

Medical Science



IMPOSTOR PHENOMENON AND IT'S ASSOCIATION WITH MENTAL WELL-BEING OF INDIAN MEDICAL GRADUATES OF INDIA.

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ABSTRACT The impostor phenomenon is a condition where a person despite of being competent doubt his or her own capabilities. This condition can be seen in any stage of life however it is very commonly seen among the students who are in the active phase of learning and study there are various social demographic and psychological factors associated with it. It has been seen that impostor phenomena is more commonly seen in females as compare to the males and also affect their mental well-being in the long run. A person with impostor phenomenon can never accept the fact how competent he or she is and will always think whatever they have achieved is because of luck or some supernatural forces. This study has been devised to focus on prevalence of impostor phenomenon among medical students of academic year 2019 and 2018 and to know about its association with their mental well-being. With the development of new research modalities and ever expanding medical science, medical students in a developing country like India are under a constant pressure to somehow complete their syllabus, get updated with new advancements and meet the expectations ,the modern society has for the doctors. This greatly affect their psychological and psychiatric well-being trapping them into a vicious cycle of depression, anxiety and stress. Having frequent experiences of impostor phenomenon predisposes or makes a person more vulnerable to conditions like stated above. The aim of our study is to assess the impostor phenomena in the final and pre-final year medical student in north-western India and correlating it with their mental well-being based upon an assessment for depression, Anxiety and stress.

KEYWORDS: Depression, Anxiety, Stress, Medical Students

INTRODUCTION

The Impostor Phenomenon (IP) is defined as a condition where despite of being competent an individual doubt his or her own capabilities. The person never acknowledges his achievements and always have a deep-seated fear of being exposed as a fraud. Even though all they have accomplished is by their hard work but they credit it to luck or chance. This psychological condition was first described in 1978 about women but now known to affect man also and show situational effective response.

The phenomenon has also been associated with various psychological attributes like perfectionism, neuroticism, low self-discipline, perceived competence, conscientiousness and resilience. These psychological attributes in long run can prove to impact psychological or mental well-being of an individual. It can affect all, though it is most commonly studied among students. Among students it is a matter of mental health concern as any mental health issues among students can have a long-lasting impact their career and expertise as professional.

Among medical students it is particularly a matter of concern for the reason that medical curriculum is already one of the toughest academic curriculum. The medical professional is expected to conduct themselves with full competence and professionalism. The medical sciences are ever evolving. The medical knowledge has grown almost 3.5 times in the last 70 years. In the. 2020, the time for doubling the available information for medical science was unbelievably just 73 days!3 Medical students found it really difficult to cope up with this speed of the knowledge that leads to symptoms of stress and depression among them. The performance of a student with IP may not be upto the mark. A professional with IP may feel himself inadequate or incompetent to take-up a responsibility he is expected to perform⁵. Considered as a hallmark of hard work and dedication, society look up to medical students as future doctors, their teachers and senior doctors expect them to be perfect and disciplined. But these responsibilities can act as a burden for them manifesting as various psychological and psychiatric condition

Third year medical students with fear, failure, hesitation and worry were shown to be suffering from IP using CIPS. Variation

across the gender, mitigation appeared promoting Impostorism in the transition phase from Pre-clinical to Clinical training. 6

Another research addressed the low help seeking behaviour among medical students for their own psychiatric problems often only presenting to mental health services once a crisis arises 7 .

A study was done with an objective to find out the prevalence of Imposter phenomenon among Pakistani medical students. That was a cross sectional, done using Young Imposter scale (YIS). they find Out of 143 final year MBBS students Sixty-eight (68) students were found positive to imposter phenomenon. Out of these 45 were females and 23 males. Thus they concluded that imposter phenomenon is present in significant frequencies among medical students.

A study was done to examine the incidence and severity of impostorism and the intercorrelation between impostorism and stress in male and female medical students of America. This was also A cross-sectional study which was conducted in 215 medical students using Clance Impostor Phenomenon Scale and the Perceived Stress Scale and they found that the mean impostor score was 63.0 ± 14.6 and was 9% higher in females and Perceived Stress scores for females were 17% higher than males. Thus, they demonstrated the intercorrelation between impostorism and stress in male and female medical students.

Lacunae in Literature

There has been a lot of research about the Impostor Phenomenon across the globe keeping all kinds of population and demography in mind with various types of scales being used but many scales have their own limitations. Young's Impostor Scale for example talks about only the presence and absence of IP but fail to tell us about the extent of the IP among the respondents.

Despite the fact that the studies were done in a homogeneous educational settings ,the results were quite variable. There's limited literature available about its association with psychiatric well-being of a person however there are some studies pointing that mental health issues might be

associated with IP but such studies are limited and to the best of our knowledge none is reported from India.

Our study primarily will be focusing on the prevalence of Impostor Phenomenon among the Indian medical graduates of Northwestern India and its association with depression, stress and anxiety while assessing the mental well being of the students.

METHODS

The objective of our research was to study the prevalence of Impostor Phenomenon, depression, anxiety and stress across the Academy year and gender of the Indian medical graduates and to find association between these symptoms and their prevalence. Study sample was drawn from the students of 2018 and 2019 batch from various medical colleges across the north western India. Eligible participants were enrolled with the help of a Google form which was sent to students through a unique email I'd created for the research purpose. Students who consented to take part in the research were asked about their demographic details followed by Clance Impostor Phenomenon Scale (CIPS) to asses the self perception about intellectual and professional fraudulence among the individuals which was accessed after taking permission from Dr. Pauline Rose Clance and The Depression , Anxiety and Stress Scale-21 items (DASS-21) which is a set of three, self report scale designed to measure mental well being of an individual assessing for depression stress and anxiety. The collected data was then subjected to statistical analysis abiding to all the norms of the Institutional Ethical Committee and Research Committee.

RESULTS AND OBSERVATION

100 people consented to take part in the study out of 562 people approached with around 84% between 20-22 years old, median age being 21 years (35%). 58% were females and majority of the students were from the academic year of 2018. A large no. Of participants were pursuing their degree from Pandit Bhagwat Dayal Sharma Postgraduate Institute of Medical Sciences, Rohtak , Haryana, India. There were about 5% of individuals whose parents were doctors. About 11% students' father and 10% students' mother either belonged to medical profession or were a hospital employee.

About 54% of the individuals were found to have Moderate Impostorism out of which 30% were females. About 37% reported frequent bouts of impostorism out of which around 26% were females. The incidence in the study sample was much higher than the prevalence documented in other researches across the diverse diaspora. Majority of students manifesting Impostor Phenomenon belonged to the academic year of 2018 (final prof.) (about 68%).

While assessing the DASS-21 scale about 58% students were suffering from depression , 64% students had anxiety and about 30% were dealing with stress as per the responses recorded. There were about 51% of individuals who were dealing with more than one psychiatric condition at the time of survey (depression and anxiety 23%, anxiety and stress 2%, stress and depression 2%, stress, anxiety and depression 24%). Prevalence of these conditions was found to be more in the females as compared to the males of the same age group.

Table 1.1 Correlation of Impostor phenomenon and depression in females

Impostoris	Norm	Mild	Moder	Severe	Extremely	Grand
m	al	depres	ate	depres	severe	total
		sion	depres	sion	depressio	
			sion		n	
Few	17.39					6.67%
characteris	%					
tics						

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Moderate	65.22	40.00%	38.89%	20.00%	50.00%	48.33
experiences	%					%
Frequent	17.39	50.00%	55.56%	80.00%	50.00%	41.67
experiences	%					%
Intense		10.00%	5.56%			3.33%
experiences						
Grand total	100.0	100.00	100.00	100.00	100.00	100.00
	0%	%	%	%	%	%

Table 1.2 Correlation of impostor phenomenon and depression in males

Impostorism	Norm	Mild	Mode	Severe	Extremel	Grand
_	αl	depre	rate	depress	y severe	total
		ssion	depre	ion	depressi	
			ssion		on	
Few	11.11					5.26%
characteristics	%					
Moderate	77.78	75.00	55.56	100.00%	16.67%	63.16
experiences	%%	%	%			%
Frequent	11.11	25.00	44.44		66.67%,	28.95
experiences	%	%	%			%
Intense					16.67%	2.63%
experiences						
Grand total	100.0	100.0	100.0	100.00%	100.00%	100.00
	0%	0%	0%			%

Table 1.3 Correlation of impostor phenomenon and anxiety in females

lemules						
Impostorism	Nor	Mild	Modera	Severe	Extrem	Grand
	mal	anxiety	te	anxiety	ely	total
			anxiety		severe	
					anxiety	
Few	9.52			33.33%		6.67%
characteristi	%					
cs						
Moderate	52.3	66.67%	58.82%	50.00%	10.00%	48.33%
experiences	8%					
Frequent	38.1	16.67%	35.29%	16.67%	90.00%	41.67%
experiences	0%					
Intense		16.67%	5.88%			3.33%
experiences						
Grand total	100.	100.00	100.00	100.00	100.00	100.00
	00%	%	%	%	%	%

Table 1.4 Correlation of impostor phenomenon and anxiety in males

Impostorism	Nor	Mild	Modera	Severe	Extrem	Grand
	mal	anxiety	te	anxiety	ely	total
			anxiety		severe	
					anxiety	
Few	7.69		9.09%			5.26%
characteristi	%					
cs						
Moderate	92.3	42.86%	45.45%	60.00%	50.00%	63.16%
experiences	1%					
Frequent		57.14%	45.45%	40.00		28.95%
experiences						
Intense					50.00%	2.63%
experiences						
Grand total	100.	100.00	100.00	100.00	100.00	100.00
	00%	%	%	%	%	%

Table 1.5 correlation of impostor phenomenon and stress in females

Impostoris m	Norm al	Mild stress	Severe stress	Extreme ly severe stress	Grand total
Few characteristics	7.69%		16.67%		6.67%

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Moderate	66.67%		14.29%	16.67%	50.00%	48.33%
experiences						
Frequent	20.51%	100.0	85.71%	66.67%	50.00%	41.67%
experiences		0%				
Intense	5.13%					3.33%
experiences						
Grand total	100.00	100.0	100.00	100.00	100.00	100.00
	%	0%	%	%	%	%

Table 1.6 Correlation of impostor phenomenon and stress in males

maies						
Impostorism	Nor	Mild	Moder	Severe	Extrem	Grand
	mal	stress	ate	stress	ely	total
			Stress		severe	
					stress	
Few	6.67					5.26%
characteristics	%					
Moderate	63.3	66.67%	100.00			63.16%
experiences	3%		%			
Frequent	30.0	33.33%		100.00		28.95%
experiences	0%			%		
Intense					100.00	
experiences					%	
Grand total	100.	100.00	100.00	100.00	100.00	100.00
	00%	%	%	%	%	%

It was found that about 72% of the people presenting with Impostor Phenomenon also had some kind of psychiatric or psychological condition associated with it . About 10% had depression along with impostorism. About 10% had anxiety along with impostorism and about 52% had more than one psychiatric condition associated with impostorism.

Overall, it has been observed that psychiatric and psychological of the female medical students were much more affected as compared to that of male students adding up to the challenges faced by them being a medical student.

Correlation was also established across the academic years for impostor phenomenon and its relation with depression, anxiety and stress, it was found that final year students belonging to academic year of 2018 don't have a good mental well-being as compare to their Immediate juniors and this can be reflected by the fact that most of the students manifesting with two or more psychological and psychiatric condition belonged to final professional while that of pre final professional is also in alarming numbers.

Table 1.7 Correlation of impostor phenomenon with depression in academic year 2018

Impostorism	Nor		Modera			
	mal	depr	te	-	ly	total
		essio	Depress	sion	severe	
		n	ion		depress	
					ion	
Few	18.75					8.70%
characteristics	%					
Moderate	65.63	37.50	47.37%	33.33%	28.57%	52.17
experiences	%	%				%
Frequent	15.63	62.50	47.37%	66.67%	71.43%	37.68
experiences	%	%				%
Intense			5.26%			1.45%
experiences						
Grand total	100.0	100.0	100.00	100.00	100.00	100.00
	0%	0%	%	%	%	%

Table 1.8 correlation of impostor phenomenon with depression in academic year of 2019

Impostori	Norm	Mild	Moderat	Severe	Extremel	Gran
sm	αl	depress	е	depres	y severe	d total
		ion	Depress	sion	depressi	
			ion		on	

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	Moderate	90.0	66.67%	37.50%	33.33%	25.00%	58.06
	experiences	0%					%
	Frequent	10.0	16.67%	62.50%	66.67%	50.00%	35.48
	experiences	0%					%
	Intense		16.67%			25.00%	6.45%
	experiences						
	Grand total	100.	100.00	100.00	100.00	100.00	100.00
		00%	%	%	%	%	%

Table 1.9 correlation of impostor phenomenon with anxiety in the academic year of 2018

Impostorism	Nor	Mild	Modera	Severe	Extremel	Grand
	mal	anxiet	te	anxiety	y severe	total
		У	Anxiety		anxiety	
Few	12.0		4.76%	25.00%		8.70%
characteristics	0%					
Moderate	64.0	50.00	42.86%	62.50%	14.29%	52.17
experiences	0%	%				%
Frequent	24.0	50.00	42.86%	12.50%	85.71%	37.68
experiences	0%	%				%
Intense			4.76%			1.45%
experiences						
Grand total	100.	100.00	100.00	100.00	100.00%	100.00
	00%	%	%	%		%

Table 1.10correlation of impostor phenomenon with anxiety in the academic year of 2019

Impostorism	Norma	Mild	Modera	Severe	Extrem	Grand
	1	anxiety	te	anxiety	ely	total
			Anxiety		severe	
					anxiety	
Moderate	80.00	60.00%	62.50%	33.33%	20.00%	58.06
experiences	%					%
Frequent	20.00	20.00%	37.50%		60.00%	35.48
experiences	%					%
Intense		20.00%		66.67%	20.00%	6.45%
experiences						
Grand total	100.00	100.00	100.00	100.00	100.00	100.00
	%	%	%	%	%	%

Table 1.11 correlation of impostor phenomenon with stress in the academic year of 2018

Impostorism			Modera			Grand
	mal	stres	te	stress	ely	total
		S	Stress		severe	
					stress	
Few	10.20			20.00%		8.70%
characteristics	%					
Moderate	61.22	28.57	33.33%	20.00%	50.00%	52.17%
experiences	%	%				
Frequent	26.53	71.43	66.67%	60.00%	50.00%	37.68%
experiences	%	%				
Intense	2.04					1.45%
experiences	%					
Grand total	100.0	100.0	100.00	100.00	100.00	100.00
	0%	0%	%	%	%	%

Table 1.12 correlation of impostor phenomenon with stress in the academic year of 2019

	and deddenine year of 2010							
Impostorism	Norm	Mild	Moder	Severe	Extremel	Grand		
	αl	stress	ate	stress	y severe	total		
			Stress		stress			
Moderate	76.19		50.00%			58.06		
experiences	%					%		
Frequent	19.05	100.00	50.00%	100.00		35.48		
experiences	%	%		%		%		
Intense					100.00%	6.45%		
experiences								
Grand total	100.0	100.00	100.00	100.00	100.00%	100.00		
	0%	%	%	%		%		

DISCUSSION

Our study was mainly based in the state of Haryana with a sex ratio of 922 females per 1000 males. Even today females do not have much freedom in choosing the right career path for themselves and for those who still come into some promising fields like medical sciences they are subjected to constant criticism and unrealistic expectations. Many households believe that whatever a women does is because she got some sort of luck with it and this deep seated thought process is imbibed by their premature minds leading them to believe that they are less competent than the others in the same field and whatever they have achieved by their hard work was just a mere fluke. Seeing that more than 50% of the females have moderate to frequent experiences with impostorism points towards the fact that even after becoming so called cream of society women live in a fear that they might be exposed fir fraudulence while whatever they do is legitimate and appreciable. Medical students are experiencing more stress and depression than the normal average this also accounts for the increasing No. of drop outs from the medical school and students opting for a different career option after their MBBS, something which is not as much mentally taxing as their medical studies. The mental profile of the students doesn't look good over all, although it has been found that students of academic year 2018 who are currently in their final year and dealing with more impostorism and depression as compared to immediate juniors who are not lagging behind and if the trend continues they might come with same manifestations in a year or two. The recent change in the curriculum to make medical education competency based has so far not yielded any results in the terms of mental well being of the students rather with more advancements what we are getting is a mentally charred, anxious, stressed and blued set of doctors who lack enthusiasm to try new things and not ready to accept their achievements. Society has always looked up to medical students as model students who are hardworking and dedicated but this rise in the deteriorating mental well-being of the students is a warning sign that the worse might come if no intervention is done at this time.

CONCLUSION

Our research focused on impostor phenomenon assessed by Clance Impostor Phenomenon Scale (CIPS) accessed after taking permission from Dr. Pauline Rose Clance and its association with mental well being of individual using Depression, Anxiety and Stress Scale-21 items (DASS-21). It has been found that about 54% individuals have moderate impostor phenomenon and 37% were having frequent experiences with impostorism out of which majority of them were females and belonged to academic year of 2018. About 51% individuals had more than one psychiatric condition at the time of study. About 72% of individuals who had impostorism also had some kind of psychiatric and psychological condition associated with it. Overall we can say that women have more frequent experiences with impostor phenomenon predisposing them to more psychiatric condition like depression, anxiety and stress.

Recommendation

Since it becomes an institutional responsibility to cater the needs of mental health of the individuals, some programs should be devised to help them come out of their psychiatric and psychological condition and motivate them to go for a proper psychiatric counselling whenever needed.

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