also leads to difficulty for the FMGs to secure an internship seat in their home state further increasing their stress.

As per recent changes in the guidelines, FMGs compulsorily have to do their internship from India and based on the number of online classes they attended, the duration of internship has been increased up to 2-3 years. This has led to a lot of confusion amongst the FMGs leading to multiple psychiatric problems like depression, anxiety and stress. Most of the places where FMGs start their internships also don't pay any stipends. Thus most of the FMGs after longer duration of finishing under graduation along with internship are in their late 20s and with no money unlike IMGs who start to get paid stipend (though not much) in their internship and are still in their early-mid 20s when they become graduates.

FMGs already face a lot of stigma with peers and seniors looking down upon them which might lead to their inability to share problems leading to panting up of emotions and further worsening of their mental health. Our study aims to find out the prevalence of depression, anxiety and stress amongst FMGs. The study also ventures to look for the causative factors for development of depression, anxiety and stress amongst FMGs.

MATERIALS AND METHODS

The study was cross-sectional and was conducted online in a Tertiary Care Hospital in Rajpura, Punjab where FMGs were recruited for their internships. Clearance from Institutional Ethics Committee was taken before beginning the study. Informed consent was taken. 44 FMG interns participated in the study. A semi-structured questionnaire was to be filled by the participants on Google forms. This semistructured questionnaire was to collect sociodemographic details, details about home state, MBBS country, year of passing MBBS, year of passing FMG exam and starting internships and causative stressors amongst FMGs. Participants also had to fill depression, anxiety, stress scale-21 (DASS-21). DASS-21 is a self-administered scale, having 21 questions, each question having 4 options with 0 to 3 scoring. The scores were 0 (did not apply to me at all), 1 (applied to me to some degree), 2 (applied to me to a considerable degree) and 3 (applied to me most of the time).

DASS-21 contains three 14-item scales each for depression, anxiety and stress. Scores are to be multiplied by 2 to get final results.

Data was compiled and results were assessed using SPSS 20.

RESULTS

The study had an intake of 44 participants consisting of FMGs from various countries working as Interns in a Tertiary Care Hospital in Punjab. Amongst the participants, 14 were females and 30 were males. 41 of the total participants were unmarried, 1 was engaged and 2 were married. 30 participants lived as paying guests, 8 lived in their homes and 6 lived in hostel.

Sociodemographic details of the participants were as follows:

Variable	Frequency	Percentage
	Gender	
Females	14	31.8%
Males	30	68.2%
	Residence	
PG	30	68.2%
Hostel	6	13.6%
Home	8	18.2%
	Marital Status	
Unmarried	41	93.2%
Engaged	1	2.3%
Married	2	4.5%

Table 1: Sociodemographic details of the participants:

The participants belonged to various states, mentioned as follows:

Table 2: Home states of the participants:

State	Frequency	Percentage
Gujarat	1	2.3%
Haryana	6	13.6%
Himachal Pradesh	3	6.8%
Kerala	10	22.7%
Maharashtra	1	2.3%
Punjab	8	18.2%
Rajasthan	5	11.4%
Tamil Nadu	4	9.1%
Uttar Pradesh	6	13.6%
Total	44	100.0%

Participants also passed their MBBS from countries as mentioned below:

Table 3: Country of passing MBBS in the participant

MBBS Country	Frequency	Percentage
Bulgaria	2	4.6%
Armenia	4	9.1%
China	13	29.5%
Kazakhstan	3	6.8%
Kyrgyzstan	2	4.5%
Philippines	6	13.6%
Russia	6	13.6%
Ukraine	8	18.2%
Total	44	100.0%

1 participant passed MBBS in 2018, 2 in 2019, 5 in 2020, 22 in 2021 and 14 in 2022. After passing MBBS, participants took an FMG exam to get an internship in India. 9 participants passed the FMG exam in 2021, 21 in 2022, 13 in 2023 and 1 in 2024. After passing the FMG exam, participants had applied for Internships in various states and had to wait to get internships. 2 participants had entered Internship in 2021, 5 in 2022, 36 in 2023 and 1 in 2024.

32 (72.7%) of the total participants reported the presence of stressors in their lives. The various causes of stress as mentioned by participants were as follows:

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Stressor	Frequency	Percentage
No stressor	8	18.2%
Longer duration of internship	25	56.8%
No stipend	5	11.4%
Preparation for PG entrance exam	4	9.1%
Difficulty in adjusting in Indian Medical set-up	2	4.6%
Total	44	100%

 Table 4: Stressors present in participants:

Upon application of DASS-21, scoring was done and severity of depression, anxiety and stress was measured separately.

Table 5: Severi	ity of depression in participants as	seen on DASS-21:
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Severity	Frequency	Percentage
No depression	26	59.1%
Mild	5	11.4%
Moderate	3	6.8%
Severe	4	9.1%
Extremely severe	6	13.6%
Total	44	100%

Severity	Frequency	Percentage
No anxiety	24	54.5%
Mild	4	9.1%
Moderate	6	13.6%
Severe	3	6.8%
Extremely severe	7	15.9%
Total	44	100%

Table 7: Severity of stress in participants as seen on DASS-21:

Severity	Frequency	Percentage
No stress	29	65.9%
Mild	3	6.8%
Moderate	5	11.4%
Severe	5	11.4%
Extremely severe	2	4.5%
Total	44	100%

DISCUSSION

Depression, anxiety and stress amongst doctors is highly underdiagnosed in India and in even larger number in FMGs.

The result of our study suggests that there is a substantial prevalence of depression, anxiety and stress in FMGs.

Stress is inevitable in the medical profession, given our direct dealing with life but FMGs overburdened with the stress of adjusting with the new environment after spending their tender years in a foreign country and later going through a tedious process to obtain a practicing licence after going through longer internship years as compared to their peers increases the stress multiple-folds.

A study done during COVID pandemic in China on International medical students showed prevalence of 23.27% of anxiety and 48.52% of depression.⁴

Stressors have been found in 81.8% of participants in our study. This is in sync with a study conducted by Karthikeyan et al in Tamil Nadu on FMGs where 47.3% participants were found to be distressed.⁵

In a study on interns in Maharashtra, depression, anxiety and stress were found to be 59.70%, 63.03% and 38.79% and the results had excluded mild category from DASS-21.⁶ Depression, Anxiety and Stress were found to be higher in FMGs in our study as compared to female IMGs in a study by Deekala et al where depression, anxiety and stress were 34.7%, 44% and 30.3% as compared to our study where results were 40.9%, 45.5% and 34.1%.⁷

On the other hand in a comparative study between Malaysian and Indian medical undergraduates, depression, anxiety and stress levels were higher in Indian medical undergraduates. The average level of depression, anxiety and stress in Indian Medical Undergradutes was found to be 50.0%, 50.0% and 32.5% whereas 66.5%, 50.3% and 45.8% of Malaysian Medical Undergraduates were found to be below average range of the same, respectively.⁸

A study in Peru, using DASS-21 with 405 participants who were medical students found prevalence of depression, anxiety and stress to be 71.6%, 71.9% and 62.7%.⁹ A comparative study between IMG and FMG interns needs to be done to compare the differences in prevalence of stress, depression and anxiety among the two groups. Intervention is required to manage stress and psychiatric illnesses amongst FMGs.

Very less data on Foreign medical graduates especially interns returning to their homeland after completing MBBS from another country was found.

CONCLUSION

Steps need to be taken by respective authorities for smoother transition of FMGs in Indian Medical System. Necessary support and intervention is required to help the FMGs deal with depression, anxiety and stress.

This is one of a kind screening study on FMGs to assess for the severity and types of stressors in the participants done in Northern India.

Limitations: Study had smaller sample size and therefore results cannot be generalised on a larger scale. Psychiatric evaluation was not done and results were based on screening scale of DASS-21. Further studies are required to consolidate the association of depression, anxiety and stress in FMGs.

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