

The Imposter Syndrome in Surgical Residents

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Abstract

Imposter syndrome (IS) is an internal sensation of intellectual phoniness in persons who feel fraudulence and worthlessness. The purpose of this study was to assess the prevalence of imposter syndrome among surgical residents. A web-based survey was conducted among all surgical residents of PGMI, Khyber Pakhtunkhwa, Pakistan, from May 1, 2022 to May 30, 2022. Of the 156 respondents, 104 (66.7%) were males and 52 (33.3%) were females. Moderate imposterism was seen in 81(51.9%) of the respondents and 57 (36.5%) respondents reported severe or intense imposterism. Among postgraduate residents, no significant differences in Clance Imposter Phenomenon Scale score by year was noted ($p = 0.291$). Imposter syndrome was highly prevalent among surgical residents, i.e. 138(88.5%) falling in the range of either moderate, severe, or intense imposterism. Prevalence was more among female residents as compared to male residents. Year of training didn't have any impact on the grades of imposterism.

Keywords: Imposter syndrome, Imposterism, Prevalence.

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Introduction

Outstanding academic or professional achievement is not enough to overcome imposter syndrome, which is described as "an internal sensation of intellectual phoniness in persons who feel fraudulence and worthlessness".¹ The phrase "Imposter syndrome" was coined by Pauline R. Clance and Suzanne A. Imes in their 1978 essay, in which they described imposterism as an "internal feeling of intellectual phoniness". Generalised anxiety, low self-esteem, despair, and feeling of not being able to satisfy one's own standards of accomplishment are the clinical symptoms that are most frequently mentioned.² Clance first recognised the disease in high-achieving professional women, but Imposter

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phenomenon is a personality type that affects people in a variety of professions, including teachers, medical students, doctors, and resident physicians.^{2,3} The root cause of imposter syndrome is not known; it has been related to depression and anxiety that are present among trainees.⁴ In surgical residents, one study reported that up to 76% residents included in the study had severe IS.⁵ Several tools have been used to assess imposter syndrome, which include: 1) Clance Imposter Phenomenon Scale (CIPS), 2) Harvey Impostor Phenomenon Scale (HIPS), 3) Leary Imposter Scale, 4) Perceived Fraudulence Scale, 5) Young Imposter scale.⁶ Imposter syndrome has several negative consequences on medical workers. Those who have imposter syndrome are less likely to speak up for themselves or offer answers and information than those who are not affected by the phenomenon.⁷

In Pakistan, very limited literature on imposter syndrome among surgeons is available. The purpose of the study was to assess the frequency of imposter syndrome among resident surgeons of all surgical specialities so that in the future, specific measures may be introduced to improve teaching and learning methodologies to lower the rate of imposterism among surgical residents.

Subjects and Methods

Demographic and Clance Imposter Scale Questionnaire 5 web-based study was conducted among all surgical residents of Postgraduate Medical Institute(PGMI), Khyber Pakhtunkhwa, Pakistan, from May 1, 2022 to May 30, 2022. Out of 350 surgical residents, 160 responded; four surgical residents did not meet the inclusion criteria and were excluded from the study. Sampling technique was convenient nonprobability type. Sample size of 156 was calculated by using WHO calculator⁸ keeping in view the current population of surgical residents approximately up to 350 in KP and prevalence of 76%⁷ moderate to intense imposterism in surgical residents ($p=0.05\pm 5$). After obtaining informed consent all the residents were briefly introduced to the study and were asked to complete the anonymous self-administered online Google forms questionnaire. Clance Imposter Scale (CIPS) was used to assess the prevalence and degree of severity of imposterism.

The Inclusion Criteria were Postgraduate residents of all surgical specialties and years in current residency programme of PGMI across KP province with no history of previously diagnosed earlier or recently with psychological disorders. The Exclusion Criteria were Residents diagnosed earlier or currently having psychological problems.

Data Analysis: All statistical calculations were performed using SPSS Version 23 software. Data was automatically collected by the internet-based survey (Google Forms) which were imported into SPSS for analysis.

Results

Of the 156 respondents included in the study, 104 (66.7%) were males and 52 (33.3%) were females Table 2. The mean CIPS score among all residents was 55.51 (range 27 to 87) which falls into moderate impostorism. Eighteen (11.5%) residents obtained a score between 0 and 40 (none to mild impostorism). Moderate impostorism (CIPS score 41 to 60) was seen in 81 (51.9%) respondents and 57 (36.5%) respondents reported severe (CIPS score 61 to 80) or intense (CIPS score 81 to 100) impostorism (Figure 1).

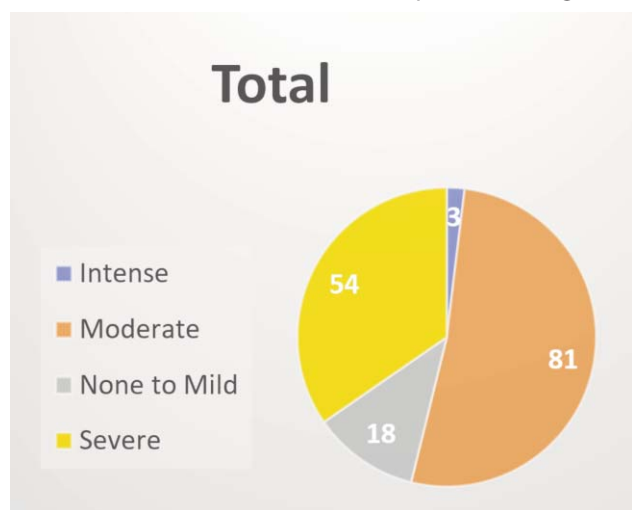


Figure: Severity of Imposter syndrome among all residents.

Table-1: Analysis of Imposter syndrome score.

Category	N (%)	Mean Score±SD	p value
Gender			
Male	104 (67.7)	53.79±11.764	0.012
Female	52 (33.3)	58.94±12.129	
Total	156 (100)	55.51	
Postgraduate year			
PGY-1	51 (32.7)	56.78± 12.511	0.291
PGY-2	60 (38.5)	55.40± 12.771	
PGY-3	33 (21.2)	55.30± 10.221	
PGY-4	11 (7.1)	50.64± 12.404	
PGY-5	1 (0.6)	57	

Table-2: Severity of Impostorism based on Gender.

Gender	N (%)
Male	
None to Mild	13 (12.5)
Moderate	58 (55.8)
Severe	32 (32)
Intense	1 (1.0)
Total	104
Female	
None to Mild	5 (9.6)
Moderate	23 (44.2)
Severe	22 (42.3)
Intense	2 (3.8)
Total	52

The mean CIPS score among males was 53.79 ±11.764 compared to females which was 58.94±12.129 (p =0.012) both falling in the range of moderate impostor syndrome. Out of 156 respondents, 51 (32.7%), 60 (38.5%), 33 (21.2), 11 (7.1%) and 1 (0.6%) were from first, second, third, fourth, and fifth year, respectively. First year residents had a mean score of 55 compared to the score 50 of PGY-4, both of which fall under the category of moderate impostorism (Table 2).

Discussion

Imposter syndrome, also known as Imposter phenomenon, is nothing new, but it has recently received increasing attention from researchers because of the persistent negative effects it has on victims as well as departments, organisations, and society as a whole. The victims are competent but secretly worry about their presumed lack of knowledge and skills and eventually this becoming known to others.⁹

Among general surgery residents, imposter syndrome is not only common but also severe. Only 2.1 percent of the study participants indicated that they did not experience mild impostorism, according to the trademark study to date on this topic, which also noted that the prevalence of moderate to major and extreme impostorism was 97.9 percent.⁵ In our study the prevalence of moderate to significant, and intense impostorism was 88.5% and mild to none was 11.5%.

Additionally, female residents scored higher on the impostor scale, a finding that is comparable with previous research results.^{10, 11} Similar findings were reported in our study where females had increased odds of suffering from impostor syndrome compared to males.

Our study is subjected to a few limitations worth noting. First, the potential non-response bias due to the use of an online survey method. Secondly, the comparison

between different groups of specialties was not done. Third, sample was nonprobability convenient and Fourth, as the study was self-reporting, there could be a bias of acknowledging psychiatric illness.

Despite limitations, the study provides a preliminary look at the frequency and severity of impostor syndrome among the surgical residents of KP. It introduces a new chapter to explore the risk factors of impostor syndrome and its negative effect on the performance of surgical residents and patients. Keeping in view the effects of this phenomenon which is already mentioned in previous literature, strategies need to be devised in institutions and at the national level to overcome the degree of imposterism among residents. This will help the students to recognise and utilise their skills which will have a positive influence on their health and lead to improvement in the quality of care in hospitals.

Conclusion

The study concluded that imposter syndrome was highly prevalent among surgical residents. Moderate, severe, or intense imposterism was prevalent in 138(88.5%) students. Female residents were more affected than male residents. The year of training did not have any impact on the grade of imposterism.

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Conflict of Interest: None.

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