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Research Article

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Upgrading self-esteem: Effectiveness of cognitive enhancement package among psychiatric inpatients

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Abstract

Objective: To assess and compare the self-esteem before and after administration of cognitive enhancement package among psychiatric inpatients.

Design & Method: Quantitative approach, Non-Equivalent control group pre-test and post-test design under quasi experimental research design was used for study. Total 60 psychiatric inpatients from selected hospital of Ambala whose scores were 25 and less in Rosenberg Self-esteem scale were enrolled in the study. Samples were selected by using purposive sampling method.

Interventions: Total four sessions of intervention were provided with 80 to 100 minutes for overall tasks. It comprised of total three sub-tasks and each task was followed by daily assessment of progression with the help of self-care activities checklist for self-care activities, Ferrara Group Experience scale for group interaction and Mini-Mental Status Examination for cognitive functioning. Post-test was taken on fifth day of intervention.

Results: The results showed that mean score of self-esteem (14.17±2.00), self-care activities (3.83±2.34) and group interaction (20.83±7.42) along with cognitive functioning (18.23±6.07) in pre-test were in lower level comparatively than in post-test after administration of Cognitive Enhancement Package which is self-esteem(20.17±3.24), self-care activities (6.82±2.31), group interaction (37.90±5.71) and cognitive functioning (24.80±4.12) at the 0.05 level of significance (p<0.05). However, the score remained same or decreased in case of comparison group who only received routine hospital care.

Conclusion: All in all, present study concluded that different innovative psychological approaches like Cognitive Enhancement Package can be incorporated along with usual psychopharmacology in order to promote the overall wellbeing and better rehabilitation for the psychiatric inpatients.

Keywords

Self-esteem; Cognitive Enhancement Package; Psychiatric Inpatients.

Introduction

Achievement of optimum level of holistic human health is not as easy as fluctuating between on and off points of some specific

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buttons. People dynamically moves on continuum from better to poor health condition or disabilities as there are various degrees of health condition. Mental illnesses are deviation in health conditions involving changes in emotion, thinking or behavior or a combination of these .Mental disorders are related to severe impairment and distress in daily life which are in fact mandatory diagnostic criteria having dramatic consequences for both persons affected and their families along with social and occupational environments . Percentages of Indian population suffering from serious psychiatric issues is at least 6.5 percentages and this is equal in all area with no differences among rural-urban .

Person's overall sense of their values or worth is known as self-esteem in simple language . Self-esteem should always be at the midpoint as decreased self-esteem can leave people feeling defeated or depressed followed by destructive inter personal relationship. Similarly, higher percentages of self-esteem can lead to personality disorder like narcissistic personality disorder. Although acute phase of mental illness can be managed effectively by antipsychotic medication, beneficial effects of such medicines is not seen on cognition and social skills. As a result, larger numbers of psychiatric patients have cognitive dysfunctions as well as significant social and vocational disabilities leading to poor functional recovery even after recuperation from positive symptoms of illness .In general, person suffering from mental illness can be lagging behind in self-care due to lack of abilities (physically and intellectually) to involve in such activities and as a result of side effects arising from several medications too. Results from survey has shown that higher percentages of patients mentioned self-care as very important aspect and it helps in improving mental health overall . Another study revealed that there was a negative correlation between self-care and depression. It was also found that there is significant inverse relationship between physical, psychological and emotional self-care with depression .

As per the nature of diagnosis of psychiatric disorders, indulgent in the group activities are also hampered in long run. Stereotype thinking about mental illness hampers the chances of social participation and interaction. Decreased involvement with other people around them will eventually cultivate not only the feelings of aloofness but also lack of stimulation in cognition including attention, concentration and judgement. Cognitive complaint from subjective view might be strong predictor of decreased self-esteem .

Hence, self-care, group interaction and cognitive functioning are interlinked with each-others and has impact on each other directly or indirectly. Research showed that intervention like Cognitive Stimulation Workshops consisting of puzzle games, fill in the blanks etc. affects the self-esteem and cognitive performance of patients in a positive form . Indulgent in creative task results in the improvement in self-esteem levels along with decrease in the devastating effects of mental illness. It improves the mental wellbeing of people gradually .

New approaches like case-management methods has illustrated that individuals suffering from schizophrenia, seemed to be benefited from the effects of the module regarding self-esteem. In case of a rehabilitation programs in multidisciplinary group led by someone who liaises with other partner it seems to have more effects suggesting reconsideration of structure of intervention and settings

of conduction to establish long term impacts from surrounding in the domain of coping abilities, self-esteem and their empowerment [. Prevention, management and rehabilitation of different psychiatric disorders and apprehension regarding them are the two sides of same coin. Sound mental health functioning is underpinning milestone for the smooth operation of person and his community. .

It still remains ambiguous whether self-esteem can be addressed with such psychological intervention addressing different domains which directly or indirectly alters the level of self-esteem despite different studies. Different leisure activities were found to serve as distractions from everyday worries and to provide daily regeneration of energy.

Hence, the solo aspiration of this study is to address unique needs of psychiatric population in effective rehabilitation and decrease the burden of diseases. The study is being carried out as it is necessary to test how combination of such non pharmacological activities addressing self-care, group participation and cognitive improvements affects self-esteem among patients in direct or indirect form in order to promote the overall wellbeing and better rehabilitation of psychiatric inpatients.

Material and Methods

Study Design and Samples

A non-equivalent control group pre-test and post-test study design was conducted among 60 psychiatric inpatients who were admitted in selected hospital of Ambala, India. Patients were organized into two groups, control group consisting of 30 inpatients receiving only routine care of hospital and experimental group receiving intervention in addition to routine hospital care.

This study included psychiatric inpatients who were willing to participate and in the age group of 18-50 years, scoring 0-25 in Rosenberg Self-Esteem Scale and understanding Hindi language. Similarly, study excluded those inpatients who were violent and aggressive and carrying the risk of harming self and others.

Instruments

Tools used for study were converted into Hindi language and their reliability and validity were calculated. Tools were found to be valid and reliable as the calculated values were in the range between 0.7-1. Sample characteristics and self-care observation checklist were made by researcher under the guidance of experts.

- Selected sample characteristics questionnaire.
- Following instruments were used in pre-test and post-test interventions to evaluate the results of the interventions on self-esteem, self-care activities, group interaction and cognitive functioning:
- *Rosenberg's self-esteem scale (RSS) for self-esteem.
- Self-care checklists for self-care activities.
- *Ferara Group Interaction Scale (FGES) for group interaction.
- *Mini Mental Status Examination for cognitive functioning.
- *Standardized tools were used after taking their permission.

Procedure/Data collection

Comparison group was completed first in order to prevent data contamination. Patient diagnosed as per ICD-10 were taken for study if they met the inclusion criteria and enrollment was voluntary. Comparison group received routine hospital care along with daily administration of tools to assess their self-care activities (self-care checklist), group interaction (Ferara group interaction scale) and cognitive functioning (Mini-mental status examination). However, in experimental group, interventions were introduced gradually in following steps:

- **Step I.** Screening with Rosenberg's self-esteem scale
- **Step II.** Collecting sample characteristic, self-care observation checklist, Ferara Group Interaction Scale and Mini Mental Status Examination individually.
- **Step III.** Administration of Cognitive Enhancement Package;5 sessions for each patient was conducted for 80-100 minutes followed by administration of self-care observation checklist, Ferara Group Interaction Scale and Mini Mental Status Examination daily.
- **Step IV.** All patients were reassessed on 5th day of intervention based on self-esteem, self-care activities, Group Interaction and cognitive functioning.

Ethics statement

The study was approved by the communication of Decision of the Committee (IEC) under project number 1515. It was mandatory for all patients to sign an informed consent before hand only.

Study is registered under CTRI/2020/06/026014.

Statistical analyses

The normal distribution of data was verified by Kolmogorov Smirnov test. Test showed all data were normally distributed. Chi square test was applied to assess the association between sample characteristics, self-esteem, self-care activities, group interaction and cognitive functioning. Independent 't' and paired 't' was applied in order to substantiate the differences between pre and post-test of intervention in all components. 5 % level of significance was incorporated.

Results

Sample characteristics of inpatients

More than half (56.7%) of inpatients in experimental group and less than half of populations (46.6%) in comparison group were from the age group of 18-27 years. Similarly, equal percentages (50%) of male and female were in experimental group whereas in comparison group more than half of percentages (70%) were male.
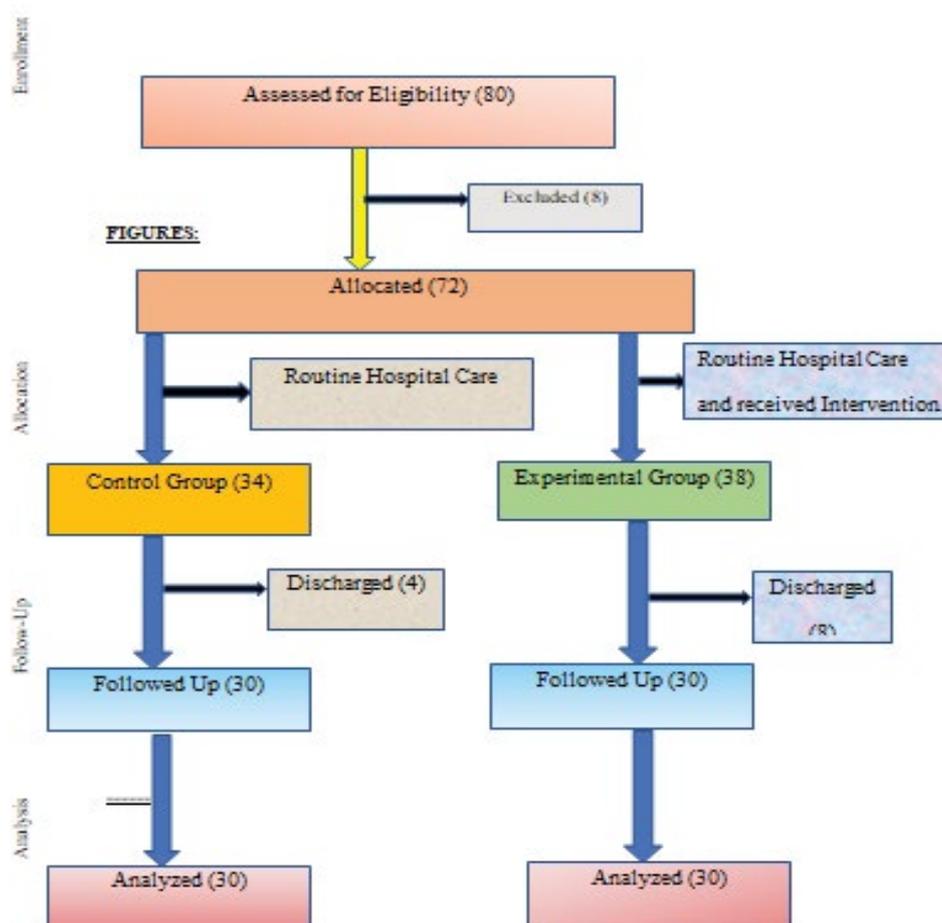
In terms of clinical variables percentages of inpatients with diagnosis of Substance abuse (23.3%) and depression (23.3%) were highest but in terms of comparison group, inpatients with diagnosis of Substance abuse (33.3%), Schizophrenia (16.7%) and Psychosis (16.7%) were topmost. Supreme percentages of inpatients in experimental group (46.7%) and comparison group (43.3%) were under antipsychotic medications. Similarly, less than half of inpatients of experimental group (16.7%) had co-morbid illnesses. Lastly, utmost percentages of inpatients in experimental group (23.3%) and comparison group (50%) had insight level 1 which is complete denial of illness.

Experimental and comparison group were homogenous in terms

Table 1: Difference in self-esteem, self- care activities, group interaction and cognitive functioning before and after the administration of cognitive enhancement package.

Variable	Group	Before Intervention Mean± SD	't' value (p value)	After Intervention	't' value (p value)
Self-esteem	Experimental Group (n=30)	14.17±2.00	0.78(0.42NS)	20.17±3.21	8.43(0.00*)
	Comparison group (n=30)	14.33±2.41		13.38±2.23	
Self-care activities	Experimental Group (n=30)	3.83±2.34	3.6(0.01*)	6.82±2.31	9.00(0.00*)
	Comparison group (n=30)	1.77±2.04		2.37±1.80	
Group Interaction	Experimental Group (n=30)	20.83±7.42	1.46(0.14 NS)	37.90±5.71	9.23(0.00*)
	Comparison group (n=30)	17.63±9.32		17.70±8.71	
Cognitive Functioning	Experimental Group (n=30)	18.23±6.07	2.29(0.02*)	24.80±4.12	10.21(0.00*)
	Comparison group (n=30)	14.93±6.94		13.43±4.72	

N=60; S. D= Standard Deviation; p = Independent sample t test; Statistical significance is denoted by asterisks: *; NS- Non significant (p>0.05) Significant (p<0.05)

Figure 1: Consort Diagram Showing Sample Size for the Final Study.

of selected sample characteristics except total family income in comparison group before administration of Cognitive Enhancement Package as assessed by chi-square formula.

Effectiveness of Cognitive-Enhancement Package

Result illustrated in shows that there was a significant increasement in mean post-test self-esteem score (14.17±2.00 to 20.17±3.21), self-care activities (3.83±2.34 to 6.82±2.31), group interaction (20.83±7.42 to 37.90±5.71) and cognitive functioning (18.23±6.07 to 24.80±4.12) among the psychiatric inpatients in experimental group (p<0.05). In terms of comparison group, the mean difference in these domains were not statistically significant (p>0.05).

Similarly, present study further depicted that inpatients who were receiving information regarding self-care activities and participated in group interaction and cognitive games elaborated a gradual progressive improvement in taking care of themselves followed by group interaction and cognitive functioning rather than other group of inpatients who were only receiving routine hospital care as shown in .

Association between sample characteristics and self-esteem, self-care activities, group interaction and cognitive functioning

This study further highlighted that there was a significant association between history of previous hospitalization related to psychiatric
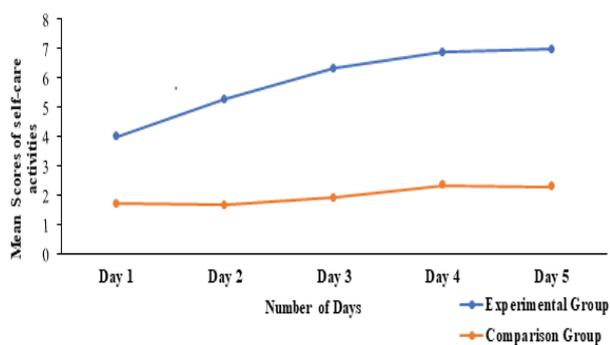

Figure 2: Line Graph Showing Mean Scores of Psychiatric Inpatients in Each Consecutive Day in terms of Self-Care Activities in Experimental and Comparison Group.
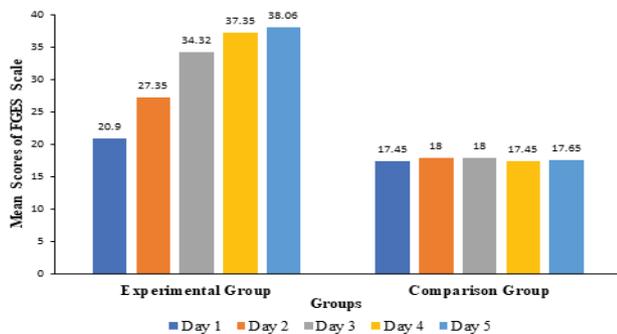

Figure 3: Bar graph Showing Mean Scores of Psychiatric Inpatients in Each Consecutive Day in terms of Group Interaction as Measured by Ferara Group Experience Scale (FGES).
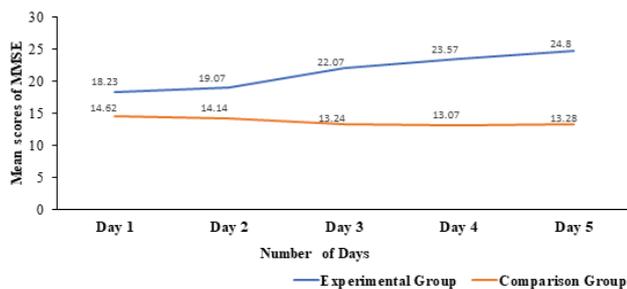

Figure 4: Line Graph Showing Mean Scores of Psychiatric Inpatients in Each Consecutive Day in terms of Cognitive Functioning as Measured by Mini-Mental Status Examination.

illness and self-esteem score in comparison group (t=2.68 p<0.05). This result indicates inpatients having previous history of hospitalization have higher level of self-esteem as they were more aware about the disease condition and its acceptance, treatment modalities and self-management.

Result showed that there were no statistically significant association of sample characteristics with self-care activities score but gender (t=2.3, p=0.03) in experimental group, duration of illness (t=3.83, p=0.01) of comparison group were significantly associated with the group interaction score. Moreover, co-morbid illness of comparison group (t=2.5, p=0.01) and levels of insight (F=2.983, p=0.03) in experimental group were significantly associated with the cognitive functioning score.

Post-hoc test demonstrated that complete denial of illness (Level 1) vs Slight awareness being sick (Level 2), complete denial of illness (Level 1) vs Intellectual Insight (level 5) and slight awareness being sick (Level 2) vs true emotional insight. (Level 6) were having significant high mean difference (MD=10.14, p=0.00), (MD=9.4, p=0.03), (MD=10.14, p=0.00) respectively.

Discussion

Low self-esteem is considered to have an association with disturb daily activities, impaired social functioning and cognitive impairment in the general psychiatric population. Results from current study suggest that use of Cognitive Enhancement Package has significantly improved all selected areas of psychiatric inpatients.

In this study, two groups of psychiatric inpatients were enrolled. The experimental group and comparison group were homogeneous in terms of self-esteem and group interaction but not in the terms of self-care activities and cognitive functioning before administration of Cognitive Enhancement package. Results of current study depicted that that the Cognitive Enhancement package of 80-100 minutes daily continuously for five days was proficient in upgrading the performances in self-care activities, group interaction and cognitive functioning leading raise in self-esteem scores in experimental group who received this package in addition to routine hospital care.

Self-esteem is considered as an important sort for measurement of the extent to which person values, appreciates, approves or prefer himself or herself . Improvement in the behaviors to indulge themselves in various self-care activities can uplift the self-esteem . Self-esteem of experimental group increased significantly after the intervention which is in line with the results from various previous study in which there was significant raise in the mean score of self-esteem after the administration of intervention focusing on self-care, group interaction and cognitive functioning . Different non-pharmacological approaches like Cognitive enhancement group training programs showed its impacts on daily living activities, cognition and psychiatric disorder like depression in positive direction thereby reducing its burden too . Intervention on self-management of mental health disorders especially recurrent depression for short period of time is very beneficial and such interventions are very helpful in circumstances where there is lack of scheme to guide patients for providing direction of self-management .

Study have shown an increasing tendency of social dysfunction among patient with differential psychiatric illness and it is also proven

that mental disorder causes various problems in social functioning for patients and maximum attempts of community mental health teams is focused at reducing this burden . Feelings of being loved and accepted by groups along with the self-confidence in terms of independent performance of daily activities and efficient ways of problem solving could be the major components of self-esteem. In general, social functioning are found to be impaired in terms of psychiatric patients as a result of which their self-care activities and group interaction is diminished resulting in aloofness and demoralization. Moreover, group interaction leads to catharsis which ultimately provides relief in the symptoms enhancing feelings of belongingness in the group .

Memory impairment is lower among patients using alcohol than those using cannabis but visuospatial abilities of cognitive functioning are lower among opioids users than those abusing cannabis or stimulants . Previous study has shown that different types of cognitive stimulation workshops are successful in promotion of changing the cognitive performance having positive impacts on self-esteem . Researcher found that uses of cognitive remediations are beneficial in improvement of daily psychosocial functioning and also in the area of vocational and social functioning along with minimization of different psychiatric symptoms .

Similarly, the present study showed the association of levels of insight and cognitive functioning (p=0.03). In clinical setting, complete denial of illness might be one of the defense mechanisms to safeguard own-self from the cognitive disturbance in the process of dealing and coping with psychiatric illness. Once patients accept their condition as sufferers from such a stigmatized disorder, their level of self-esteem dropped down as they begin to evaluate themselves negatively .

Strengths and Limitations

- Study was carried out in the clinical setting; patients were only excluded if they have risk of self-harm or harming to others through aggression which is the strength of study.

- Consequently, patients with different psychiatric diagnosis were included with a variety of psychological complaints.

- Therefore, results of the current study are representative of clinical practices.

- However, small sample size of study due to limited data collection period is the only limitations of the current study.

- Investment in the study of similar design with large sample size and analysis on effects of group dynamic can be an important milestone in the improvement of self-esteem, self-care activities, group interaction and cognitive functioning of psychiatric patients.

Conclusion

In conclusion, the present study depicted that the implementation of cognitive enhancement package has positive effects on the self-care activities, group interaction and cognitive functioning of psychiatric inpatients which additionally also transforms their self-esteem positively. These results support investment in non-pharmacological programs like Cognitive Enhancement Package as a supportive pillar to psychopharmacology in upgrading the wellbeing of individuals with various types of psychiatric disorders. Therefore, these results are encouraging and promoting the efforts on the behalf of psychiatric nurses warranting the conduction of further research in such field.

References

1. https://www.psychiatry.org/patients-families/what-is-mental-illness.

2. Trautmann S, Rehm J, Wittchen H (2016) The economic costs of mental disorders. J. EMBO Rep 17:1245-1249.

3. https://www.indiatoday.in/education-today/gk-current-affairs/story/india-is-the-most-depressed-country-in-the-world-mental-health-day-2018-1360096-2018-10-10.

4. Rössler W (2016) The stigma of mental disorders: A millennia-long history of social exclusion and prejudices. EMBO Rep 17:1250-1253.

5. Douglas Ziedonis, Celine Larkin, Raghu Appasani (2016) Mental health care in India: restoring hope and dignity .Indian J Med Res 144: 491-495.

6. Bible L, J Casper, K A Seifert, J L Porter, K A (2017) Assessment of self-care and medication adherence in individuals with mental health conditions, in: Journal of the American Pharmacists Association. J Am Pharm Assoc Rep 57:203-210.

7. Orth U, Robins RW, Widaman KF, Conger RD (2014) Is low self-esteem a risk factor for depression? Findings from a longitudinal study of Mexican-origin youth. J Dev Psychol Rep 50:622-33.

8. Bagheri-Nesam M, Goudarzian A H, Mirani H, Jouybari S S, Nasiri D (2016) Association between self-care behaviors and self-esteem of rural elderlies; necessity of health promotion. J Mater Sociomed Rep 28:41-45.

9. Schultheisz TSDV, de Aquino RR, Alves ABF, Radl ALM, Serafim deAP (2018) Effect of cognitive stimulation workshops on the self-esteem and cognition of the elderly A pilot project. Dement Neuropsychol Rep 12:421-426.

10. https://positivepsychology.com/self-esteem.

11. Borras L, Boucherie M, Mohr S, Lecomte T, Perroud N (2009) Increasing self-esteem: Efficacy of a group intervention for individuals with severe mental disorders. Eur Psychiatry Rep 24:307-316.

12. Jung JY, Park SY, Kim JK (2018) The effects of a client-centered leisure activity program on satisfaction, self-esteem, and depression in elderly residents of a long-term care facility. Phys Ther Sci. Rep 30:73-76.

13. Lee E J (2015) The effect of positive group psychotherapy on self-esteem and state anger among adolescents at korean immigrant churches. Arch Psychiatr Nurs Rep 29:108-113.

14. Parul (2018) Assessing mental health among adults. Community Ment Health Rep 54:683-685.

15. Kunikata H, Yoshinaga N, Shiraishi Y, Okada Y (2016) Nurse-led cognitive–behavioral group therapy for recovery of self-esteem in patients with mental disorders: A pilot study. Japan. J Nurs Sci Rep 13:355-364.

16. Cho M L, Kim D J, Chung J Y, Park J H, You H C, Yang Y (2015) Effects of a cognitive-enhancement group training program on daily living activities, cognition, and depression in the demented elderly. J Phys Ther Sci Rep 27:681-684.

17. Hagerty B M, Bathish M A (2018) Testing the relationship between a self-management intervention for recurrent depression and health outcomes. J Appl Nurs Rep 44:76-81.

18. Newton-howes G (2015) The impact of mental state disorder and personality on social functioning in patients engaged in community mental health care. Australas Psychiatry Rep 22:19-22.

19. Saris IMJ, Aghajani M, van der Werff SJA, van der Wee NJA, Penninx BWJH (2017) Social functioning in patients with depressive and anxiety disorders. Acta Psychiatr Scand Rep 136:352-361.

20. Bruijnen CJWH, Dijkstra BAG, Walvoort SJW, Markus W, Van Der Nagel JEL, et al (2019) Prevalence of cognitive impairment in patients with substance use disorder. Drug Alcohol Rep 38:435-442.

21. Rizwan M, Ahmad R (2015) Self-Esteem Deficits Among Psychiatric Patients. Psychiatry 5: 21582440155.

22. Kim EJ, Bahk YC, Oh H, Lee WH, Lee JS, et al. (2018) Current status of cognitive remediation for psychiatric disorders: A review. Front Psychiatry Rep 9:461.

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