

PERSONALITY PROFILE AS A CORRELATE OF SUICIDALITY AMONG INDIVIDUALS WITH NO MAJOR PSYCHIATRIC COMORBIDITIES

Zulfath Moideen ¹, Naresh D ^{2*}, Lakshmi Dorai B ³,
C. Pradeep ⁴ and Dharani E ⁵

¹ Senior Resident, Department of Psychiatry, MES Medical College, Perinthalmanna, Kerala.

² Final Year Post Graduate, Department of Psychiatry, Vinayaka Mission's Kirupananda Variyar Medical College and Hospital, Vinayaka Mission's Research Foundation (Deemed to be University), Salem, Tamilnadu.

³ Professor and Head, Department of Psychiatry, Vinayaka Mission's Kirupananda Variyar Medical College and Hospital, Vinayaka Mission's Research Foundation (Deemed to be University), Salem, Tamilnadu.

⁴ Associate Professor, Department of Psychiatry, Vinayaka Mission's Kirupananda Variyar Medical College and Hospital, Vinayaka Mission's Research Foundation (Deemed to be University), Salem, Tamilnadu.

⁵ Assistant Professor, Department of Psychiatry, Vinayaka Mission's Kirupananda Variyar Medical College and Hospital, Vinayaka Mission's Research Foundation (Deemed to be University), Salem, Tamilnadu.

*Corresponding Author Email: dr.nareshdhana@gmail.com

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Abstract

Background: Personality disorders are enduring, inflexible and pervasive patterns of behaviour and inner experience that seriously deviate from cultural norms and cause significant distress or impairment in various areas of an individual's functioning. Data from the World Health Organization / EURO Multi-center Study on Suicidal behaviour showed that neurotic and personality disorders were the second most frequent diagnosis (after the adjustment disorders) having been identified in 18% of male and 15% of female suicide attempters given the fact that temperament trait, and personality affect our emotional and behavioural patterns, we presume that personality profile assessment could be a key factor in identifying suicidal behaviour. **Aim:** To study the relationship between personality profile and suicidality among Persons without any major psychiatric illness by using International Personality Disorder Examination (IPDE) questionnaire. **Materials and Methods:** A cross-sectional study was conducted for a period of one and half year at the psychiatry department of Vinayaka Missions Kirupananda Variyar Medical College and Hospital. Patients admitted with a history of suicide attempt in our medical college hospital were taken as our study subjects. Psychiatric patients were excluded from the study. For the assessment of personality profile, IPDE ICD-10 module screening questionnaire was used. The IPDE Screening Questionnaire is a self-administered form that contains 77 DSM-IV or 59 ICD-10 items written at 9 years of age reading level. **Results:** In our study, 88% of the subjects had multiple personality trait and only 12% had single personality trait. The combination of Schizoid, Borderline and Histrionic was found to be the commonest multiple personality trait and apart from that we found an almost equal mix of combinations among the paranoid, schizoid, Dissocial, Impulsive, Borderline, Histrionic, Anankastic, Anxious and Dependent personality trait. There was no statistical significant difference observed between the gender and the type of combination of personality trait. Majority of the people in the age group of > 30 years had multiple personality trait compared to people aged < 30 years and this difference was found to be statistically significant ($p < .05$). **Conclusion:** All patients reporting to Psychiatry department with a history of suicide attempt should be properly evaluated for the personality trait and proper intervention in the form of medication and psychotherapy would prevent these patients from committing suicide in the future.

Keywords: Suicide Attempters, Personality Trait, Borderline Personality, Multiple Personality Trait.

INTRODUCTION

There are various factors that were contributing to suicidality and all those were diverse and complex. Suicide is a global phenomenon that is occurring in all regions of the world; and according to the 2015 statistics, of all the suicide that is occurring globally 78% of the suicide had occurred in low-and middle income countries.^[1] Studies had shown that the annual suicide rate was 11.6 per 100,000 people worldwide in 2012, and it was also associated with approximately 805,000 suicidal behaviors.^[2] Additional studies are clearly needed to identify effective treatment and prevention strategies for suicidal behaviour disorder, as underlined in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).^[3]

Suicide being a crucial psychological and social problem, there is a universal attempt to prevent it. Nationally the prevalence of contemplating suicide is 16% and that of Suicide attempt is 4.4%.^[4,5] The risk of death from suicide is 30–40 times more for the Suicide attempters compared to the normal population.^[6,7] Furthermore, the likelihood of death among patients with repetitive self-harm behaviours is 100 times more than general population. Globally one suicide attempt per second and one death per 40 seconds due to suicide have been reported.^[8] Several risk factors increase the likelihood of mortality and morbidity among the cases.^[9]

Aim of the present study is to study the relationship between personality profile and suicidality among Persons without any major psychiatric illness by using International Personality Disorder Examination (IPDE) questionnaire

METHODOLOGY

A cross-sectional study was conducted over a 20-month period, from April 2021 to December 2022, at Vinayaka Missions Kirupananda Variyar Medical College and Hospitals. The study focused on 100 patients who were admitted with a history of suicide attempt. Utilizing a cross-sectional design, the researchers aimed to understand various aspects related to these patients. The sample size comprised 100 individuals, all of whom had been admitted to the medical college hospital following a suicide attempt. To derive this sample size, the study employed quota or purposive sampling, a type of non-random sampling technique, ensuring a focused selection of participants for the research. The inclusion criteria for the study were participants aged 18 years and above, patients admitted with a history of suicide attempt, and those willing to provide written informed consent. Conversely, the exclusion criteria included patients unwilling or unable to provide written informed consent, patients suffering from other comorbid medical conditions such as epilepsy and cardiovascular diseases, and those identified with mental retardation through clinical interviews.

Study Tools:

IPDEICD-10 module screening questionnaire to assess the personality profile of the suicide attempt patients. IPDEICD-10 module screening questionnaire formulated for the World Health Organization (WHO) A59 item, self-report scale, has been designed to measure the personality profile. This questionnaire measures the following personality profiles- Paranoid, Schizoid, Dissocial, Impulsive, Borderline, Histrionic, Anankastic, Anxious and Dependent. The items of the questionnaire are to be answered true or false. The results include both a categorical diagnosis of personality disorders in both classification systems and a dimensional score for each personality disorder and the type.

Statistical Analysis:

The collected data were entered and analysed using SPSS version 24. Mean and standard deviation was calculated for all the parametric variables and percentage was calculated for all the frequency variables. Correlation and association type of statistical tests were used for deriving the statistical inference.

RESULTS

In our study 88% of the subjects had multiple personality trait and only 12% had single personality trait. The combination of schizoid, borderline and histrionic was found to be the commonest multiple personality trait and apart from that we found an almost equal mix of combinations among the paranoid, schizoid, Dissocial, Impulsive, Borderline, Histrionic, Anankastic, Anxious and Dependent personality trait. There was no statistical significant difference observed between the gender and the type of combination of personality trait. Majority of the people in the age group of > 30 years had multiple personality trait compared to people aged < 30 years and this difference was found to be statistically significant ($p < .05$).

Table 1: Gender wise Distribution of the Study Subjects based on the different Combination of Multiple Personality Trait

Personality trait	Male	Female	P VALUE
Borderline	5	5	0.633
Impulsive	2	0	
Dissocial, Borderline, Anankastic	1	4	
Dissocial, Borderline, Anankastic, Dependent	1	3	
Dissocial, Borderline, Dependent	0	3	
Dissocial, Impulsive, Borderline, Anankastic	1	2	
Dissocial, Impulsive, Borderline, Dependent	1	2	
Paranoid, Dissocial, Impulsive, Borderline, Anankastic	1	2	
Paranoid, Schizoid, Borderline, Histrionic, Anankastic, Anxious, Dependant	3	2	
Paranoid, Schizoid, Dissocial, Impulsive, Borderline, Anankastic, Anxious	1	2	
Paranoid, Schizoid, Dissocial, Impulsive, Borderline, Anankastic, Dependent		2	
Paranoid, Schizoid, Dissocial, Impulsive, Borderline, Histrionic, Anankastic, Anxious	1	5	
Paranoid, Schizoid, Dissocial, Impulsive, Borderline, Histrionic, Anankastic, Anxious, Dependent	0	3	
Paranoid, Schizoid, Dissocial, Impulsive, Borderline, Histrionic, Anankastic, Dependent	4	3	
Paranoid, Schizoid, Impulsive, Borderline, Histrionic, Anankastic, Anxious, Dependent	1	2	
Schizoid, Borderline	2	2	
Schizoid, Borderline, Histrionic	4	8	
Schizoid, Borderline, Histrionic, Anankastic, Anxious, Dependent	0	2	
Schizoid, Dissocial, Impulsive, Borderline,	1	2	
Schizoid, Dissocial, Impulsive, Borderline, Anankastic	0	3	
Schizoid, Dissocial, Impulsive, Borderline, Histrionic, Anankastic, Dependent	3	1	
Schizoid, Impulsive, Borderline, Histrionic, Anankastic	1	5	
Schizoid, Impulsive, Borderline, Histrionic, Anankastic, Dependent	1	2	
Total	35	65	

Table 1 shows the gender wise distribution of the study subjects based on the different combination of multiple personality trait. It is inferred from the table that there was no statistical significant difference observed between the gender and the type of combination of personality trait ($p > .05$).

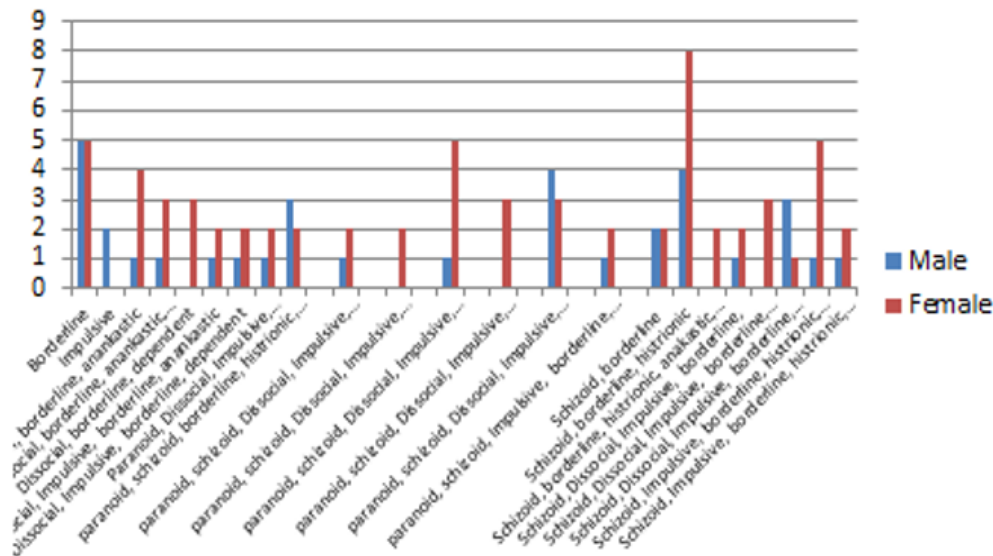


Figure 1: Gender wise Distribution of the Study Subjects based on the Different Combination of Multiple Personality Trait

Table 2: Age Wise Comparison of the Study Subjects based on the Different Combination of Multiple Personality Trait

Personality trait	Age <30 years	>30 years	Total	P value
Borderline	7	3	10	<.0001
Dissocial, Borderline, Anankastic	0	5	5	
Dissocial, Borderline, Anankastic, Dependent	0	4	4	
Dissocial, Borderline, Dependent	0	3	3	
Dissocial, Impulsive, Borderline, Anankastic	0	3	3	
Dissocial, Impulsive, Borderline, Dependent	3	0	3	
Impulsive	2	0	2	
Paranoid, Dissocial, Impulsive, Borderline, Anankastic	0	3	3	
Paranoid, Schizoid, Borderline, Histronic, Anankastic, Anxious, Dependent	1	4	5	
Paranoid, Schizoid, Dissocial, Impulsive, Borderline, Anankastic, Anxious	3	0	3	
Paranoid, Schizoid, Dissocial, Impulsive, Borderline, Anankastic, Dependent	3	0	3	
Paranoid, Schizoid, Dissocial, Impulsive, Borderline, Histronic, Anankastic, Anxious	3	3	6	
Paranoid, Schizoid, Dissocial, Impulsive, Borderline, Histronic, Anankastic, Anxious, Dependent	0	3	3	
Paranoid, Schizoid, Dissocial, Impulsive, Borderline, Histronic, Anankastic, Dependent	3	4	7	
Paranoid, Schizoid, Impulsive, Borderline, Histronic, Anankastic, Anxious, Dependent	0	3	3	
Schizoid, Borderline	4	0	4	
Schizoid, Borderline, Histronic	8	4	12	
Schizoid, Borderline, Histronic, Anankastic, Anxious, Dependent	2	0	2	

Schizoid, Dissocial, Impulsive, Borderline,	3	0	3
Schizoid, Dissocial, Impulsive, Borderline, Anankastic	3	0	3
Schizoid, Dissocial, Impulsive, Borderline, Histrionic, Anankastic, Dependent	4	0	4
Schizoid, Impulsive, Borderline, Histrionic, Anankastic	6	0	6
Schizoid, Impulsive, Borderline, Histrionic, Anankastic, Dependent	0	3	3
Total	55	45	100

Table 2 shows the age wise comparison of the study subjects based on the different combination of multiple personality trait. It is inferred from the table that the people aged < 30 years have more of single personality trait compared to people aged more than 30 years, as majority of the people in the age group of > 30 years had multiple personality trait compared to people aged < 30 years and this difference was found to be statistically significant ($p < .05$).

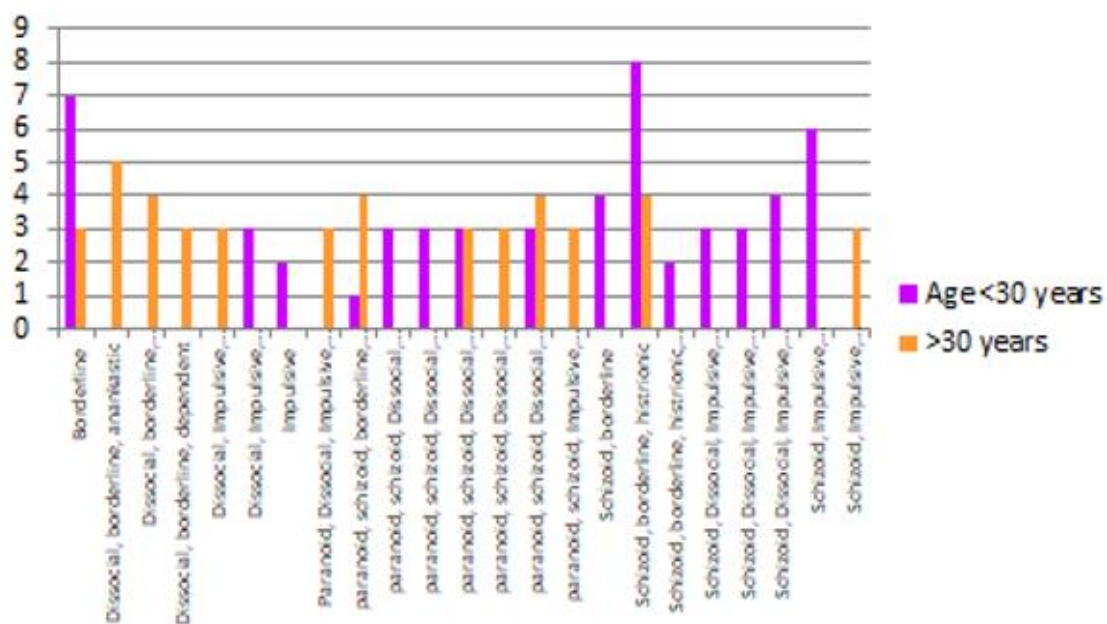


Figure 2: Age Wise Comparison of the Study Subjects based on the Different Combination of Multiple Personality Trait

DISCUSSION

The present study aimed to assess the prevalence of various personality traits among the patients who had attempted suicide previously either single attempt or more than one attempt. We independently administered a comprehensive in-depth interview which includes a structured psychiatric diagnostic examination to identify the personality trait of the individual. Most of the personality trait studies among suicide attempted patients were done in the western countries and only very few were done in this part of the country and so the present study was undertaken.

Personality disorders (PDs) are very commonly diagnosed among patients presenting with suicide risk which would indicate that personality pathology may act as an important factor in predicting suicide attempts.^[10] In the present study out of 100 patients with history of suicide attempts 55 of them were in the age group between 20 and 30 years, which shows that suicidal tendency is more common among young

adults and the results are almost in par with the studies done by Nabi J et al, Seager CP et al and Hawton K et al , in all these studies it was mentioned that suicide is a commonest problem among young adults.^[11-13] Based on the gender distribution in our study among the people who have attempted suicide we found females are more common than the males. Comparing it with the previous studies there was a mixed type of results in which few studies showing male gender being more commonly affected and in a study done by Rao KN et al and Morgan HG et al it was female gender which was more common than the males and some studies have quoted that there was no gender difference among the suicide attempters.^[14-15]

In the present study majority of the study subjects (62%) were educated either up-to middle school or higher secondary, whereas a study done by Nabi J et al had showed that 39% of the suicide attempters were educated only up to primary school level and many Indian based studies had shown lower educational status as a risk factor for suicide attempters.^[11]

A prospective Western study had proved that the socio-demographic factors among suicide attempters did not differ from general population.^[16] Since majority of the study subjects were females, home maker was found to be the major occupation among the suicide attempters and only 11% of the entire study subjects were unemployed which was almost in par with the study done by Nabi J et al which showed that thirty eight percent of the study sample patients were students, 33% were in salaried job, 22%, have their own business and only 7% were not employed.¹²⁶ Further, our study was contrary to study conducted by Beghi et al, which had quoted that unemployment as a risk factor for suicide attempt.^[17]

Also there was a low representation of unemployment in our study compared to the Western study which may be due to difficulty in its identification in agrarian rather than in industrialized countries. In the current study the mean family income among the study subjects was Rs 14,560 and more than 50% of them belong to lower middle class based on modified B G Prasad classification (53%) and 77% of them belong to below poverty line. Our medical college hospital being located in the rural area majority of the study subjects reported are from in and around our medical college area belonging to the rural area and so the socio-economic status was found to be lower in majority of the subjects.

Similar to other Indian studies, majority (83%) of patients who had attempted suicide were married.^[18] This suggests that, in the Indian context, marriage is not a buffer against suicide. In the current study over half (61%) of the sample patients belong to nuclear families, which is similar to the findings reported by Nabi J et al, Narang et al and Srivastava MK et al and it was concluded that patients from nuclear families were prone for suicide.^[11,18]

In the present study 29% of the study subjects had a previous history of suicide attempt and among them 18 of them had attempted suicide twice. This shows that certain personality trait people would be repeatedly having the suicidal ideation, which was also highlighted in the studies done earlier. It also suggests that previous attempts of suicide is one of the strongest risk factors of repeat suicide attempt.^[17] Also in our study 11 patients had a family history of suicide and in that all of them were the mothers of the study subjects.

For suicidal ideation, personality traits were closely associated with suicidal ideation among the young adults group. Borderline personality trait followed by schizoid personality trait was the most common personality profile among the suicide attempters in our study. Traditionally, individuals with high neuroticism and low extraversion has been considered to attempt and/or commit suicide.^[19-20]

Our study shows that there was no association between gender and personality trait among the suicide attempters and it was almost the same as mentioned in the previous studies. As such in our study there was no any specific age group and the type of personality trait had any association but we found that among the suicide attempters single personality trait was more common among people aged less than 30 years whereas multiple personality trait was more common among people aged more than 30 years and this association was found to be statistically significant. Most of the studies done earlier had shown no statistically significant association between gender and age for the personality trait except for few studies which had mentioned that suicide attempts were more common in older age with multiple personality trait because of their loneliness and social insecurity.^[21-22]

CONCLUSION

In conclusion, the present study can be concluded quoting that multiple personality trait is more common among persons attempting suicide rather than a single personality trait. Among the various personality trait borderline seems to be the commonest personality trait in our study subjects and among the combinations of personality trait Schizoid, Borderline, Histrionic, Anankastic, Anxious and Dependent type of multiple trait was found to be more common. So all patients reporting to psychiatry department with a history of suicide attempt should be properly evaluated for the personality trait and proper interventions in the form of medications and psychotherapy would prevent these patients from committing suicide in future.

Limitation:

The limitations in the present study were, a comparative group of non-suicide attempters were not included and their personality trait was not studied and individual scoring of different personality trait was not done to show the exact correlation between the different personality trait and the suicide attempt. Time and other logistic factors were the reasons for the limitations.

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Conflicts of Interest: There are no conflicts of interest.

Ethical Statement:

Institutional ethical committee accepted this study. The study was approved by the institutional human ethics committee, Vinayaka Mission's Kirupananda Variyar Medical College & Hospital, Vinayaka Missions Research Foundation (DU), Salem. Informed written consent was obtained from all the study participants and only those participants willing to sign the informed consent were included in the study. The risks and benefits involved in the study and the voluntary nature of participation were explained to the participants before obtaining consent. The confidentiality of the study participants was maintained.

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Authors' Contributions:

Dr. Lakshmi Dorai B - conceptualization, data curation, investigation, methodology, project administration, visualization, writing—original draft, writing—review and editing; **Dr. C. Pradeep & Dr Dharani E** -conceptualization, methodology, writing—original draft, writing—review and editing; **Dr Zulfath Moideen & Dr Naresh D** - methodology, writing—original draft, writing, review and editing. All authors approved the final manuscript as submitted and agree to be accountable for all aspects of the work. All authors have read and agreed to the published version of the manuscript.

Data Availability:

All datasets generated or analyzed during this study are included in the manuscript.

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