SHORT REPORT

Prevalence of impostor syndrome in medical and non-medical students at the university of Faisalabad

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Abstract

The study aimed to investigate the prevalence of imposter syndrome along with its relationship with self-esteem among medical and non-medical female university students. A cross-sectional study was conducted after informed consent from the 100 participants recruited with convenient sampling method from The University of Faisalabad. Data was collected through a self-administered questionnaire; Clance Imposter Phenomenon Scale (CIPS) to evaluate impostorism and the Rosenberg Self-esteem Scale (RSES) to evaluate self-esteem were used. The collected data was entered and analysed by IBM SPSS Version 23. The prevalence of impostor syndrome in medical students and non-medical students was 25(47.17%) and 19(40.43%) respectively. Whereas, the prevalence of low self-esteem in medical and non-medical was 14(26.42%) and 17(36.17%), respectively. This study revealed that there is no significant relationship between impostor syndrome and self-esteem with x^2 (3) with p=0.994.

Keywords: Impostor syndrome, Medical students, Non-medical students.

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Introduction

Imposter syndrome is the feeling of insufficiency despite continuous success in the chosen field of life. People suffering from imposter syndrome have self-doubt and they do not recognise or personalise their achievements, no matter how successful they are.[1] Imes and Clance established the term imposter phenomenon in 1978; they worked with 150 high achieving and successful women from different fields, including students from graduate and undergraduate levels, and called them "intellectual phonies" who appeared to have the characteristics of impostor syndrome or phenomenon. Their theory provides some typical thoughts associated with imposter syndrome, such as fear of failure, working excessively, it's just a matter of chance, and success isn't impressive.[2]

Self-esteem is simply to have confidence, self-assurance, and belief in yourself, your abilities, values, dignity, morale, and faith in yourself. In a human being, effect of high self-esteem boosts the ability of exceptional performance and improves functioning in group tasks, which is extremely crucial in students in order to handle academic pressure. Students in medical or non-medical fields undergo various academic stressors and demands, and low self-esteem can result in contradictory or gloomy effects on the students.[1] Optimism, confidence, competence, and realistic, brilliant problem-solving capacities are attributes of high and positive self-esteem.[3,4] While, on the flip side, pessimism, hesitation, hopelessness, and inferiority complex are some characteristics visible in an individual with low self-esteem.[4] Impostor Phenomenon has devastating effect on the learning capabilities of students. Students with intense imposter characteristics are likely to be resistive in sharing opinions and avoid adversities and learning opportunities out of dread of making errors.[5]

There is a robust relationship between impostor syndrome and psychological distress. Students facing impostorism have higher probability of developing psychological problems associated with elevated levels of anxiety, depression, and development of obsessive-compulsive symptoms and suicide can be seen in such students. Female students often become self-questioning regarding their intelligence due to disparity between their perception of not being considered smart or bright and their actual high achievement.[6]

Educational systems lack the capability to observe and uncover or pin point students with impostorism, while its actual effects on professional performance is not known. According to the available information, no study has been done to evaluate the consequences of self-esteem and imposter syndrome along with comparison of its severity in both medical and non-medical students of Pakistan. So, the purpose of the current study was to overcome the void by estimating the prevalence of imposter syndrome in medical and non-medical students at The University of Faisalabad.

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Patients/Methods and Results

This cross-sectional study was conducted in Faisalabad, Pakistan, after taking approval from the Institutional Review Board (IRB) of The University of Faisalabad (TUF) (TUF/IRB/404/24). The study began on May 27, 2024, and ended on August 15, 2024. It recruited the medical and non-medical female students of The University of Faisalabad by convenient sampling method, and employed a non-probability sampling method where the participants meeting the inclusion criteria were selected on the basis of their willingness and accessibility. Inclusion criteria comprised: age above 18 years, Cumulative Grade Point Average (CGPA) Above 2.5, has completed one year in respective degree programme either medical or non-medical, and not on leave or not suspended. Exclusion criteria included students with any self-reported psychological distress, recent trauma or use of psychiatric medication, e.g. anti-depressants or anxiolytics. Data was collected from 100 students (sample calculated from http://www.raosoft.com/samplesize.html) which included 53 medical and 47 non-medical students, after written and verbal consent, via online generated form which consisted of questions from both scales— Clance Impostor Phenomenon Scale (CIPS)[7] and Rosenberg Self-esteem Scale (RSES)[8]—to evaluate impostorism and self-esteem, respectively, along with questions answering the exclusion criteria. The Clance impostor phenomenon Scale is a 20-item questionnaire, each question further has five responses each having five points, scaled as 1 (not at all) to 5 (very true) and responders have to answer it according to the level of their agreement. The score varies between 20–100, 80 and above in an individual indicates positive impostor syndrome.[7,9] This scale was selected as it is a sensitive and reliable instrument.[10] Rosenberg Self-Esteem Scale assures self-esteem in higher education and is a reliable and valid tool in these settings. A Spanish scale, translated into English, RSES is a 10-item scale that is rated on a Likert type scale, which includes responses ranging from 1 (totally disagree) to 4 (totally agree), for scoring a method of combined rating.[8] Data was entered and analysed by IBM SPSS Version 23. Descriptive analysis and chi-square was applied. In this research, 100 female participants with the mean age and standard deviation of 21.60±1.570 years. The maximum Cumulative Group Point Average (CGPA) amongst participants was 4.0 with mean and standard deviation as 3.25±0.295. According to Clance Impostor phenomenon scale (CIPS), the severity of impostor syndrome in 53 medical students is as follows: mild – 2 (3.77%), moderate – 24 (45.28%), severe – 25 (47.17%), very severe – 2 (3.77%), as illustrated in Figure, which compares the prevalence of impostor syndrome in medical and non-medical students. Statistical analysis

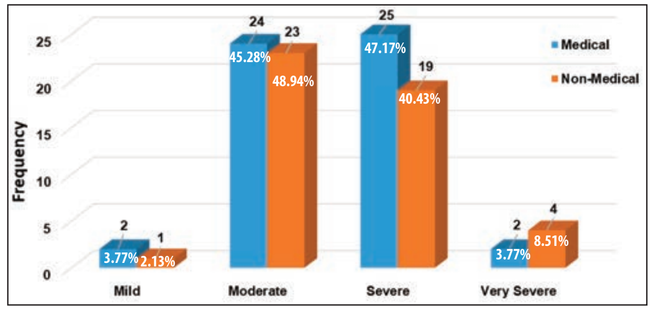

Figure: Comparison of Prevalence of Impostorism in Medical and Non-Medical students.

indicates that prevalence of moderate to severe impostorism is 96.42%. The severity of impostor syndrome in 47 non-medical students is as follows: mild–1 (2.13%), moderate–23 (48.94%), severe 19 (40.43%), very severe–4 (8.51%), as demonstrated in Figure. In non-medical students, statistical findings suggest the prevalence of moderate to severe impostorism to be about 97.88%. Rosenberg Self-Esteem Scale (RSES) showed low self-esteem in 14 medical students, i.e. 26.42%, and normal self-esteem in 39 medical students, i.e. 73.58%. Self-esteem calculated in non-medical students showed low self-esteem in 17 (36.17%) students and normal self-esteem in 30 (63.83%) students. Comparison of all the values of impostorism in medical and non-medical students in all categories is illustrated in bar graph. The prevalence of impostor syndrome in medical and non-medical students was 25(47.17%) and 19(40.43%), respectively. Whereas, the prevalence of low self-esteem in medical and non-medical students was in 14(26.42%) and in 17(36.17%), respectively. This study revealed that there is no significant relationship between impostor syndrome and self-esteem with x^2 (3) with p=0.994.

Conclusion

Impostor syndrome is prevalent in the medical and non-medical students of The University of Faisalabad along with low self-esteem. The students suffering from impostor syndrome, i.e. "The Impostors", are at risk of developing mental distress and emotional chaos. This may have harmful effects on their body, mind, personalities, and academics as well as professional developments. For this reason, the knowledge of impostor syndrome is highly crucial in the educational systems amongst both students and teachers. So, educational systems should identify and train students with impostorism.

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Author Contribution:
AE, MS & MS: Concept, design, data acquisition, analysis, interpretation, drafting, revision, final approval and agreement to be accountable for all aspects of the work.