Revista Argentina de Clínica Psicológica
2018, Vol. XXVii, N°1, 92-97
DOI: 10.53555/03276716.2018.1050

Dysfunctional Analysis and Suicidal Ideation in Psychiatric Patients

Poonam Singh[1] , Seema Rani Sarraf [2*] , Hema Khanna[3] , Jung Bahadur Singh[1]

ABSTRACT

Background: Dysfunction is a psychological concept which indicates individual's malfunctioning. It is concerned with malfunctioning of the individual at the movement, in comparison to his previous functioning or potentiality. Suicidal ideation are thoughts about killing oneself; these thoughts may include a plan. The most commonly used medical term for thoughsts of suicide is suicidal ideation, which can range from vague ideas to a fully developed plan without necessarily leading to any suicidal action. Present study attempts to explore the dysfunctional analysis and suicidal ideation in patients of schizophrenia and affective disorder.

Materials and Methods: Institution-based study was conducted in 2012. Patients with schizophrenia and affective disorder were selected using purposive sampling technique. The sample consisted of two groups of patients e.g. schizophrenia (N= 60) and affective disorder (N= 60) diagnosed by psychiatrist in mental hospital, Bareilly. Total sample consisted one hundred and twenty patients (male and female).

Detailed case history was taken and Dysfunctional analysis Questionnaire, Prasad (1971) and Suicidal Risk Eleven Scale (Verma et al., 1998) was used for this purpose.

Descriptive statistics as well as t- test was calculated to verify the objective of the study.

Results: The findings reveal significant difference on all areas of dysfunctional analysis i.e. social, vocational, personal, family and cognitive between patients of schizophrenia and affective disorder. On suicidal ideation measure no significant difference was reported between the group of schizophrenic and affective disorder patients, male and female patients of schizophrenia and male and female patients of affective disorder.

Key words: Dysfunctional Analysis, Suicidal Ideation, Schizophrenia, Affective disorders.

INTRODUCTION

Psychological functioning denotes an individual's potential performance to execute the activity of day-to- day livelihood and to engross interpersonal relationship which satisfy him and the community in which the individual lives. Dysfunction is a failure of an organismic process or system to work properly (Wolman, 1973). The term "dysfunction" refers to a change that occurs during a specific period in an individual's life, taking into account factors such as age, gender, race, and culture. The functioning is compared with one's own previous level of functioning (Verma & Pershad, 1989). Psychosocial dysfunction refers to impairments in areas like personal, social, familial, or occupational functioning. Many psychiatric disorders are linked to different levels of psychosocial dysfunction. Past research has primarily concentrated on cognitive dysfunctions in individuals with schizophrenia. However, social, personal, vocational, and familial functions are required for the maintenance of quality of life after reduction of unwanted symptoms. Disturbances in one or more areas can significantly affect patients' quality of life and daily functioning. As most of the patients are given only medical care for a long period, the social, personal, vocational, and familial dysfunctions are avoided by the mental health professionals and hence, the interventions accordingly. Baune and Renger L. (2014) and Godard, (2012) reported that depressed individuals also demonstrate significantly impaired psychosocial function, indicated by diminished organizational, occupational, and social ability. Beblo et al, (2017) explained that in addition to the substantial burden of depression on the daily lives of individuals, Elgamal (2007) and Nemeroff et al. (2003) found that depression impacts on a societal level by reducing occupational productivity.

Suicidal ideation is defined as having thoughts about causing one's own death. It may vary in seriousness depending on the specificity of suicide plans and the degree of suicidal intent (American Psychiatric Association, 2003). Suicidal ideation can range from fleeting thoughts about the meaninglessness of life or a desire for death, to persistent, detailed plans for self-harm and an obsessive focus on self-destruction. It may be a symptom of a depressed mood and, alternatively, a coping mechanism for dealing with such feelings. Suicidal ideation is also strongly linked to a sense of hopelessness. The nature of suicidal ideation can be of a habitual or chronic as well as acute (Goldney et al.,

[1, 4]Department of Applied and Clinical Psychology, M. J. P. Rohilkhand University, Bareilly, UP, India
[2] National P G College,Department of Psychology, Lucknow, UP, India
[3]Department of Psychology, Bareilly College, Bareilly, UP,India

*Correspandance mail: Seema Rani Sarraf
*Email:- seemavikas05@gmail.com ORCID 0000-0001-6360-3886 SCOPUS ID-57225026459

1989; Diekstra & Garnefski, 1995). The lifetime risk of completed suicide among psychiatric patients with mood disorders is estimated to be between 5% and 6%, with individuals suffering from bipolar disorders potentially facing a slightly higher risk than those with major depressive disorder. Lifetime risk among psychiatric patients with mood disorders of completed suicide is likely between 5% and 6%, with BDs, and possibly somewhat higher risk than patients with major depressive disorder. Suicidal behaviour is common among people with mood disorders followed by substance use-related disorders (in particular, alcohol use disorders), schizophrenia and personality disorders (Bertolote et al., (2004); Duberstein and Conwell (1997). Comorbidity of disorders increases the suicide risk.

Risk factors for suicide in schizophrenia have identified by retrospective case reviews and large followup studies, which were being young and male, being in the first decade of illness, having a high level of premorbid functioning, and having multiple relapses (Caldwell and Gottesman 1990; Rossau and Mortensen 1997). A key public health concern is understanding the psychosocial factors that contribute to suicidality in individuals with schizophrenia. Indeed, the risk of suicide in schizophrenia is 10 to 20 times higher than that of the general population (Heila, et al. 2005, Osby et al. 2000). In the light of previous researches the objectives of the study were- 1) to hightlight differences between patients of schizophrenia and affective disorders on dysfunctional analysis and suicidal ideation. 2) to know if there is any significant difference between male and female patients of schizophrenia on dysfunctional analysis and suicidal ideation. 3) to investigate difference between male and female patients of affective disorders on dysfunctional analysis and suicidal ideation.

HYPOTHESES

- There will be no significant difference between patients of schizophrenia and affective disorders on dysfunctional analysis and suicidal ideation.
- No significant difference will be found between male and female patients of schizophrenia on dysfunctional analysis and suicidal ideation.
- There will be no significant difference between male and female patients of affective disorders on dysfunctional analysis and suicidal ideation.

METHODS

Sample: Purposive sampling method was used for selecting the patients for the study. A total of 120 patients (60 patients in each group) were taken from mental hospital, Bareilly. Those patients were diagnosed by psychiatrist in outpatients' department. The sample consists of two groups of schizophrenia (N= 60, male 35, female 25) and affective disorder (N= 60, male 40, female 20). Informed written consents were obtained from all participants. Participants received no incentives for participation in the study.

Instruments:

Dysfunction Analysis Questionnaire:. Pershad *et al*. has developed Hindi version of Dysfunctional Analysis Questionnaire to assess individual's psychosocial dysfunctions. This scale encompasses fifty items which are classified into five domains, i.e., Social, Vocational, Personal, Familial, and Cognitive. The individual has to choose one response among five alternate answers and these are scored in according to the scoring system. The split half and test-retest reliabilities ranged from 0.77 to 0.97. High the score denotes increase level of dysfunction.

Suicidal Risk Eleven Scale: The Suicidal Risk Eleven Scale (S. R. E. Sacle) is constructed and standardized by Verma et al. in (1998). It has been derived from the Hamilton Rating scale for depression (Hamilton, 1967). The subject has to select one cue which characterizes individual (self rating) / the patients (rating by significant relative/ teacher/ psychologists). Higher score denotes risk of attempting suicide.

Procedure:

The study was conducted in 2012 (January to June) from out patients' department in mental hospital, Bareilly. The cases diagnosed and treated by psychiatrist were included on purpose. Those who had interest in taking part, were included in this study. The information was gathered both from the patients and their caregivers. All information was recorded using a scientifically designed structured proforma, specifically a sociodemographic data sheet, through semi-structured interviews. A good rapport was established with the respondent to ensure they felt relaxed and comfortable, encouraging the most honest and candid responses. Then dysfunction analysis questionnaire (DAQ) and the suicidal risk eleven scale (SRE Sacle) were administered to all patients one by one to determine the extent of psychosocial dysfunctions in different areas of daily life. The researchers read the instructions aloud, while the participants followed along silently. The subject must respond to each item by ticking one of the provided alternatives. There is no time limit for the test.

Analysis:

Mean and SD values were calculated and the data were analyzed by t test to obtain the objectives of the study.

RESULTS

On the measure of dysfunction analysis, comparison was made on five areas i.e. social, vocational, personal, family and cognitive. These areas are related with

mental and physical health of an individuals. The mean and SD values for areas of dysfunctional analysis and suicidal ideation of the group of schizophrenia and affective disorder are shown in Table –1.

Table 1: showing the result of significant difference between group of affective disorder and schizophrenia on dysfunctional analysis and suicidal ideation

Test		Affective disorder n= 60		Schizophrenia n= 60		t- value
		Mean	S.D.	Mean	S.D.	
Dysfunctional Analysis	Social	33.25	6.95	40.85	4.50	7.21*
	Vocational	35.05	7.10	40.65	5.95	4.74*
	Personal	34.40	6.90	42.25	5.45	7.00*
	Family	36.65	5.65	42.75	3.95	11.09*
	Cognitive	35.40	5.85	41.65	4.60	6.58*
Suicidal ideation		4.75	2.40	5.25	3.25	0.95

*Significant at 0.01 confidence level

The t value over the both groups are also given in Table – 1 for areas of dysfunctional analysis and suicidal ideation measures. The t value (vide Table – 1) manifested rejection of null hypothesis on all areas of dysfunctional analysis e.g. social, vocational, personal, family and cognitive as t values for these areas were found significant on 0.01 level. No difference was found between schizophrenia and affective disorder groups on suicidal ideation, thus null hypothesis was accepted .

On the measure of dysfunction analysis, comparison was made between the male and female patients of schizophrenia on five areas i.e. social, vocational, personal, family and cognitive. The mean and SD values of the group of male and female group of schizophrenic patients on dysfunctional analysis and suicidal ideation are shown in Table –2.

Table 2: showing the result of significant difference between group of male and female patients of schizophrenia on dysfunctional analysis and suicidal ideation

Test		Male schizophrenia n= 35		Female schizophrenia n= 25		t- value
		Mean	S.D.	Mean	S.D.	
Dysfunctional analysis	Social	41.30	5.50	40.20	3.80	0.86
	Vocational	43.00	4.00	39.00	6.55	2.73*
	Personal	41.85	6.15	42.80	3.90	0.68
	Family	41.70	4.10	44.20	3.20	2.55*
	Cognitive	43.40	3.70	36.70	5.05	5.68*
Suicidal ideation		4.74	2.53	4.46	2.40	0.03

*Significant at 0.01 confidence level

The values of t test (table- 2) explains that there were significant difference between male and female patients of schizophrenia on vocational, family and cognitive sub areas of dysfunctional analysis. No differences were reported on the social and personal sub area, so can accept the null hypothesis partially. On suicidal ideation measure non-significant effect was found between male and female groups schizophrenia which leads the acceptance of null hypothesis.

On the measure of dysfunction analysis (all five areas) and suicidal ideation comparison was made between male and female patients of affective disorder. The mean and SD values of the male and female patients of affective disorder on both measures are shown in Table –3.

Table 3: showing the result of significant difference between group of male and female patients of affective disorder on dysfunctional analysis and suicidal ideation

Test		Male affective disorder n= 40		Female affective disorder n= 20		t- value
		Mean	S.D.	Mean	S.D.	
Dysfunctional analysis	Social	34.12	7.15	31.50	6.30	1.41
	Vocational	35.50	6.35	34.87	7.49	0.32
	Personal	35.15	6.80	33.00	7.05	1.15

	Family	34.50	5.60	37.75	5.30	2.23**
	Cognitive	36.10	5.80	34.00	5.80	1.33
Suicidal ideation		4.93	2.46	4.40	2.24	0.82

**Significant at 0.05 confidence level

Only family sub area of dysfunctional analysis was found to be significant on 0.05 level of significant for male and female patients of affective disorder. No difference was reported on the rest of the sub areas of dysfunctional analysis, which accept the null hypothesis.

DISCUSSION

The finding of the present investigation reveals the significant difference on the all five subareas of dysfunctional functioning between group of schizophrenic and affective disorder patients. The observed differences between the two groups were statistically significant: social domain (t = 7.21, df = 118, P < 0.01), vocational domain (t = 4.74, df = 118, P < 0.01), personal domain (t = 7.00, df = 118, P < 0.01), family domain (t = 11.09, df = 118, P < 0.01), cognitive domain (t = 6.58, df = 118, P < 0.01) [Table 1]. Schizophrenic patients had higher mean score which reported more dysfunction in social, vocational, personal, family and cognitive areas than affective disorder patients. They were more disturbed and showed the symptoms like hallucination, delusion, thought blocking, social withdrawal etc. Swain et al. (2017) investigated and confirmed that there are clear and significant psychosocial dysfunctions in personal, familial, social, vocational, and cognitive areas. Schizophrenia is a long-term mental disorder that causes impairments in various aspects of the individual's personal, social, and occupational functioning (Villalta-Gil 2006 and Schaub et al. 2011). A study conducted by Akinsulore *et al*. (2015) found out that the patients with chronic schizophrenia reported greater disability in an individual's personal, social, and occupational life while Tuulio- Henriksson (2005) observed cognitive dysfunction in schizophrenic patients.

Male and female patients of schizophrenic group were also compared on all the dimensions of dysfunctional analysis. Male schizophrenic group had more dysfunction regarding vocational domain (t = 2.73, df = 58, P < 0.01) and cognitive domains (t = 5.68, df = 58, P < 0.01) in comparison to female schizophrenic group which is consistent with recorded researches. As investigated by Han et al. (2012), in comparison with control group, male and female patients with schizophrenia showed greater impairment in cognitive domains such as immediate memory, language and delayed memory. Male patients with schizophrenia reported more severe cognitive deficits in immediate and delayed memory compared to female patients, though no significant differences were observed in language, visuospatial and attention indices. Female schizophrenic group exhibited significant dysfunction on family domain (t = 2.55, df = 58, P < 0.01) with male schizophrenic group. In group of male and female patients of affective disorder significant difference was also seen for family dysfunction. Female patients exhibited more family dysfunction in comparison to male patients. In this area sufficient review was not found.

No difference was found between schizophrenia and affective disorder group, male and female schizophrenic patients and male and female affective disorder patients group on suicidal ideation. A review of the related literatures estimated that nearly one-third of individuals with bipolar disorder attempt suicide (Harris and Barraclough, 1997; Dunner , Gershon and Goodwin, 1976) while as many as 50% of patients with schizophrenia attempt suicide, and schizophrenia accounts for up to 13% of all suicide-related deaths (Caldwell and Gottesman, 1992). In an Ethiopian study conducted by Duko and Ayano (2018) suicidal thoughts and attempts were common issues among individuals with schizophrenia and bipolar disorder.

Financial support and sponsorship

This work (dissertation) was done as coursework for the partial fulfilment of master degree so no financial support was provided to the scholar.

Conflicts of interest

There are no conflicts of interest to declare.

Acknowledgment

I would like to extend my sincere gratitude to the Head of the Department, Applied and Clinical Psychology, Vice Chancellor, M. J. P. Rohilkhand University, Bareilly and psychaitrists of Mental Hospital, Bareilly for their valuable suggestions and providing us the facility to conduct this work.

REFERENCES

1. Akinsulore, A., Mapayi, B. M., Aloba, O. O., Oloniniyi, I., Fatoye, F. O. and Makanjuola, R.O. (2015). Disability assessment as an outcome measure: A comparative study of Nigerian outpatients with schizophrenia and healthy control. Ann Gen Psychiatry;14:40.
2. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR). Washington: American Psychological Association (2003).

3. Baune, B. T. and Renger, L. (2014). Pharmacological and non-pharmacological interventions to improve cognitive dysfunction and functional ability in clinical depression – a systematic review. Psychiatry Res 219(1):25–50.10.1016/j.psychres.2014.05.013
4. Beblo, T.; Kater, L.; Baetge, S.; Driessen, M. and Piefke, M. (2017). Memory performance of patients with major depression in an everyday life situation. Psychiatry Res 248:28–34.10.1016/j.psychres.2016.12.013
5. Bertolote, J. M.; Fleischmann, A.; De Leo, D. and Wasserman, D. (2004). Psychiatric diagnoses and suicide: revisiting the evidence. Crisis 25(4), 147–155
6. Caldwell, C. B. and Gottesman, I. I. (1990). Schizophrenics Kill Themselves Too: A Review of Risk Factors for Suicide. Schizophrenia Bulletin, Volume 16, Issue 4, Pages 571–589, https://doi.org/10.1093/schbul/16.4.571
7. Caldwell, C. B. and Gottesman, I. I. (1992). Schizophrenia—a high-risk factor for suicide: clues to risk reduction. Suicide Life Threat Behav. 22:47–493.
8. Diekstra, R. F., & Garnefski, N. (1995). On the nature, magnitude, and causality of suicidal behaviors: An international perspective. *Suicide and Life-Threatening Behavior, 25*(1), 36–57.
9. Duberstein, P. R. and Conwell, Y. (1997). Personality disorders and completed suicide: a methodological and conceptual review. Clin. Psychol. 4(4), 359–376
10. Duko, B. and Ayano, G. (2018). Suicidal ideation and attempts among people with severe mental disorder. Ann Gen Psychiatry 17:23
11. Dunner, D. L.; Gershon, E. S. and Goodwin, F. K.(1976). Heritable factors in the severity of affective illness. Biol Psychiatry. 11:31–42.
12. Elgamal, S.; McKinnon, M. C.; Ramakrishnan, K.; Joffe, R. T. and MacQueen, G. (2007). Successful computer-assisted cognitive remediation therapy in patients with unipolar depression: a proof of principle study. Psychol Med 37(09):1229–38.10.1017/S0033291707001110
13. Godard, J.; Baruch, P., Grondin, S. and Lafleur, M. F. (2012). Psychosocial and neurocognitive functioning in unipolar and bipolar depression: a 12-month prospective study. Psychiatry Res 196(1):145–53.10.1016/j.psychres.2011.09.013
14. Goldney, R. (1989). Depression in attempted suicide. *British Journal of Psychiatry, 154*(6), 881-882. doi:10.1192/S000712500017638X
15. Hamilton, M. (1967). "Development of a rating scale for primary depressive illness". *British Journal of Social and Clinical Psychology*. **6** (4): 278–96. doi:10.1111/j.2044-8260.1967.tb00530.x. PMID 6080235
16. Han, M.; Huang, X. F.; Chen, D. C.; Xiu, M. H.; Hui, L.; Liu, H.; Kosten, T. R. and Zhang, X. Y. (2012). Gender differences in cognitive function of patients with chronic schizophrenia. Prog Neuropsychopharmacol Biol Psychiatry. Dec 3;39 (2):358-63. doi: 10.1016/j.pnpbp.2012.07.010. Epub 2012 Jul 20.
17. Harris, E. C. and Barraclough, B. (1997). Suicide as an outcome for mental disorders: a meta-analysis. Br J Psychiatry. 170:205–28.
18. Heila, H.; Haukka, J. and Suvisaar, J. et al. (2005). Mortality among patients with schizophrenia and reduced psychiatric hospital care. Psychol Med. 35(5):725-732.
19. Nemeroff, C. B.; Heim, C. M.; Thase, M. E.; Klein, D. N.; Rush, A. J.; Schatzberg, A. F., et al. (2003). Differential responses to psychotherapy versus pharmacotherapy in patients with chronic forms of major depression and childhood trauma. Proc Natl Acad Sci USA 100(24):14293–6.10.1073/pnas.2336126100
20. Osby, U.; Correia, N.; Brandt, L., et al. (2000). Mortality and causes of death in schizophrenia in Stockholm county, Sweden. Schizophr Res. ;45(1–2):21-28.
21. Pershad, D.; Verma, S. K.; Malhotra, A. and Malhotra, S. (2004). Manual for Dysfuntion Analysis Questionnaire (DAQ). 2nd ed. Agra: National Psychological Corporation.
22. Rossau, C. D., & Mortensen, P. B. (1997). Risk factors for suicide in patients with schizophrenia: Nested case-control study. *The British Journal of Psychiatry, 171,* 355–359. https://doi.org/10.1192/bjp.171.4.355
23. Schaub, D.; Brüne, M.; Jaspen, E.; Pajonk, F. G.; Bierhoff, H. W. and Juckel, G. (2011). The illness and everyday living: Close interplay of psychopathological syndromes and psychosocial functioning in chronic schizophrenia. Eur Arch Psychiatry Clin Neurosci 261:85-93.
24. Swain, S. P.; Behura, S. S.; Dash, M. K.; Nayak, A. K. and Pati, S. S. (2017). The influence of psychosocial dysfunctions in chronic schizophrenia patients in remission: A hospital-based study. Indian J Psychol Med;39:157-63.
25. Tuulio- Henriksson, T. (2005). Cognitive dysfunction in schizophrenia : A familial and genetic approach. Academic dissertation. Faculty of Behavioural Sciences, University of Helsinki, Finland.
26. Verma, S. K. and Pershad, D. (1989). Measurement of change in psychosocial functioning following illness and therapeutic intervention. Indian J Clin Psychol. 16:64–7.
27. Verma, S. K.; Nehra, A.; Kaur, R.; Puri, A. and Das, K. (1998). Suicide risk eleven: A visual analogue scale. Rupa Psychological Centre.

28. Villalta-Gil, V.; Vilaplana, M.; Ochoa, S.; Haro, J. M.; Dolz, M. and Usall, J., et al. (2006). Neurocognitive performance and negative symptoms: Are they equal in explaining disability in schizophrenia outpatients? Schizophr Res 87:246-53.