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ORIGINAL ARTICLE

Burnout Syndrome among Students of a Private Medical College at Lahore

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ABSTRACT

Background: Background: Medical education is a dynamic and lifelong process directly linked with human life. The profession is supposed to minimize the human sufferings, prevent diseases and promote the healthy practices at individual and community level. Burnout in undergraduate medical education can influence the academics and overall well-being of the learners in a negative way, which will ultimately affect the process of learning.

Objective: The current study was conducted to assess the magnitude of Burnout syndrome among the students of a private medical college.

Study Design: Descriptive, cross sectional study design.

Place & Duration: The study was conducted during the period of six months from September 2019 to March 2020 at Azra Naheed Medical College Lahore.

Methodology: Non probability convenient sampling technique was used and all the students of 3rd and 4th year MBBS were invited for the study. Burnout was evaluated by using the Maslach Burnout Inventory-Student Survey (MBI-SS). Approval of institutional ethical review committee and informed consent from the participants were obtained. The collected data was organized, entered in the version 21 of SPSS and analyzed by the use of statistical tools.

Results: Out of total 200 participants, 43.5% were females and 56.5 % were males, 55.5% were from 3rd year and 44.5% were from 4th year of MBBS class. The prevalence of high Burnout was found to be 45(22.5%). Gender and residence-based prevalence was studied and calculated P value of (0.87) and (0.41), showed no association. However, a statistically significant association of burnout, (P value 0.003) was found between the 3rd and 4th year MBBS classes.

Conclusion: The study concludes that a substantial number of undergraduate medical students suffers from the Burnout syndrome which may influence the health, well-being and academic progress of students in a negative way. Preventive measures including counselling, early diagnosis and clinical management should be opted by the medical institutes.

Key Words: Burnout, Medical Education, Emotional Exhaustion, Depersonalization

INTRODUCTION

Medical education is a dynamic and lifelong process directly linked with human life. The profession is supposed to minimize the human sufferings, prevent diseases and promote the healthy practices at individual and community level. The holistic concept of health emphasizes the cognitive, psychomotor and affective domains of medical learning aligned with the future needs of the profession[1]. Similarly, the personal development of medical professionals including the psycho social domain is an important area of concern[2]. Medical profession is a significantly noble and highly demanded field, but it is very critical and emotionally demanding profession as well. It needs a robust entry requirement followed by lengthy and tough learning sessions. Routine assessment and academics related pressures may lead to emotional disturbances and some time to psychological issues[3]. The psychosocial health of the learners in medical education is considered as a major concern in different countries. It is due to the fact that learning environment regarding the description of moral and legal responsibilities along with the little or no tolerance for mistakes is a consistent source of stress and anxiety[4]. Generally, the undergraduate medical students spend learning time in a tense environment. As a result, these students may face different psychological issues during their career. One of these concepts is termed as “Burnout” which was emerged in the late 1960s[5,6]. It is characterized by “different levels of emotional exhaustion, depersonalization and a low sense of personal accomplishment”. This syndrome is well documented in literature and also considered as endemic in the health care system (4). Relevant studies describe that the symptoms of burnout are prevalent during medical learning and around half of the students in medical college may experience the Burnout Syndrome[7]. Different studies conclude that an estimated number of 49% students from the medical schools of USA and 28 to 61% from the medical schools of Australia experience the symptoms of Burnout[8].

Burnout in undergraduate medical education can influence the academics and overall well-being of the

learners in a negative way, which will ultimately affect the process of learning. It is also identified as an important single reason for the ideation of suicide and expulsion from the medical college[9]. This syndrome is significantly prevalent among the medical students. A study from Brazil, concluded a prevalence of 34 % among the first four years medical students[10]. Similarly, burnout reportedly, have potential to negatively effect and interfere the process of medical teaching and learning. Apart from these issues it may cause emotional instability, use of drugs eating disorders, fatigue and drowsiness[11]. It is worth mentioning that globalization and technological revolution has created a competitive world, which is also an influencing factor for the academic pressures. Moreover, the extensive growth of medical knowledge is also a contributing factor for the education related stress and anxiety in learners.

Burnout at the undergraduate level is not getting due attention in Pakistan. Although the medical students face multiple issues resulting in academic disturbances suicidal tendencies and the exaggerated behaviors. The present study was conducted, to measure the magnitude of Burnout syndrome among the students of a private medical college at Lahore Pakistan.

MATERIAL AND METHODS

A descriptive, cross sectional study was conducted among the students of Azra Naheed Medical College Lahore, during the period of January to June, 2019. Non probability convenient sampling technique was adopted. After the approval of institutional ethical review board all the students of 3rd year and 4th year MBBS were invited for the study. Burnout was evaluated by using the Maslach Burnout Inventory-Student Survey (MBI-SS)(12). This inventory comprised of 15 items grouped into three dimensions including exhaustion, cynicism, and efficacy. A 7-point rating scale was used to score different items. The final score of each dimension were obtained by calculating the arithmetic means of each item. The final score for each subgroup was classified as ‘‘low’’, ‘‘average’’, or ‘‘high’’. The high category was considered as the prevalence of Burnout among the participants. The study subjects were communicated about voluntary participation, confidentiality and informed consent was obtained. Data collection tool was distributed and different queries of the participants regarding questionnaire were clarified.

The data regarding age, gender, class, previous education, parental education, and occupation was also collected. The data was collected from the both classes and the incomplete questionnaires were excluded from the study. This data was organized, entered in the version 21 of SPSS and analyzed by the use of statistical tools.

RESULTS

Out of total 200 study participants, 43.5% were females and 56.5 % were males, 55.5% were from 3rd year and 44.5% were from 4th year of MBBS class. The majority of participants (63%) were from urban area. Father’s occupation of participants was businessman (35%), professionals including doctor, teachers and engineers (25%), landlord and farmers (15%), other Government employees (25%). Education level of fathers was bachelor degree or above in (75%) and among mother of the participants it was found as (54.5%). These finding are presented in Table 1.

Table-1: Socio-demographic Profile of the study participants.

Variable		Frequency n=200	%age
Gender	Male	113	56.5
	Female	87	43.5
Class	MBBS 3rd Year	111	55.5
	MBBS 4th Year	89	44.5
Previous Education	Matric/F.sc	190	95.0
	O/A Level	10	5.0
Family Residence	Urban	126	63.0
	Rural	21	10.5
	Mix	53	26.5
Father's Occupation	Businessman	70	35.0
	Professional	50	35
	Landlord & farmers	30	15
	Govt. Employee	50	25
Father's Education	Bachelor Degree or above	150	75
	Intermediate or Below	50	25
Mother’s Education	Bachelor Degree or above	109	54.5
	Intermediate	91	45.5

The prevalence of Burnout was studied and found that out of total 200 study participants, 88(44.2%) were having low burnout, 67(33.3%) had medium burnout, and 45(22.5%) had high risk of burn out. These findings are presented in Table 2.

Table 2: Sowing the Prevalence of Burnout among medical students

Maslach Burnout Inventory-Student Survey (MBI-SS)		Frequency	%age
Exhaustion	Low	106	53.0
	Moderate	56	28.0
	High	38	19.0
Cynicism	Low	73	36.5
	Moderate	73	36.5
	High	54	27.0
Efficacy	Low	86	43.0
	Moderate	71	35.5
	High	43	21.5
Overall Risk of Burnout	Low	88	44.2
	Moderate	67	33.3
	High	45	22.5

The gender and residence-based prevalence was studied and results are presented in Table 3. The P value (0.87) and (0.41), calculated through chi square test, shows that there is no association of gender and residence area of the study subjects with the burnout syndrome. The prevalence of burnout between the 3rd and 4th year MBBS classes was also compared and found that it was higher among the participants of 4th year class. The calculated P value (0.003), represent a statistically significant association.

Table 3: Gender, residence and educational year-based comparison of the Burnout among the study participants

		Low	Med	High	Total	p-value
Gender	Male	48	38	27	113	0.87
	Female	40	29	18	87	
	Total	88	67	45	200	
Residence	Urban	60	37	29	126	0.41
	Rural	10	8	3	21	
	Mix	18	22	13	53	
	Total	88	67	45	200	
Education Year	3rd year	50	40	21	111	0.003
	4th Year	20	41	28	89	
	Total	70	81	49	200	

DISCUSSION

Burnout syndrome was identified during the 1960s and it is characterized by "different levels of emotional exhaustion, depersonalization and a low sense of personal accomplishment"[5]. The findings of the present study revealed that the cumulative prevalence of high burnout syndrome among the participants was 22.5%. These results are contrary to findings of a similar study conducted among the medical students of a university from Brazil which concluded a prevalence of 14.9%[7]. However, this study was different from the present research regarding the study year of the participants which were included from first to eight semesters whereas the participants of present study were from the 3rd and 4th year classes of MBBS. The low prevalence may be due to the inclusion of the subjects from the initial years[7]. The results are also in contrast to the conclusion of another similar study which concluded a prevalence of 26.4%[4]. Another study conducted among the senior medical students of Iran also contradicts the findings of current study by concluding a prevalence of 16% [13]. The findings of present study are close to the outcome of a research conducted among the medical students of Karachi Pakistan which concluded the prevalence of burnout as 18.2%[14]. The results also contradicts the findings of another similar research conducted among the students of two medical colleges from Lahore which concluded the burnout prevalence as 30.6%[15]. Another study among the residents of a tertiary care medical institutes of India concluded that Burnout was present among one third of the study participants which also opposes the findings of present study[16]. A study among the Malaysian medical students also differs the finding of present research as the concluded prevalence of Burnout in this study was 67.9%[17].

Gender based prevalence of burnout was investigated and no significant difference was found in the present study. These findings are contradictory to the conclusion of another research conducted among the Brazilian medical students which concluded a gender based difference by describing that that females were more affected by the syndrome[8]. However, the results of the present study regarding gender oriented prevalence are in line with the finding of another research from Iranian medical students which concluded that there was no statistically significant association between these variables[13]. Another study conducted among the students of china also concluded that there is no significant association between burnout and the gender of the study participants which favors the finding of present study[12]. A study among the Malaysian medical students about the prevalence of Burnout also supports the gender based findings of current study by describing that there was no difference among the female and male participants[17]. Regarding the prevalence of burnout among the students of 3rd and 4th Year MBBS a statistically significant difference was found with a higher prevalence in 4th year class. However the current findings contradict the results of another study among the participants of pre-clinical and clinical classes in which no difference was concluded.

The participants of present study were from 3rd and 4th year MBBS classes which may be a limitation of this research. The study subjects from all the classes can yield a more representative finding regarding the college. Moreover, the inclusion of a single private medical college also limits the generalizability to undergraduate medical students. It will be more appropriate to manage a multicenter study. However, this research can be used as a baselined research for further studies.

CONCLUSION

This study concludes that a substantial number of undergraduate medical students suffers from the Burnout syndrome. This issue will negatively influence the health, well-being and academic progress of students, which may compromise the future of these professionals. It is recommended that, preventive measures including counselling, early diagnosis and clinical management must be adopted by the medical institutes. This will not only improve the health status but enhance the quality of medical education as well.

Limitations: This study was conducted at one private medical college and total numbers of students are limited as per our local capability. We recommend extending this study to other private and government sector medical colleges and more students may be involved to formulate the guidelines regarding burnout in medical students

Suggestions / Recommendations

Our study was conducted in one private medical college. Further validity of the study needs that it should be conducted in other private and government sector medical colleges.

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