

A Study of Instrumental Activities of Daily Living of Patients having Bipolar Affective Disorder and Its Relationship with their Subjective Well Being and Self Efficacy

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Abstract

Background: The people suffering from bipolar disorders experience a poor quality of life as compared to the general public, it includes difficulties in the areas of work, interpersonal relationship and activities of daily living. During the course of illness the social and family dysfunction affect the persons having bipolar disorder their physical, emotional, social and functional well-being impacted.

Aim: To examine the instrumental activities of daily living of patient suffering from bipolar affective disorder and its relationship with their subjective wellbeing and self-efficacy.

Methods: A cross-section survey was done on thirty patients having bipolar affective disorder using three scales to measure instrumental activities of daily living, subjective well-being and self-efficacy with Lawton instrumental activities of daily living.

Results: The mean age of patients was 38 ± 12 years, with almost equal numbers from both the gender. Most of the patients studied up to graduation (60%), most of them were unemployed. Most of the subjects were in depressive phase (53%), while in mania (27%) and in mixed phase 20%. The activities of daily living and self-efficacy of patients was found to be significantly correlated. The subjective well-being of patients and self-efficacy were also positively correlated. On the other hand there is a weak positive correlation found between subjective well-being of patients was and activities of daily living.

Conclusion: The subjective well-being and self-efficacy of patients with bipolar disorder must be assessed independently and not to be confused with activities of daily living and the interventions need to be planned for improving functioning of patients.

Keywords: Bipolar affective disorder; Subjective well-being; Self-efficacy; Instrumental activities of daily living

Introduction

Bipolar affective disorder (BPAD) disorder is one of the serious mental disorders unlike schizophrenia where cognition, affect and reality testing get distorted; the former is characterized by alternating or concurrent depressive and manic symptoms that may be or may not be accompanied by psychotic symptoms. The presentations of the disorder can be polymorphic. Bipolar disorder in India affects majority males, majority of patients suffering with more number of manic episodes and both manic as well as depressive phases of illness last an average of 3-4 months [1]. Worldwide the prevalence rates of bipolar affective disorder varied, i.e., bipolar I 0.6%, bipolar II 0.4% and bipolar disorder-NOS 1.4%. In general the bipolar spectrum rate is 2.4 percent. The United States had the highest prevalence rate of bipolar spectrum, i.e., 4.4 percent, while India had the lowest rate of 0.1 percent. According to half of the patients who are suffering from this disorder in their adulthood, noted that their illness began in their adolescent years only [2]. Globally bipolar affective disorders are a chief cause of disability. The World Health Survey estimates that 110

million people (2.2%) have very significant difficulties in functioning while the Global Burden of Disease estimates 190 million (3.8%) have "severe disability" - the equivalent of disability inferred for conditions such as quadriplegia, severe depression, or blindness [3]. The people suffering from bipolar disorders experience a poor quality of life as compared to the general public [4]. It includes difficulties in the areas of work, interpersonal relationship and community functioning [5]. Instead of good compliance there is a risk of relapse of about 73%. Among the different phases depressions were more strongly related to social and family dysfunction. These symptoms affect an individual's physical, emotional, social and functional well-being to a great extent and have a considerable impact on their overall quality of life [6-8]. Mania and depression phases are associated with marked psychosocial dysfunction; the impairment covers various areas of functioning and become chronic condition in many of the cases [9,10]. The mixed phase constitutes approximately 20% in bipolar disorders category. Mixed states are also associated with more co morbidity, an inferior treatment outcome, poor prognosis and overall decline in performance in day to day activities [11]. Till today less is known about the experience of subjective well-being and its association with their activities of daily living. The activities of daily living are often related with quality of life the individual is facing. Previous studies found that

in a course of 10 years, about 49.7% patient got misdiagnosed [12]. Misdiagnosis has a considerable impact of quality of life [13].

Research problem

A study to assess the instrumental activities of daily living of patients having bipolar affective disorder and its relationship with their subjective well-being and self-efficacy.

Objectives of the study

1. To find the instrumental activities of daily living of patients having bipolar affective disorder,
2. To find the subjective well-being of patients having bipolar affective disorder,
3. To find the self-efficacy of patients having bipolar affective disorder and to find out the relationship between activities of daily living, subjective well-being and self-efficacy of patients having bipolar affective disorder.

Methodology

A Cross-sectional survey design was used in selected tertiary care hospital, New Delhi on 30 patients with diagnosis of bipolar affective disorder, taking treatment from psychiatry OPD. Ethical clearance was taken from the institutional ethics committee and consent was taken before the data collection. Tools: Subject Data Sheet contained demographic details and selected variables, such as age, gender, education, occupation, marital status, religion, monthly income. Tool no. 1: The Generalized Self-Efficacy scale: The scale was created to assess a general sense of perceived self-efficacy with the aim in mind to predict coping with daily hassles as well as adaptation after experiencing all kinds of stressful life events [14]. Perceived self-efficacy is an operative construct, Reliability: Cronbach's alphas ranged from $r=0.76-0.90$. Responses are made on a 4-point scale. Sum up the responses to all 10 items to yield the final composite scores ranging from 10-40. Tool no. 2: The Lawton Instrumental Activities of Daily (IADL) Scale: is an appropriate instrument to assess independent living skills [15]. There are eight domains of function measured with the Lawton IADL scale. Women are scored on all eight areas of function; historically, for men, the areas of food preparation, housekeeping, and laundry are excluded. A summary score ranges from 0 (low function, dependent) to 8 (high function, independent) for women and 0 through 5 for men. Mental Status Questionnaire (10 point test of orientation and memory), Behaviour and Adjustment rating scales (4-6 point measure of intellectual, person, behavioural and social adjustment) and the PSMS (6-item ADL). Inter-rater reliability was established at $r=0.85$. Tool no. 3: WHO (FIVE) Well-Being Index (1998 version): is a five items rated on 6-point likert scale. It is based on subjective quality of life on positive mood (good spirits, relaxation), vitality (being active and waking up fresh and rested), and general interest (being interested in things). Higher the score better the well-being [16]. Raw score: total the figures of the 5 answers- 0 to 25, where 0 represents worst possible quality of life and 25 represents best possible quality of life. Zero represents worst possible quality of life and 100 represents best possible quality of life. If raw score is below 13 or if

the patient answered 0 to 1 to any of the five items it indicates poor well-being and an indication for testing for depression under ICD-10. Data Analysis: The collected data were coded and entered into excel spread sheet, cleaned and checked for missing values. The data were analysed by using STATA 11.1. Chi square test and spearman correlation were used.

Description of subjects

Thirty patients having BPAD at the time of inclusion all of them were having active symptoms. All of them were attending follow up clinic in psychiatry OPD. The mean age of subjects was 38 years \pm 12 (ranging from 17 to 65 years), with almost equal numbers of male and female, i.e., 16 and 14 (Table 1) respectively, marital status is also found to be similar with 16 ever married and 14 never married individuals, most of them belongs to Hindu religion, from urban background, most of them have an educational level of up to graduation and are housewife or not earning self. Most of the subjects are in depressive phase (53%), while for mania and mixed phase 27% and 20%, respectively.

Variables of Patients			
Age (in years) (mean \pm SD)		38.16 \pm 12.84	Range (17-65)
		Frequency	(%)
Sex	Male	16	53%
	Female	14	47%
Marital Status	Ever Married	16	53%
	Unmarried	14	47%
Educational Status	Till 12th	12	40%
	Above 12th	18	60%
Occupation	Housewife/not earning self	17	57%
	Private/government/farmer	13	43%
Income(INR)	<10,000	20	67%
	10,000-50,000	10	33%
Phase	Mania	8	27%
	Depression	16	53%
	Mixed	6	20%

Table 1: Socio demographic data of Subjects (n=30).

Results:

Objective 1

To find the instrumental activities of daily living of patients having bipolar affective disorder (Figure 1).

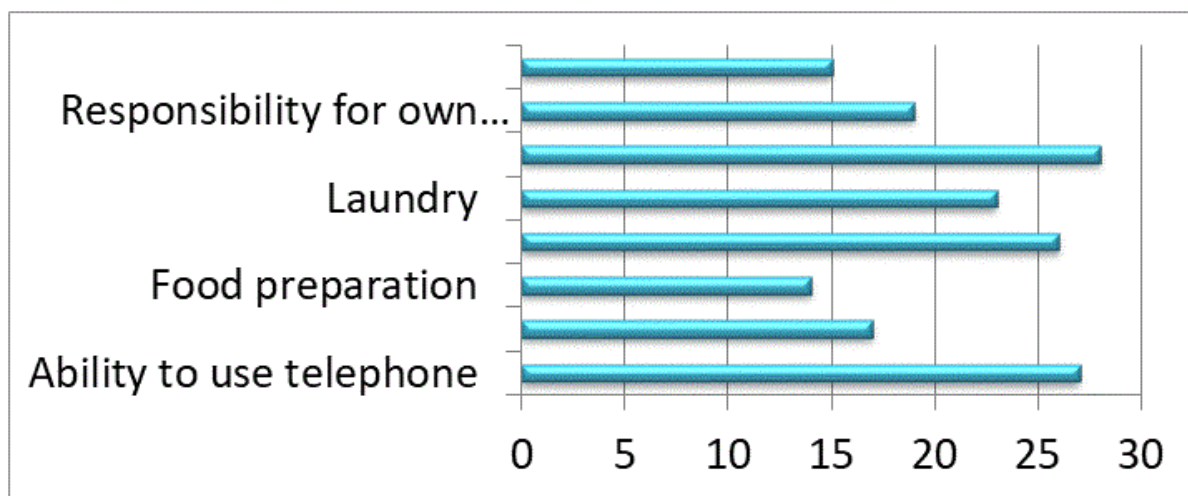


Figure 1: Bar graph showing instrumental activities of daily living of patients.

The instrumental activities of daily living of patients with bipolar affective disorder were as moderately well. The total mean score is 5.6 ± 1.6 . The score ranged from 3-8. The patients who are in manic phase scored comparatively high than the patients in depressive and mixed phase.

Objective 2

To find the subjective well-being of patients having bipolar affective disorder (Figure 2).

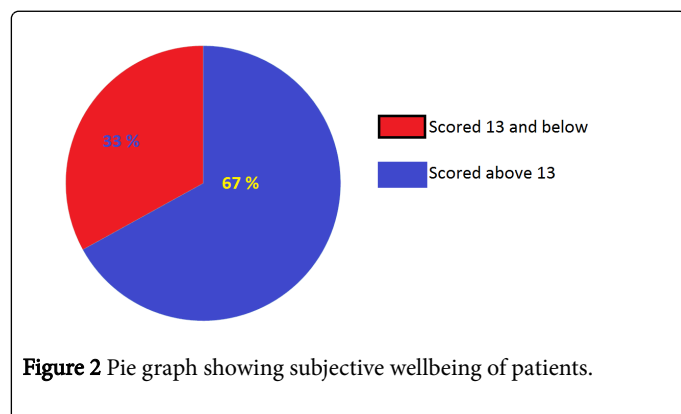


Figure 2: Pie graph showing subjective wellbeing of patients.

The subjective wellbeing of patients with bipolar affective disorder was found to be poor. The mean score is 10.5 ± 7.6 and it ranges from 0-25. The patients who were in manic phase scored higher followed by the patients in mixed phase and the least score obtained by the patients in depressive phase.

Objective 3

To find out the self-efficacy of patients having bipolar affective disorder.

The Generalized Self-efficacy of patient with bipolar disorder is moderate. The mean score is 27.2 ± 7.7 and ranges from 13-40. The patients in manic phase scored highest among the other two phases, followed by patients in mixed phase and then patients in depressive phase.

Subjective assessment of Patients	Subjective assessment scores	Range
	Mean \pm SD	
Wellbeing Score	10.5 ± 7.6	0-25
Self-Efficacy score	27.2 ± 7.7	13-40
IADL Score	5.6 ± 1.6	8-Mar

Table 2: Mean scores of well-being Score, self-efficacy and IADL of patients with BPAD (n=30).

The patients scored differently on subjective assessment scales (Table 2). In well-being patients scored very poorly. On the other hand for self-efficacy and Lawton instrumental activities of daily living they scored moderately well (Table 3).

Subjective assessment scales	WHO 5 Wellbeing Scale	Generalized Self-Efficacy Scale	Lawton Instrumental Activities of Daily living Scale
Wellbeing Scores	1		
Self-Efficacy Scores	0.448	1	
	0.0130*		
Instrumental Activities of Daily living Score	0.1119	0.4126	1
	0.5561	0.0234*	

Table 3: Correlation between scores of well-being, self-efficacy and instrumental activities' of daily living in patients with BPAD (n=30) *p<0.05.

All the Scores of three variables Well-being, Self-efficacy and Instrumental activities' of daily living in patients with BPAD were positively correlated to each other, although the correlation is weak to moderate. The correlation between 5 Wellbeing scores and the Self-efficacy scores is (r=0.4480) and is showing a significant correlation.

The correlation between Wellbeing scores and Instrumental of daily living is very weak (r=0.1119) while the correlation between Self-efficacy scores and Instrumental activities of daily living is moderate and significant (r=0.4126).

Variables of Patients	Phases of illness								
	Observation			Mean ± SD			Range		
	Mania	Depression	Mixed	Mania	Depression	Mixed	Mania	Depression	Mixed
WHO-5 Wellbeing scale	8	16	6	19 ± 6.64	6 ± 4.2	11 ± 6.1	25-Apr	0-19	18-Jan
GSE scale	8	16	6	35 ± 4.4	23 ± 6.3	27 ± 7.1	28-40	13-39	17-35
Lawton IADL scale	8	16	6	7 ± 1.5	5 ± 1.5	5 ± 1.6	8-Apr	8-March	7-March

Table 4: A comparison among well-being, self-efficacy and instrumental activities' of daily living in patients with bipolar disorder according to different phases of illness (n=30).

Most of the subjects were in depressive phase (n=16) (Table 4). Among the three scales the depressive patients scored very poor in Subjective wellbeing score with mean= 6 ± 4.2 and range= (1-18). In other two variables Self-efficacy and the Instrumental activities of daily living scores were fairly well, i.e., mean=23 and 5, respectively.

The subjects in manic phase scored very well in all three variables, well-being, self-efficacy and Instrumental activities of daily living with a score of 19, 35 and 7, respectively.

In the mixed stage only six subjects (n=6) were there. The figures indicate that the subjective wellbeing of these individuals is poor mean=11, while they scored similar as the depressive subjects scored in instrumental activities of daily living scale and for self-efficacy they scored well as compare to depressive phase individuals with a mean of 27.

Description of patients

All thirty patients were having active symptoms. The mean age of patients was 38 years ± 12. Almost equal numbers of patients were male and female. Most of them were from Hindu religion, from urban background, educational level of up to graduation and were not earning.

Major findings of the study

- Most of the subjects are in depressive phase (53%), while for mania and mixed phase 27% and 20%, respectively.
- The activities of daily living and self-efficacy of patients with BPAD had a positive significant correlation.
- The subjective wellbeing and self-efficacy of patients with BPAD were also positively correlated.
- There is a very weak correlation between subjective wellbeing and activities of daily living of patients with BPAD.
- Depressive phase is more common among all the other phases of patients with BPAD.
- In spite of good educational level most of the individuals with bipolar disorder remained unemployed.

Discussion

All the patients who participated in this study were patients with the active symptoms of bipolar disorder. The patient profile in AIIMS psychiatry setting is considerably different from other rural setup due to many reasons including understanding of the disorder by the physicians as well as by the increasing awareness in the general public.

Socio-demographic data showed that male and females are almost equally affected by this disorder which is different from the previous literature [17], which reported that females are more affected by this disorder. In this study the marital status is also not showing any

significant relation as they also found to be somewhat equal in numbers with more for the married individuals. It is opposite to the previous study which found marriage as an effective factor for early recovery and improved quality of life [18-20]. This might be due to the increased marital discords and disharmony between couples which itself now becoming an active factor for relapse this episode The stressful life events has an great impact on functional recovery of patients. In the home duties domain, participants who did not experience a stressful life event had a mean time to recovery of 16.2 days (SD=9.4 days) and participants who did experience a stressful life event had a mean time to recovery of 37.3 days (SD=20.8 days) [21]. In this study the higher prevalence is found in individuals who are graduate and postgraduate (60%) than those of educated below 12th or below 10th and most of them are housewives and individuals who are not earning self. Despite of that the total monthly income of individuals (67%) is found to be less than Rs. 10,000. This finding is same as that is previous study [22]. A total of 30 subjects were enrolled in the study and among those, n=16 subjects were in depressive phase. This finding is similar to the previous study in which the lifetime prevalence rate of depressive phase is 1.57% and mania 1.06% [23]. Among the three phases the subjects who were in depressive phase scored very poor in all the three scales as compared to other phases i.e. mania and mixed stages. This finding is similar to the previous study findings which found that the quality of life were most affected in patients with bipolar disorder I, than in the remaining groups [24,25]. In a longitudinal study in 2015, the relationship between quality of life, the level of functioning and severity of symptoms was examined. The results showed that the decline in subjective and objective quality of life is associated with deterioration in functioning capacity as well as absence of symptom of remission in patients with schizophrenia [26]. The present study found that there is a correlation between self-efficacy with the subjective well-being of the individuals ($r=0.4480$, $p=0.0130^*$) and also there is a relation between self-efficacy and the activities of daily living which is again significant ($r=0.4126$, $p=0.0234^*$). In a study, to examine the links between self-perceived recovery, symptoms and the social components of quality of life, the results showed that greater the self-perceived recovery stronger is the quality of life, even in the presence of considerable psychotic symptoms [27]. A study done in China (2014) on 150 outpatients revealed that personal recovery was significantly correlated with functional recovery [28].

Implications

For patient

As the self-efficacy and subjective well-being are positively and significantly correlated, actions should be taken to improve the self-efficacy of the patients so that the subjective well-being will be improved by themselves.

For family

Family members must be given education about their role in improving the patients self-efficacy and not to encourage dependence thus help in the early recovery.

For mental health practitioners

While assessing the patients in follow-up clinic to consider the Subjective complaints and the Objective signs at the same time in order to improve the overall functioning and QOL.

For rehabilitation service providers

The rehabilitative services provided to patients must be directed at improving both psychological and social impairments, in order to enhance the social functioning and Quality of Life of patients.

For health care workers

HCWs have an important role in comprehensive recovery of patient, it is important to focus on instrumental activities of daily living of patient first followed by the activities of daily living as the former starts deteriorating first. Well trained mental health care workers such as mental health nurses could provide a far better service to the patients, they nurse needs to provide guidance to family members and hence it is important for them to have an accurate knowledge of assessment of subjective well-being, activities of daily living and self-efficacy.

Limitations

The current study is limited for generalization as it was a cross sectional assessment and done on a small sample size. Only subjective self-reports were used for measuring the individual aspects.

Conclusion

The two variables wellbeing and Self-efficacy scores and Instrumental activities of daily living of patients with bipolar disorder were not strongly correlated to each other. The subjective wellbeing and activities of daily living have shown a very weak correlation. It is found that patients suffering from bipolar disorder have scored very poor in their subjective wellbeing but they count themselves well efficiently in maintaining the day to day activities like communication, laundry, transport, shopping, cooking and finance etc. The correlation of subjective wellbeing with self-efficacy is also moderate. Health care workers have important role to play for guiding the patient and the family in comprehensive recovery of patients hence it is important to focus on quality of life, subjective wellbeing and self-efficacy aspects separately. Thus subjective wellbeing and self-efficacy of patients with bipolar disorder must be taken care separately and not to be confused with activities of daily living.

Recommendations

Qualitative studies can be done to assess the quality of life, subjective wellbeing and self-efficacy of the patients and to improve the follow-up services in order to improve functioning of the patients. It is important to develop protocols of care after the recovery from acute episode of illness where the self-efficacy and the Instrumental activities of daily living should be measured and as per the status of functioning of patient the instrumental activity-training programs can be conducted with the help of volunteers, social workers and family member accompanying the patient in follow up OPD. Quality of life of patient need to be assessed, every time, patient visits the follow up along with the verification of recovery from symptom.

References

1. Ramdurg S, Kumar S (2013) Study of socio-demographic profile, phenomenology, course and outcome of bipolar disorder in Indian population. *Int J Health Allied Sci* 2: 260.
2. NIMH (2011) International impact of bipolar disorder highlights need for recognition and better treatment availability. Science Update.

3. WHO (2011) World report on disability.
4. Dean BB, Gerner D, Gerner RH (2004) A systematic review evaluating health-related quality of life, work impairment and healthcare costs and utilization in bipolar disorder. *Curr Med Res Opin* 20: 139-154.
5. Sierra P, Livianos L, Rojo L (2005) Quality of life for patients with bipolar disorder: Relationship with clinical and demographic variables. *Bipolar Disord* 7: 159-165.
6. Gitlin MJ, Swendsen J, Heller TL, Hammen C (1995) Relapse and impairment in bipolar disorder. *Am J Psychiatry* 152: 1635-1640.
7. Fava GA (1999) Subclinical symptoms in mood disorders: Pathophysiological and therapeutic implications. *Psychol Med* 29: 47-61.
8. Scott J, Scott EM, Hermens DF, Naismith SL, Guastella AJ, et al. (2014) Functional impairment in adolescents and young adults with emerging mood disorders. *Br J Psychiatry J Ment Sci* 205:362-368.
9. Coryell W, Scheftner W, Keller M, Endicott J, Maser J, et al. (1993) The enduring psychosocial consequences of mania and depression. *Am J Psychiatry* 150: 720-727.
10. Henry BL, Minassian A, Perry W (2013) Everyday functional ability across different phases of bipolar disorder. *Psychiatry Res* 210: 850-856.
11. Lee Mortensen G, Vinberg M, Lee Mortensen S, Balslev Jørgensen M, Eberhard J (2015) Bipolar patients' quality of life in mixed states: a preliminary qualitative study. *Psychopathology* 4: 192-201.
12. Ruggero CJ, Carlson GA, Kotov R, Bromet EJ (2010) 10 year diagnostic consistency of bipolar disorder in a first-admission sample. *Bipolar Disord* 12: 21-31.
13. Awad AG, Rajagopalan K, Bol ge SC, McDonnell DD (2007) Quality of life among bipolar disorder patients misdiagnosed with major depressive disorder. *Prim Care Companion J Clin Psychiatry* 9: 195-202.
14. Luszczynska A, Scholz U, Schwarzer R (2005) The general self-efficacy scale: multicultural validation studies. *J Psychol* 139:439-57.
15. Graf C (2008) The Lawton instrumental activities of daily living scale. *Am J Nurs* 108: 52-62.
16. Topp CW, Østergaard SD, Søndergaard S, Bech P (2015) The WHO-5 Well-Being Index: A systematic review of the literature. *Psychother Psychosom* 84: 167-176.
17. Arnold LM (2003) Gender differences in bipolar disorder. *Psychiatr Clin North Am* 26: 595-620.
18. Vibha P, Saddichha S, Khan N, Akhtar S (2013) Quality of life and marital adjustment in remitted psychiatric illness: An exploratory study in a rural setting. *J Nerv Ment Dis* 201:334-338.
19. Hsiao CY, Hsieh MH, Tseng CJ, Chien SH, Chang CC (2012) Quality of life of individuals with schizophrenia living in the community: Relationship to socio-demographic, clinical and psychosocial characteristics. *J Clin Nurs* 21: 2367-2376.
20. Ran MS, Chen S, Chen EY, Ran BY, Tang CP, et al. (2011) Risk factors for poor work functioning of persons with schizophrenia in rural China. *Soc Psychiatry Psychiatr Epidemiol* 46:1087-1093.
21. Yan-Meier L, Eberhart NK, Hammen CL, Gitlin M, Sokolski K, et al. (2011) Stressful life events predict delayed functional recovery following treatment for mania in bipolar disorder. *Psychiatry Res* 186: 267-271.
22. Kupfer DJ, Frank E, Grochocinski VJ, Cluss PA, Houck PR, et al. (2002) Demographic and clinical characteristics of individuals in a bipolar disorder case registry. *J Clin Psychiatry* 63: 120-125.
23. Clemente AS, Diniz BS, Nicolato R, Kapczinski FP, Soares JC, et al. (2015) Bipolar disorder prevalence: A systematic review and meta-analysis of the literature. *Rev Bras Psiquiatr São Paulo Braz* 1999 37: 155-161.
24. Cotrena C, Branco LD, Shansis FM, Fonseca RP (2016) Executive function impairments in depression and bipolar disorder: association with functional impairment and quality of life. *J Affect Disord* 190: 744-753.
25. Chino B, Nemoto T, Fujii C, Mizuno M (2009) Subjective assessments of the quality of life, well-being and self-efficacy in patients with schizophrenia. *Psychiatry Clin Neurosci* 63: 521-528.
26. Cichocki L, Cechnicki A, Franczyk-Glita J, Bładziński P, Kalisz A, et al. (2015) Quality of life in a 20 year follow-up study of people suffering from schizophrenia. *Compr Psychiatry* 56: 133-140.
27. Kukla M, Lysaker PH, Roe D (2014) Strong subjective recovery as a protective factor against the effects of positive symptoms on quality of life outcomes in schizophrenia. *Compr Psychiatry* 55:1363-1368.
28. Tse S, Davidson L, Chung K, Ng KL, Yu CH (2014) Differences and similarities between functional and personal recovery in an Asian population: A cluster analytic approach. *Psychiatry* 77: 41-56.