

An assessment of socio-demographic profile and psychological related problems in students attending mental health clinic having poor academic performance**Jai Singh Yadav¹, Shiv Prakash^{2*}**¹*Professor, Department of Psychiatry, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh, India*²*Ph.D. Research Scholar, Department of Psychiatry, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh, India*

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ABSTRACT

Background: The prevalence of psychiatric disorders has been increasing day by day among students. The students having poor academic performance are more prone to these disorders especially in developing countries like India. **Methods:** A cross-sectional study was conducted to assess and compare the socio-demographic profile and the psychological disturbance between male and female students attending mental health clinic due to poor academic performance. A total of 530 students fulfilling the inclusion and exclusion criteria were interviewed using a semi-structured proforma and The Mini international neuropsychiatric interview (MINI) English version 5.0.0. The data were analyzed using the SPSS version 20 software. The descriptive analysis was done using frequency, percentage mean, and standard deviation. The comparison and risk ratio was calculated using the chi-square test. **Results:** The majority of the respondents were male students 279 (52.61%) as compared to female students 251 (47.36%) in the present study. Most of them (approximately 45%) were from the age group 20-24 years. The major psychological disturbances were found such as depression, anxiety, stress disorder, and suicide intent among the male and female students having poor academic problems. There was a significant difference ($P < 0.001$, $OR = 0.205$, 95% CI 0.130-0.323) in the risk of depression between male and female students. There were other psychological disturbances such as headache, dizziness, and behavioral problems also high among female students. However, sleep disturbance and addiction were found high among male students. **Conclusion:** Findings of the study revealed that students attending mental health clinic due to poor academic performance are prone to psychological disturbances. The risk of depression was found significantly high among female students as compared to male students.

Key words: Mental Health, Academic Achievement, Depression, Anxiety, Addiction

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INTRODUCTION

India is the second-largest populated country in the world consisting of most young generational populations. There is about 422 million youth population as per the last census 2011 in India (Central Statistics Office 2017).^[1] Youth can play an important role in the bright future of the nation, by improving their academic performance we can create a number of skilled citizens. One of the main national priorities in India is to the improvement of the quality of education.

However, this is a problem that depends on particular qualities of the child, his/her peer group, family, teachers and numerous other factors related to education such as academic background, school environment, and the infrastructure of the educational establishments. All the factors mentioned above affect greatly the development of countries that are hampered by shortcomings in educational, socio-economic, socio-cultural, intellectual and nutritional conditions that affect the quality of life of the youth population. According to the National Mental Health Survey Report (2015-16), the prevalence of psychiatric morbidity among adolescents in India was 7.3% with similar distribution between both genders (male: 7.5% and female: 7.3%) and the most common disorders were found depression and anxiety disorders.^[2]

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Academic performance of students defined as competence and ability of students to demonstrate their study skills and behaviours. There are many factors like teachers, home, student's profiles, and psychological factors can affect their schooling performance. Some previous studies had reported that the mental health of the students affects on their academic performance.^[3,4] Though there are limited studies in this area especially in the adolescent age group, hence we planned to conduct the present study at our center, which have reached the source of the subject because this center covers a wide area of the northeast zone of India.

AIM & OBJECTIVES

1.To assess the socio-demographic profile of students attending mental health clinic due to poor academic performance.

2.To assess and compare the psychological related problems between male and female students attending mental health clinic due to poor academic performance.

MATERIAL & METHODS

A Cross-sectional study was carried out in Centre for Excellence Child and Adolescent Health, Sir Sundarlal Hospital, Institute of Medical Sciences, Banaras Hindu University in Varanasi in Uttar Pradesh. The ethical clearance was taken in two parts; first we took permission to conduct this study from authorities of centre for excellence adolescent and health. Thereafter, second part was reviewed by Ethics review committee Institute of Medical Sciences, Banaras Hindu University in Varanasi in Uttar Pradesh. The present study was conducted between the duration of March 2018 to March 2019.

Sample Size

A total of 530 respondents who fulfilled the inclusion and exclusion criteria were selected from a total of 1473 school going and university students who came to Centre for Excellence Child and Adolescent Health, Sir Sundarlal Hospital

Inclusion Criteria

1.School & university going students who scored less than 25% marks in comparison to the previous academic year. And also complain about poor academic performance along with psychological problems.

2.Aged 10 to 24 years.

3.Both gender; male and female.

4.Giving consent and willing to participate in the study.

Exclusion Criteria

1.Individuals who were aged below 10 years and above 24 years.

2.Having any chronic physical illness.

3.Neither willing to participate nor giving consent.

Study tools

A semi-structured questionnaire was prepared on basis of ICD 10 DCR the objectivity, the feasibility of proforma done in consultation with research expertise in the department of the institute of medical sciences, Banaras Hindu University. Proforma consists of 24 items based on common psychological disorders among students those questionnaires based on yes or no options. It was a self-administered questionnaire by students and can easily be answered within 5 minutes. The Mini international neuropsychiatric interview (MINI): It is a widely used psychiatric structured diagnostic interview instrument. The M.I.N.I. English version 5.0.0 designed as a brief structured interview for the major Axis I psychiatric disorders in DSM-IV and ICD-10.^[5] Validation and reliability studies have been done comparing the M.I.N.I. to the SCID-P for DSM-III-R and the CIDI (a structured interview developed by the World Health Organization for lay interviewers for ICD-10). The results of these studies show that the M.I.N.I. has acceptably high validation and reliability scores, but can be administered in a much shorter period of time (mean 18.7 ± 11.6 minutes, median 15 minutes) than the above referenced instruments. It can be used by clinicians, after a brief training session.

Procedure

All the patients attending the Coe-AMH centre, SS hospital, institute of medical sciences, Banaras Hindu University Varanasi, who fulfilled the exclusion and inclusion criteria, were selected for the present study. First, all the respondents were given a brief information about all the instructions and importance of the study by the male/female counsellors. Then they were enrolled in the OPD and the informed consent was taken. "Then all the selected respondents were interviewed using the semi-structured questionnaire and the mini international neuropsychiatric interview (MINI) by the clinical psychologist. Finally, the respondents who were found with psychological problems in the screening were diagnosed by the psychiatrist using ICD-10 criteria for the diagnosis of psychiatric problems. Each interview was conducted in approximately 30 minutes."

Data analysis

First the collected data was entered in the Microsoft Excel and then exported in to the SPSS version 20 Software for the analysis. The data was analysed using descriptive statistics; all the categorical data was compared using frequency, percentage, mean and standard deviation. " Comparison and relative risk was calculated using Pearson's Chi-square test."

RESULTS

A total of 530 individuals (having low or poor academic performance) out of 1473 students who visited the adolescents' mental health clinic were interviewed in the present study. Low or poor academic performance-related complaints were claimed comparatively high by male students (52.67%) compared to female students (43.36%). In the age distribution maximum male students (44.91%) were aged between 20 to 24 years, while in females students most of them (42.23%) were between the age the group 15 to 19 years. Higher percentages of students in both the groups were unmarried, except some minor deference i.e.2.51 % males and 11.95% females were married. Evaluation on the basis of religion, higher percentages 91.8% were male and 95.3 were female in both groups. The poor academic performance had been complained highly by the students who belong to the lower and middle class of socioeconomic status. The

majority of the male students (48.75%) were from the lower socioeconomic status while among the female students most of them (49.81%) were from the middle class of socioeconomic status. In our samples maximum percentages of students were regular of school or college going, in school going students, the percentage female students were slightly higher i.e.42.23% than male students i.e. 39.43%.while in college going student, percentage of male students were higher than female i.e. 40.14% and 31.87 % respectively. There are certain percentage of students i.e.15.03%, those were completed their study and were still associated with their study in form of preparations of competitive examination or involved in mental work. Even 1.07% subjects also included in this study because these subjects were taking informal educations in forms of coaching and home tuition and they had educational problem.[Table1]

Table:1 Socio-demographic Characteristics of the students having low academic performance

Socio-demographic Variables	Male N=279		Female N=251		Total N=530	
	f	%	f	%	f	%
Age						
10-14	47	16.84	48	19.12	95	17.92
15-19	91	32.62	106	42.23	197	37.17
20-24	141	50.54	97	38.65	238	44.91
Marital Status						
Married	7	2.51	30	11.95	37	6.98
Unmarried	272	97.94	221	88.05	493	93.02
Religion						
Hindu	270	96.77	225	89.64	495	93.40
Muslim	6	2.15	18	7.17	24	4.52
Sikh	1	0.36	4	1.59	5	0.94
Christian	1	0.36	2	0.80	3	0.57
Others	1	0.36	21	0.80	3	0.87
Socio-economic status						
Upper	25	8.96	31	12.35	61	10.57
Medium	118	42.29	125	49.81	243	45.85
Lower	136	48.75	95	37.85	231	43.59
Educational Detail						
School going	110	39.43	106	42.23	216	40.75
College going	112	40.41	80	31.87	192	36.23
Completed	42	15.05	38	15.14	80	15.09
Dropout	11	3.94	22	8.75	33	6.23
Never gone	4	1.43	5	1.99	9	1.70

Table 2 shows that depression, anxiety disorder, and stress disorder were found as major psychological disturbances among both male and female students having poor academic performance, while there were some individuals having suicidal intent among male students (2.15%) and female students (0.8%). In the estimation of the gender of the respondents as the associated risk factor of the major psychological disturbance; the result was found that there was no significant association between the gender of the respondent and anxiety, stress disorder. But there was a significant association ($P < 0.001$) found between the gender of the respondents and depression. And the risk of depression was found two times higher among female students compared to male student.

Table 2 :Distribution of the major psychological related problems among the respondents

Major psychological disturbances	Male (279)		Female (251)		Total number (530)		Odds Ratio	95% C. I.		P Value
	F	%	f	%	f	%		Lower	Upper	
Depression										
Present	30	10.8	93	37.1	123	23.2	0.205	0.130	0.323	0.000*
Absent	249	89.2	158	62.9	407	76.8				
Anxiety										
Present	20	7.2	10	14.0	30	5.73	1.861	0.854	4.056	0.133
Absent	259	92.8	241	96.0	500	94.3				
Stress Disorder										
Present	45	16.1	35	13.9	80	15.1	1.187	0.735	1.916	0.483
Absent	234	83.9	216	86.1	450	84.9				
Suicidal Intent	6	2.15	2	0.80	8	1.5	-	-	-	-

Abbreviations: * Statistically significant at P is < 0.001, C. I. Confidence Interval,

Table 3 shows that besides the major psychological disturbances there were some other psychological disturbances among students having poor academic performance (like; headache, sleep disturbance, behavioural problems, dizziness and relationship matters). There were some psychological disturbances especially headache (21.51%), behavioural problems (7.97%) and dizziness (3.98%) found highly among female students compared to the male students. While among the male students some psychological disturbances like sleep disturbance (7.89), relationship matters (2.51%) and addiction (alcohol and smoking intake) were found higher compared to the female students.

Table 3: Distribution of the other psychological related problems among the respondents

Other psychological disturbances	Male (279)		Female (251)		Total number (530)	
	f	%	f	%	f	%
Headache	43	15.41	54	21.51	97	18.30
Behavioural Problems	6	2.15	20	7.97	26	4.91
Dizziness	7	2.51	10	3.98	17	3.21
Sleep Disturbance	22	7.89	18	7.17	40	7.55
Relationship matters	7	2.51	1	0.40	8	1.51
Addiction						
Smoking regular	11	3.94	0	0.00	11	2.08
Smoking Occasionally	22	7.89	4	1.59	26	4.91
Alcohol consumption Regular	7	2.51	0	0.00	7	1.32
Alcohol consumption occasionally	29	10.39	3	1.20	32	6.04
Other addiction	24	8.60	1	0.40	25	4.72

Discussion

The present study was conducted to assess and compare socio-demographic profile and psychological disturbance between male and female students of schools and universities attending mental health clinic due to poor academic performance. The result of the present study revealed that poor academic performance-related complaints were reported high by male students as compared to female students, it is similar findings a previous study conducted.^[6, 8, 12] The present study indicated that the majority the students having poor academic performance-related complaints were from the lower and middle class of socioeconomic status. Some previous study has revealed that poor socioeconomic status of the family affect the academic performance of the students.^[6, 7, 8] In contrast to the present findings a study revealed that there is no significant association between the family's socioeconomic status and student's academic performance.^[9] The present study indicated that majority of the students having poor academic performance were school going children. The present study revealed that there were depression, anxiety, stress disorder, and suicidal intent as major psychological disturbances among students having poor academic performance. Some studies conducted in India and other countries had reported that there is a significant relationship between mental health and academic performance of the students.^[10-12] However, some other studies had reported there is no significant association of common mental illness with the academic performance of the students.^[13] In the present study shown that depression was strongly associated with the gender of the students; the risk of depression was found two times higher among female students having poor academic performance compared to male students. Findings of the previous studies also had revealed that academic performance is associated with depression among students, and depression is more prevalent among female students as compared to male students.^[12, 14-16] The findings of the present study also revealed that besides depression there were anxiety, stress disorder, and suicidal intent more common among the students. But there was no significant difference in the risk of anxiety and stress disorder found between male and female students having poor academic performance. In contrast to the present finding, some previous studies had reported the there is a significant difference in the prevalence of anxiety and stress disorder between male and female students.^[17, 18] The present study revealed that there were some other psychological disturbances besides the major psychological disturbances like depression, anxiety, and stress disorder. There were some other

psychological disturbances (like headache, dizziness, behavioural problems, sleep disturbance, relationship matters, and addiction) found among both male students and female students in the present study that is similar to the previous studies.^[19] Findings of the present study indicated that headache, dizziness and behavioural problems were found comparatively higher among female students compared to male students.^[19,20] In correspondence to the present findings, some previous studies had reported significant difference in the prevalence of migraine and dizziness between male and female students.^[20, 21] However, psychological problems like sleep disturbance, relationship matters, and addiction (taking alcohol and smoking) were found comparatively high among male students. In correspondence to the findings of the present study, some previous studies also had revealed that sleep disturbance or insomnia and substance abuse (mainly alcohol intake and smoking) are more prevalent among male students compared to female students.^[22, 23]

Limitations

There are some limitations of the presents study; the sampling method may not be appropriate. The samples were collected from only one mental health clinic. The respondents were interviewed with the screening tools only. And the severities of the psychological disturbances were not assessed. Psychological disturbances such as internet addiction and nomophobia were not assessed.

Conclusion

Findings of the present study revealed that the students attending the mental health clinic due to poor or low academic performance are more prone to psychological disturbances. There are some major psychological disturbances like depression, anxiety, stress disorder, and suicidal intent more common among these students. And the risk of depression is significantly higher among female students having poor academic performance compared to male students. There are some other psychological problems like headache, dizziness, and behavioural problems are more prevalent among female students. However, psychological disturbance such as sleep disorder and addiction are more prevalent among male students compared to female students. Hence, there should be organized some educational programs related to mental health and illness and provide counselling facilities in the schools, colleges, and universities to prevent students from psychological disturbances.

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