Effect of Structured Activity Program on subjective wellbeing of patients with chronic mental illness

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Abstract

Objectives: The present study aimed to determine the effect of structured activity program (SAP) on subjective well-being (SWB) of patients with chronic mental illness and its association with selected variables. **Methods:** One group pre-test post-test experimental design was used. Sixty patients with mental illness between the age group of 31-60 years were selected using purposive sampling technique. Tools used were semi structured interview schedule on socio demographic datasheet, Mini Mental Status Examination (MMSE) to screen the mentally ill patients and to exclude those with cognitive impairment and a modified subjective well-being inventory to assess the SWB of selected patients. Initially pre-test assessment was done and next day onwards the group was subjected to SAP for two hours in the evening for a period of 28 days followed by first and second post-test done using the same tool on 30th and 44th day respectively. Data were tabulated and analyzed using descriptive and inferential statistics. **Results:** Findings revealed that SAP given to mentally ill patients resulted in an improvement in SWB ($p < .001$). There was a significant difference in mean SWB score before and after the SAP. **Conclusion:** A present study finding suggests that SAP can be used as an effective intervention program to improve the SWB of mentally ill individuals. Nurses can act as vehicle by promoting the SAP and enabling people to have better control over their behaviour and improve their SWB.

Key words: Structured activity program (SAP), subjective well-being (SWB), chronic mental illness, Mini Mental Status Examination (MMSE)

Introduction

Mental health problems affect people of all age groups. Stigma and economic burden of mental illnesses are the reasons why it is so poorly treated (CHARDEP, 2008 & Sridar, 2010). Considering the high prevalence of mental illness, the stability of SWB seems too contradictory. Ability to nurture a positive attitude and high levels of satisfaction is the indicator of SWB. According to World Health report (2001), 20% of total patients scrutinized by health care workers have one or more mental disorders. One in four families seemed to have one member with a mental disorder or behavioural problem. Kerala State and mental health authority (2001) reports that mental disorders account for 10.5% of the global burden of disease (GBD), 12% in 2000 and this will rise and reach 15% by 2020. Mental health foundation (2001) revealed that one in four people get the help of General Health Services both in developed and developing countries for emotional and psycho-social problems. Singh (2007) reported that major mental and behavioural ailments in India are approximately 65 in 1000. Behaviourally ill people are almost neglected; they are cared with little or no importance and are frequently isolated/imprisoned. Almost 75% mentally ill patients exist in villages, where essential health care access is not available. Half (53%) of the Government sector hospitals do not support rehabilitation program. In India about two to five percent of the population suffers from some form of behavioural or mental disorder (Sridar, 2010). Around one percent suffers serious mental disorder requiring urgent care. Almost 10-15% of those on board general health facilities have a common mental disorder (Sridar, 2010). Fleeson, Staudinger and Baltes (1999) predicted that the subjective physical health and global well-being as self-perception of health differs extensively from physician assisted health and has a greater impact on SWB than objective health related variables.

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CHARDEP (2008) estimated that around 500 lakh people in India are affected by mental illness such as schizophrenia, obsessive compulsive disorder, depression, anxiety and bi-polar mood disorder. Many are in the community under the care of their family members or are admitted to specialized medical institutions for care. Others who are not so fortunate are denied medical care due to reasons like superstition, economic backwardness, and social stigma and therefore are abandoned near temples or just driven out into the streets.

Kerala has nurtured a materialistic practice in the view of social nuclearisation. In search of materialistic pleasures, the old and the young are experiencing emotional isolation. As a consequence of this unachievable search for materialism, marriages are falling apart, alcoholism is uncontrolled and there is an increase in suicides. In our society, mental health still has a low priority: Some persist to examine mental illness as a character/behaviour defect. This is interlaced by the stigma and social support deprivation. This negative impact is creating a disaster, making peak incidence of mental illness in Kerala.

Brajša, Merkaš, and Šverko (2011) conducted a comprehensive study to determine the excellence of life with objective factors and with subjective awareness of factors which persuade human life. Relaxation activities have a significant role in SWB because they bring probability to achieve life values and needs. By joining in leisure activities people build social relationships, positive emotions, gain additional skill and knowledge, and therefore progress their subjective virtue of life.

One of the narrative study opined that negative symptoms and neurocognitive deficits are predictors of impoverishment in schizophrenia. Personal narratives were obtained from 25 participants with schizophrenia after assessing flexibility of abstract through positive and negative feelings and emotional discomfort symptoms using Wisconsin card sorting test and PANSS. This revealed that the schizophrenia group narratives showed significantly more impoverished results than the control group. Neurocognitive deficits and negative symptoms could be addressed in rehabilitation to promote recovery (Lysaker, Wickett, & Davis 2005).

Another study regarding the relationship between positive and negative symptomatology, cognitive functions and ability to perform basic activity of daily living in patients with schizophrenia using Brief Psychiatric Rating Scale (BPRS) was performed. This is for a better assessment of the positive and negative symptoms and cognitive function and functional needs
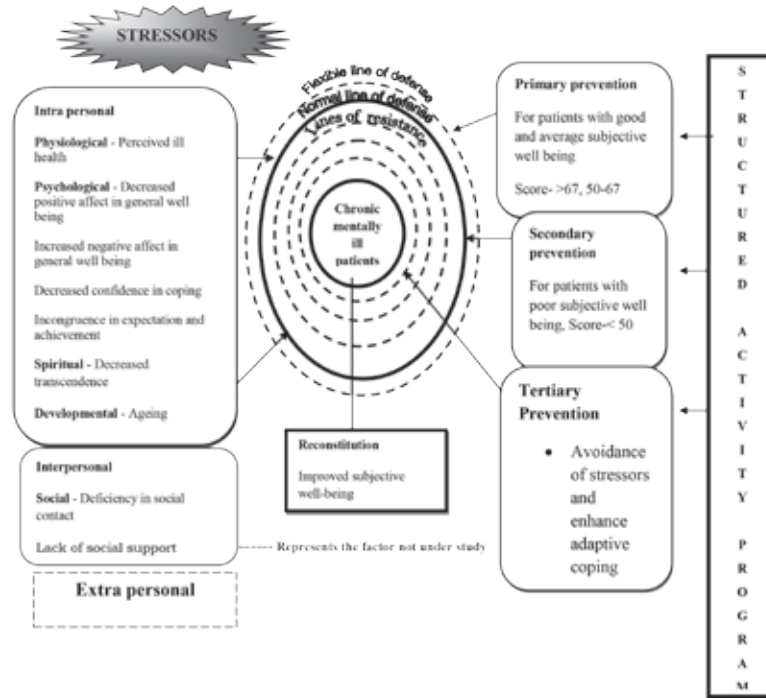

Figure 1: Modified theoretical framework based on Betty Neuman's system model

for activities of daily living and a comprehensive neuropsychological test. Regression analysis showed that symptomatology had direct impact on activity of daily living. This points the importance of addressing symptomatology and cognitive deficits in psychosocial intervention programs (Velligan, Kern & Gold, 2006). The stigma prevailing in society isolates the families with a mentally ill member. People are hesitant to establish close personal or marital relation with such families. These factors prompt the families to hospitalize the patients with a view of long term institutionalization. They are left alone in the hospital and the family shows reluctance to take them back home even if they become symptomatically better. Many homeless persons with chronic mental illness have been institutionalized. However, an increasing number of the homeless are young persons with persistent mental illness and social stigma which increased the importance of residential care. During the posting in residential care facility, the researcher noticed that patients with chronic mental illness in residential care facility were having low SWB. Hence, the researcher decided to conduct a study to realize the effect of SAP on SWB of chronic mentally ill patients of a selected residential care unit.

Material and Methods

The design selected one group pre-test post-test experimental design with one follow up. All the subjects were given a pre-test, they were provided with SAP and the group was subjected to two post-tests with two weeks apart.

Study design: The following design was adopted for the study

| O1 | X | O2 | O3 |

O1 – Pre-test

X – Structured activity program for 2 hours daily for 28 consecutive days

O2 – Post-test-1 (on immediate day after the structured activity program)

O3 – Post-test-2 (2 weeks after the first post-test)

The setting of the study was in residential care facility, Navajeevan trust, Kottayam. The study population comprised of individuals, who were residing in residential care facilities with chronic mental illness. Sixty patients were selected by purposive sampling from the unit. Criteria for including the patients for study were chronic mental illness, who has willingness to participate in the study, are between the age group of 31- 60 years, can read and write Malayalam, and has MMSE score ≥ 25. Patients with mental retardation and organic mental disorders are excluded from study.

The following tools were selected to collect the data for identifying the effect of structured activity program
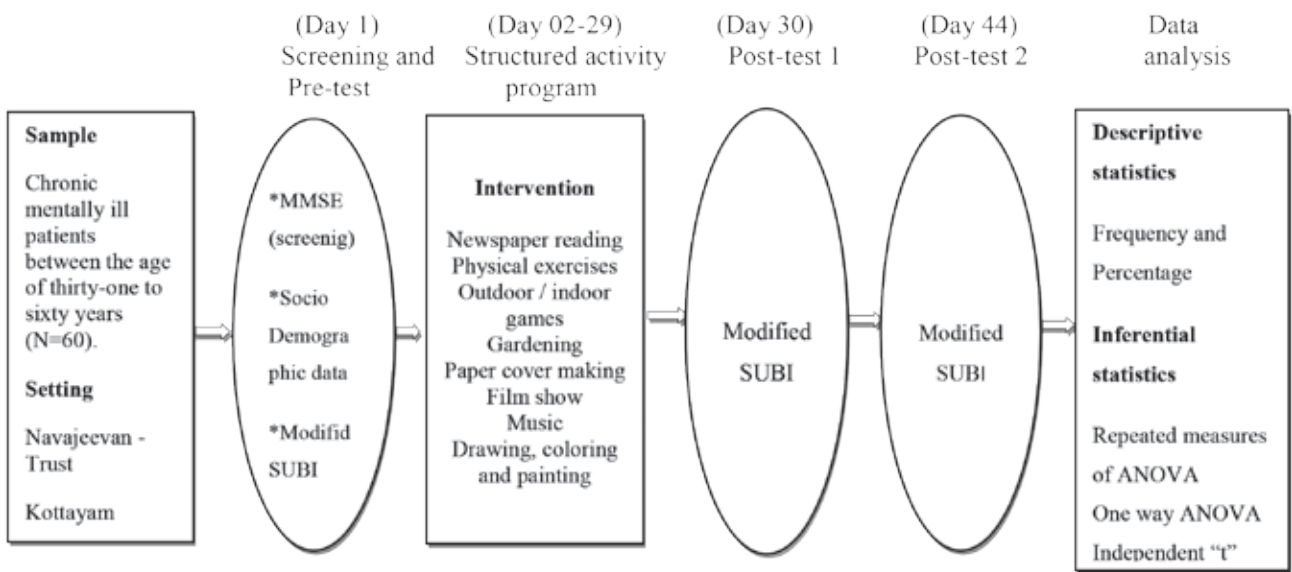

Figure 2: Schematic representation of the study design

on SWP of patients with chronic mental illness in a residential care facility.

Tool 1: Mini Mental Status Examination (MMSE) Folstein and McHugh (1975)

Tool 2: Socio demographic data sheet

Tool 3: Modified Subjective Well Being Inventory (SUBI) Sell and Nagpal (1992)

Tool 1 - **Mini Mental Status Examination (MMSE)**
MMSE was selected as a screening tool to exclude the subjects with cognitive impairment. It consists of 11 items with total score of 30. MMSE is separated into two sections. Initial section includes verbal responses only and covers orientation, memory, and attention. Final part examines the ability to name, follow written and verbal commands, sentence writing, and reproduce a complex polygon. Total Score is 30. The score greater than or equal to 25 points (out of 30) is effectively normal (intact). A score below (≤9 points) indicate severe, moderate (10-20 points) or mild (21-24 points) impairment. For this present study, a score of twenty-five is considered as a cut off value and patients scored 25 and above were selected for the study.

Tool 2 - Socio demographic data sheet
Structured interview schedule on socio demographic data sheet consisted of age, gender, education, religion, marital status, duration of stay in the residential care facility, medical diagnosis, duration of illness, reason for stay, leisure time activity, and most satisfying activity in residential care facility.

Tool 3 - Modified Subjective Well-being Inventory (SUBI)
Rup Nagpal and Helmunt Sell developed Subjective Well-being Inventory in 1992. It helps to test the affective well-being or ill-being as accomplished by the human being in diverse daily life concerns. It constitutes eleven domains of 40 items with total score of 120. For the present study, it was modified to thirty-three items with nine domains. The two domains, family group support and primary group concern consisting of three questions and domain transcendence with one question were deleted from subjective well being inventory because the subjects were residing in residential care facility. Thus, the final tool contains nine domains with thirty-three items. These domains include general

well-being, positive effects, inadequate mental mastery, expectation achievement congruence, transcendence, confidence coping, social support perceived ill-health, general well-being negative effect and deficiency in social contacts.

Domain 1 - General well-being positive affects
It reflects feeling of well-being originating out of general perception of life as performing smoothly and joyfully. The elements include whether life is interesting, the life compared with past and present things in recent years.

Domain 2 - Expectation achievement congruence
The domain reflects to feeling of well being generated by attaining success and the standard of living as in one's expectation or satisfaction. This confirms the theoretical construct of expectation achievement harmony. The items such as fulfillment of expectations with relation to standard of living, success, and accomplishments' efforts were included.

Domain 3 – Coping skills
The domain is related to anticipate personality strength, the power to master critical or unexpected situations. The items include mastery of managing unexpected situations, ability in facing crisis, and strength in coping with future.

Domain 4 - Transcendence
Domain reflects affection of subjective well being originated from values of spiritual quality. Moments of intense happiness and belongingness as a common force were included in this domain.

Domain 5 - Social support
The domain describing that the social environment act as general support in crisis situation. Help by friends or relatives in illnesses, when needed and in emergency were included in this item.

Domain 6 - Inadequate mental mastery
This domain reflects the inability to act efficiently with certain aspects of daily life that have the capacity to disturb mental equilibrium. The items included are upset by unexpected things, feeling sad without any reason, irritability, anxiety and tension, losing temper over minor things, upset by minor things and upset over criticism.

Domain 7 - Perceived ill health

This explains perceived or real physiological dysfunction due to psychological or emotional conflict or stresses. Items include worry over health, pain in various parts of the body, palpitations/thumping heart, giddiness, getting tired too easily, and disturbed sleep.

Domain 8 - Deficiency in social contact

The domain constitutes worries about being disliked and feelings of missing friends. The items include lack of close relationship, wish for more friends and lack of close friend.

Domains 9 - General well-being negative affect

This domain exhibits a life with depressed outlook, worrying about future, boring/uninteresting life, and think that life is useless.

Among the thirty-three items, fourteen of these represent positive affect i.e., whether one is happy, good or reassured about particular life distress. The remaining nineteen elements shows negative affect that is unhappiness, worry, or concerned about problem in life. The responses were categorized into very positive, positive, and neutral (or negative) affirmation for the positive items and very negative, negative and neutral association for the negative items. SUBI can be measured by mapping the point three, two and one to the positive elements and one, two, three to the negative objects. Lowest and highest scores thus obtained are 33 and 99, respectively.

Structured activity program (SAP)

SAP encompasses newspaper reading, physical exercises, outdoor games (football and badminton), indoor games (musical chair, snakes and ladder), gardening, paper cover making, film show, listening to music, singing, drawing and colouring assigned for a period of four weeks from 2.00pm to 4.00pm every day. The program starts by reading any one Malayalam daily for 30 minutes followed by 45 minutes of simple warm up exercises and different recreational activities for 45 minutes. Validity of the tool ensured, the reliability was found out to be .89 using Cronbach Alpha method.

Results

The study was conducted to determine the outcome of SAP on subjective well-being of patients with chronic mental illness residing in residential care facility in Kottayam district.
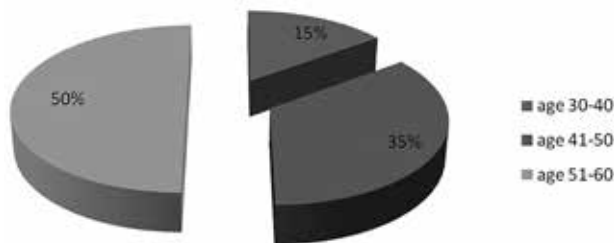

Figure 3: Frequency and percentage distribution of patients with chronic mental illness in residential care facility based on age

Figure 3 shows that 50% of patients in the study group belonged to age group of 51-60 years. Among them 65% were Hindus and 33.33% Christians. Most of them (33.3%) were unmarried. Among the patients, 51.7% were staying in the residential care unit for a period of three to five years. Most of the patients (41.7%) stayed in residential care facility because they did not have a house of their own. Among them 36.7% of the subjects liked to hear music, whereas 28.3% liked reading as their leisure time activity. The relatives of the patients never visited them in the residential care unit. They reported that the most satisfying activities in residential care unit were cleaning (28.3%) and cooking (23.4%). The patients suffering from mental illness for the past 11 to 15 years were 28.3%. Majority of them (61.7%) were suffering from mania, whereas 38.3% were affected with schizophrenia.

A greater percentage (96.7%) of study participants had poor SWB with mean score of 39.60 and standard deviation of 5.15. The mean pre-test subjective well-being score was 40.48 with a standard deviation of 7.05. After the SAP, the mean score of SWB increased to 78.70 in post-test 1 and 82.37 in post-test 2. There was a significant ($p < .001$) difference in the mean subjective well-being scores of various domains after the SAP (Table1, 2, 3 &4). There was a meaningful difference in pre- and post-tests points of SWB of patients with chronic mental illness. That means SAP was effective in improving the SWB of patients with chronic mental illness. No significant association was found between SWB and selected variables such as age, gender, duration of illness, and disease condition. Patient's education and leisure time activity in the residential care unit had significant influence on SWB .

Table 1:

Mean and Standard Deviation of Scores of Subjective Well-Being of Patients with Chronic Mental Illness with Respect to Structured Activity Program

N=60

Test	Mean	SD
Pre-test	40.48	7.05
Post-test 1	78.70	9.27
Post-test 2	82.37	9.03

Table 2:

Scores of ANOVA on Subjective Well-Being of Patients with Chronic Mental Illness with Respect to Structured Activity Program

N=60

Source of variation	Sum of squares	Mean square	df	F ratio
Between group	812448.05	812448.05	1	
Within group	52626.41	52626.41	1	7804.01***
Total	865074.46	865074.46		

***Significant at (< .001) level*

Table 3:

Pre-Test and Post-Test Pair Comparison of Mean Scores of Subjective Well-Being of Patients with Chronic Mental Illness with Respect To Structured Activity Program

N=60

Pairs	Mean value	Mean difference between pairs	Critical difference
Pre-test	40.48	38.22	0.41**
Post-test1	78.70		
Pre-test	40.48	41.89	0.44**
Post-test 2	82.37		
Post-test 1	78.70	3.67	0.40**
Post-test 2	82.37		

** Significant at <0.01 level*

Table 4:

Mean, Standard Deviation and F Ratio of Various Domains of Subjective Well-Being of Patients with Chronic Mental Illness Before and After the Structured Activity Program

N=60

Subjective well-being domains	Pre-test		Post-test 1		Post-test-2		F ratio
	Mean	SD	Mean	SD	Mean	SD	
General well-being positive affect (3-9)	3.50	1.00	7.23	1.38	7.20	1.40	3236.77***
Expectation achievement congruence (3-9)	3.50	1.00	7.20	1.31	7.10	1.30	2752.39 ***
Confidence in coping (3-9)	4.10	1.20	7.15	1.30	7.50	1.32	2916.88***
Transcendence (2-6)	2.73	1.00	4.73	1.06	4.90	1.13	1927.70***
Social support (3-9)	3.90	1.20	7.10	1.30	7.47	1.26	4086.91***
Inadequate mental mastery (7-21)	9.10	2.60	16.23	2.67	17.08	2.78	3490.70***
Perceived ill health (6-18)	7.00	1.50	14.28	2.19	15.20	2.10	5045.97***
Deficiency in social contacts (3-9)	3.45	1.00	7.40	1.40	7.80	1.34	820.49***
General well-being negative affect (3-9)	3.20	0.74	7.55	1.44	8.12	1.29	3298.18***
Total	40.48	7.05	78.70	9.27	82.37	9.03	

***significant at <.001 level*

Discussion

The study was focused on the effect of SAP on SWB of patients with chronic mental illness residing in residential care facility. The study revealed that majority of the patients were between the ages of 51-60 years, this might be due to the fact that mental health problems affect people of this age group and the improvement in the standard of living and technology increased their life expectancy. In this study majority of patients (55.0%) were females as women have better life expectancy than men. The present study revealed that 43.3% of patients had secondary education. Most of them (33.3%) were unmarried and did not have a house of their own. The study states that 51.7% were staying in the residential care unit for a period of 3-5 years. The reasons might be superstitions, economic backwardness, and lack of care giver and social stigma that kept the mentally ill persons separated from or neglected by their families. Majority of them (61.7%) were suffering from bipolar affective disorder and mania, whereas 38.3% were with schizophrenia. Schizophrenia affects about seven per thousand of the population, in the age group of 15-35 years. Though the occurrence is low (3-10,000),

the prevalence is peak due to chronicity. One of the main findings in this study was that 96.7% of study participants were having poor SWB. These findings were similar to the studies on quality of life in severe mental illness. It was determined that SWB of patients with chronic mental illness in residential care facility had improved after repeated SAP in regular intervals. A study revealed that SWB of elderly individuals could be enhanced through some measures addressing the economic security, health, and education. In this study, Betty Neuman's systems model was effectively used as a theoretical framework, where the patients with chronic mental illness were considered an open system, with SWB. It emphasized on intrapersonal and extra personal stressors and how they acted on it, to result in the reduction of SWB. Findings from the present study showed that there was no relevant connection found between SWB and variables such as age, gender, duration of illness, and disease condition. The investigator found out a statistically significant association between SWB of patients with chronic mental illness with their education and leisure time activities. Education and leisure time activity of watching television, hearing and singing music has an effect in increasing the SWB.

Conclusion

In the present study, a statistically significant improvement was found in the SWB of patients with chronic mental illness after the SAP. The study suggests that SAP can be used as an effective intervention program to improve the SWB of the patients with chronic mental illness. Nurses can act as vehicle by promoting the health process enabling patients increase control over their behaviour and improve the SWB.

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