

Original Research Article

The descriptive study of imposter syndrome in medical students

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ABSTRACT

Background: Imposter syndrome is characterized by chronic feelings of self-doubt and fear of being discovered as an intellectual fraud. Despite evidence of abilities, those suffering from imposter syndrome are unable to internalize a sense of accomplishment, competence, or skill. Overall, they believe themselves to be less intelligent and competent than others perceive them to be. IS has several potential implications for medical education. The current study was designed to find out the frequency of imposter syndrome among medical students college so that certain measures must be taken to improve the teaching and learning methodologies as well as the curriculum.

Methods: A cross-sectional, psycho-social analysis was conducted from March to July, 2018 at Nishtar Medical College, Multan after taking informed consent from the students. Clance Imposter Phenomenon Scale (CIPS) was used to assess the prevalence and degree of severity of Imposter syndrome among medical chosen on basis of random sampling. The data collected was entered and analysed on SPSS v.20.

Results: Two hundred (200) students were selected for the study and were asked to return the completed 20 items questionnaire. One hundred and eighty-nine (189) students returned the questionnaires, so the response rate was 94.5%. Out of 189 students, 121(64.36%) were males and 68(35.97%) were females. According to Clance imposter phenomenon scoring, of the total 189 students the severity of imposter syndrome is as follows: mild, 5(2.64%), moderate, 72(38.09%), severe, 103(54.49%) and very severe, 09(4.76%). Moreover, third year students were found to have high prevalence and degree of severity of imposter syndrome.

Conclusions: Imposter phenomenon exists in a significant percentage of medical students and appears to peak in the third year of medical school. Both genders are at equal risk of having imposter syndrome. It is associated with various psychological illnesses. Further discussion regarding medical education paradigms in light of high levels of imposter phenomenon is needed.

Keywords: Achievement, Burnout, Psychological, Burnout, Self-esteem

INTRODUCTION

Impostor syndrome (also known as impostor phenomenon or fraud syndrome) is a psychological pattern in which people doubt their accomplishments and have a persistent, often internalized fear of being exposed as a "fraud".¹ The term was first used by two clinical psychologists, Clance PR et al.¹ The impostor syndrome tends to be studied as a reaction to certain stimuli and

events. It is not perceived to be a mental disorder, but it has been the topic of research for many psychologists. Though traditionally perceived as an ingrained personality trait, impostor syndrome has more recently been studied as a reaction to certain situations. Under this interpretation, it is a response experienced by many different people to situations that prompt such feelings. Though certain people are more prone to impostor feelings, experience them more intensely than most and

can be identified through the use of personality scales, evidence does not support impostor syndrome to be a distinct personality trait.²

Imes and Clance's theory suggests several behaviours of high-achieving women with impostor syndrome. While early research focused on the prevalence among high-achieving women, impostor syndrome has been found to affect both men and women, in roughly equal numbers.^{1,3,4}

Impostor experience comprises of various psychological signs and symptoms. Some common signs are:⁵

- Perfectionism
- Overworking
- Undermining one's own achievements
- Fear of failure
- Discounting praise.

Impostor experience can present itself through thoughts such as:⁶

- "I must not fail"
- "I feel like a fake"
- "I just got lucky"

Impostor syndrome is associated with anxiety, low level of self-esteem, lack of confidence and a labile self-concept.⁷

Impostor syndrome has several potential implications for medical education. Those suffering from Impostor syndrome are less likely to speak up or volunteer answers and information than their unaffected peers. This may lead to innate differences in learning style and a subsequent need to tailor curriculum to take into account the large proportion of learners with impostor syndrome.⁸

The current study was designed to find out the frequency of impostor syndrome among third, fourth and final year students of a public sector medical college so that certain measures must be taken to improve the teaching and learning methodologies as well as the curriculum.

METHODS

Study design and setting

A cross-sectional, psycho-social analysis was conducted from March to July, 2018 at Nishtar Medical College, Multan after taking informed consent from the students. Those who did not give consent were excluded from the study. Ethical issues were addressed according to institutional review board. The class representatives were intimated before hand about the time and place of conducting the session so that all those willing to participate could be assembled in the lecture theatre. All the participants were informed about the targets of the

research, the methods of the study, and how to fill the questionnaire.

A questioner-based study was done on 188 medical students chosen on basis of random sampling to test the prevalence of impostor syndrome using Clance Imposter Phenomenon Scale (CIPS). Out of these students 121 were males and 67 were females. Likewise, 62 students were from third year, 95 were from fourth year, 32 were from final year MBBS. Students were interviewed to obtain information about age, sex and academic year of education. A complete history was taken from the subjects in relation to any systemic or psychiatric illness like anxiety, depression and schizophrenia as they affect the degree of severity and pattern of impostor syndrome.

Exclusion criteria

Students with known chronic medical illnesses or those who were taking drugs that cause any psychiatric illness were excluded from the study.

Procedure and statistical analysis

Clance Imposter Phenomenon Scale (CIPS) is a 20-item questioner with each consisting of 5 parameters showing severity from none to very severe levels (1-5). The twenty component scores are then added to yield a global CIPS score in the range of 20 to 100; the higher the score is, the worse the impostor syndrome. All symptoms of impostor syndrome were evaluated on basis of these parameters. The data collected was entered and analysed on SPSS v.20.

RESULTS

Two hundred (200) students were selected for the study and were asked to return the completed 20 items questionnaire. One hundred and eighty-nine (189) students returned the questionnaires, so the response rate was 94.5%. Out of 189 students, 121 (64.36%) were males and 68 (35.97%) were females. According to Clance impostor phenomenon scoring, of the total 189 students the severity of impostor syndrome is as follows: mild, 5 (2.64%), moderate, 72 (38.09%), severe, 103 (54.49%) and very severe, 09 (4.76%) (Figure 1).

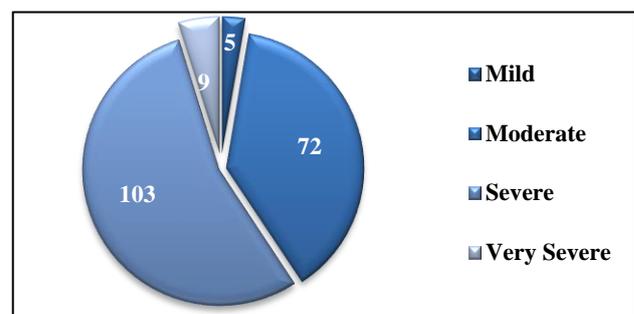


Figure 1: Severity of impostor syndrome among students.

Among 5 (100%) students suffering from mild imposter syndrome, 04 (80%) are males while 1 (20%) is female.

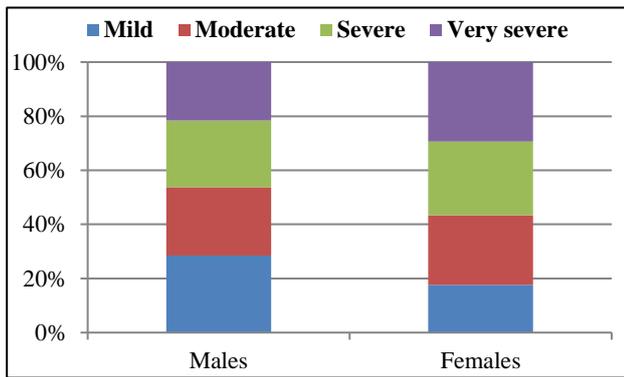


Figure 2: Gender-wise severity of imposter syndrome in students.

Among 72 students suffering from moderate imposter syndrome, 51 (70.83%) are males while 21 (29.16%) are

females. Among 103 students suffering from severe imposter syndrome, 71 (68.93%) are males while 32 (30.77%) are females. Likewise, among 09 students suffering from very severe imposter syndrome, 06 (66.66%) are males while 03 (33.33%) are females (Figure 2).

Class-wise severity of imposter syndrome is as following: among 62 (100%) third year medical students, no one is suffering from mild, 17 (27.41%) from moderate, 40 (64.51%) from severe while 05 (8.06%) are suffering from very severe imposter syndrome.

Among 95 (100%) fourth year students, 04 (4.21%) are suffering from mild, 54 (46.31%) from moderate, 45 (47.36%) from severe while 02 (2.10%) are suffering from very severe imposter syndrome. Likewise, among 32 (100%) final year students, 01 (3.12%) is suffering from mild, 11 (34.37%) are from moderate, 18 (56.25%) from severe while 02 (6.25%) are suffering from very severe imposter syndrome (Table 1).

Table 1: Class-wise distribution based on severity of imposter syndrome.

Class	Mild N=05 (100%)	Moderate N=72 (100%)	Severe N=103 (100%)	Very severe N=09 (100%)
Third year N=62 (100%)	00	17 (27.41%)	40 (64.51%)	05 (8.06%)
Fourth year N=95 (100%)	04 (4.21%)	44 (46.31%)	45 (47.36%)	02 (2.210%)
Final year N=32 (100%)	01 (3.12%)	11 (34.37%)	18 (56.25%)	02 (6.25%)

DISCUSSION

Present study has assessed the medical students of Nishtar Medical University and found a number of students falling in various categories based on the degree of severity of imposter phenomenon, by using the scale devised by Clance PR.

The earlier studies have shown mix trends regarding the gender distribution. Initially, imposter phenomenon was assumed to be predominant in high achieving women. However, further studies showed that this phenomenon is also quite frequent among males. Some researchers found the gender variable to be insignificant regarding the prevalence as well as the severity of imposter phenomenon. But most studies showed females as relatively common sufferers.⁸

Present study also showed that the females have high degree of severity of imposter phenomenon. The prevalence of moderate, severe and very severe degree of imposter phenomenon symptoms is high in females than in male students. On the other hand, the prevalence of mild level of imposter phenomenon symptoms is more in males than in females. So, present study coincides with

the previous studies showing that females are relatively common sufferers.

In most of the medical colleges in Pakistan, female students are more than male students. So, the high prevalence of imposter phenomenon affects significantly on the medical education and training.

The class wise distribution of the degree of imposter phenomenon shows that the number of third year students who have severe and very severe degree of Imposter Phenomenon are more than those of fourth and final year students. Hence, present study findings coincide with another study which states that progress into senior classes or senior training years does not have any effect on imposter phenomenon so if a student suffers, he/she will continue suffering this phenomenon despite increase in education level.⁹

The students suffering from imposter phenomenon are usually of type A personality but also are afraid of the problems they expect to face in their interpersonal relationships. Mental health disturbances i.e. anxiety, depression and misconceptions of self-abilities are associated with the imposter phenomenon. It may act as a Psychological barrier for people's career especially of

women.^{9,10} It may reduce their efficiency of working in their profession. Thus, the knowledge of imposter phenomenon help us to identify those who are at risk of leaving the institution or even they leave profession feeling they are not competent enough to cope with the institutional and professional expectation.¹¹ These people have burden of their achievements. They are in fear of their success as success will bring more responsibilities and expectations. They underestimate their abilities and feel that they are not worthy of the praise and appreciation they are receiving. At the same time, they are afraid of failure, being perfectionist and always having success in past, they cannot handle their failures. It may have strong association with burnout phenomenon and thus increasing number of quitting and suicides in campuses.

All these facts put imposter phenomenon in focus of the researchers. So, many institutions have started developing extensive programs for helping the students suffering from imposter phenomenon.¹² Students may be trained to understand perfectionism and how to set expectations for them which are more reasonable and achievable.¹³

CONCLUSION

Imposter phenomenon exists in a significant percentage of medical students and appears to peak in the third year of medical school. Both genders are at equal risk of having imposter phenomenon but in present study the prevalence and the degree of severity of imposter phenomenon is more in females than in males. Additionally, it is associated with multiple burnout indices and, likely, psychological distress like. Further discussion regarding medical education paradigms in light of high levels of imposter phenomenon is needed.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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