

Effectiveness Of A Recovery Oriented Program On Hope, Mental-Wellbeing, And Recovery Process Among Severe Mental Ill Patients.



Sandeep Arya^{1*}, Sreevani Rentala²

^{1*}Assistant Professor, Faculty of Nursing, Uttar Pradesh University of Medical Sciences, Saifai, Etawah, Uttar Pradesh, India.

²Professor and HOD, Psychiatric Nursing Department, Dharwad Institute of Mental Health and Neuroscience (DIMHANS), Dharwad, Karnataka, India.

Abstract

Purpose: This study aimed to design and assess the effectiveness of a Recovery Oriented Program (ROP) in enhancing hope, mental wellbeing, and recovery outcomes for patients with severe mental illness (SMI).

Design and methods: two-arm, single-blind, prospective study with 3 months' follow-up on 30 patients with SMI who participated in a two-week recovery program. A total of thirty participants were randomly divided into the ROP group and the Treatment as Usual (TAU) group for the study. Data for the study were gathered using the Adult State Hope Scale, the WHO-5 Wellbeing Index, the clinician version of the Illness Management and Recovery Scale, and the Social and Occupational Functioning Assessment Scale. ROP is a therapy intervention consisting of five therapy sessions administered only to the experimental group.

Results: The ROP group showed significantly higher scores than the TAU group on the ASHS, WHO MWELL, and IMRS at both 30 and 90 days ($p < 0.0001$) whereas a marginally non-significant difference was found on the recovery (SOFAS) at day 30 ($p = 0.0608$), but a significant improvement was observed at day 90 ($p = 0.0108$). Post-interventional mean scores of outcome variables, i.e., hope ($F = 31.836$, $p = 0.000$), mental wellbeing ($F = 35.087$, $p = 0.000$), and recovery assessed through IMRS ($F = 9.360$, $p = 0.005$) and SOFAS ($F = 5.464$, $p = 0.027$), were also found statistically significant in a repeated-measures ANOVA.

Conclusion: The current study concludes that the recovery-oriented program is effective in enhancing mental wellbeing, fostering hope, and promoting recovery behaviors in patients with severe mental illness (SMI).

Key words: Hope, Mental wellbeing, Recovery process, Severe mentally ill patients, Recovery oriented program

Introduction

Approximately more than 450 million individuals affect globally by mental health issues, with 80% of them residing in middle- and low-income nations. India and China collectively contribute to around 33% of the global mental health burden [1]. SMI prevalence in India was 0.8% for present experience and 1.9% for lifetime experience [2]. According to the national mental health survey 2015-16, SMI is 0.8%, common mental illness is 10%, and all mental illness in India is 10.6%. The treatment gap for mental illness is 73.6%, with 70.4% for bipolar disorder and 75.5% for schizophrenia and other psychotic illnesses [3]. The prevalence of SMI in India is 65 per 1000, with 10-20 million affected [4]. Mental health care worldwide prioritises SMI recovery [5].

Internal factors like perceived connectedness, hope, optimism, and empowerment [6], and external factors like social support and meaningful activities [7]. Mental health recovery orientation is influenced by factors such as patient engagement in daily activities, self-care, and meeting employment needs. SMI sufferers can recover and cherish the chance to contribute to society [8].

A systemic review on recovery and SMI indicated that most SMI patients still live in a way that hinders recovery, but evidence-based programmes can help [9].

A recent Australian study involving 60 patients with severe mental illness found that lower levels of hope were linked to more intense SMI symptoms, suggesting that a lack of hope can act as a negative factor for recovery in among people severe mental health disorders [10].

A recent study found that future-oriented goal-setting, spiritualism, community, moral experience, religion, cognitive behaviour therapy, mindfulness therapy, and skilled mental health professionals promote wellbeing [11].

A retrospective study of 63 Chinese individuals with severe mental illnesses—such as schizophrenia, bipolar disorder, depression, and adjustment disorder—found that a three-week rehabilitation program led to notable improvements in recovery goals and social support. Female study participants recovered better than males [12]. A comprehensive literature analysis found that a recovery-oriented programme is useful for schizophrenia patients with SMI [13].

SMI prevalence and treatment gaps are difficult to manage for health practitioners, agencies, and the health system. Several qualitative and quantitative studies on SMI recovery therapy in western nations exist. However, SMI recovery therapy literature is scarce in India. This study promotes mental wellbeing and recovery in SMI patients through trust

development, psychiatric symptom reduction, cognitive improvement, goal-setting, social skills and support, day-to-day functioning, and decision-making.

Design and methods

Material and Methods

Study Design

A two-arm, single-blind, prospective design with a 3-month follow-up was conducted to evaluate the effectiveness of a recovery-oriented program on hope, mental wellbeing, and recovery among participants with SMI diagnosed with schizophrenia, or affective disorder or major depression disorder. Study outcome variables are hope, mental wellbeing, and recovery.

Study participants

Inclusion criteria for participants in this study had to be (a) between the ages of 20 and 60; (b) patients diagnosed with SMI, i.e., schizophrenia, affective disorder, or major depressive disorders, by a psychiatrist based on ICD 10; (c) hospitalised at least once with in past 6 months; (d) admitted to tertiary mental health settings; (e) able to understand Hindi or English; and (f) willing to participate in the study. And patients with co-morbid medical illnesses, such as diabetes, cancer, or heart related disease, as well as unmanageable behavior or uncooperative behaviour requiring extensive care, were excluded from this study.

The study population comprised 48 severe mentally ill patients selected for eligibility. The participants were randomly allocated to either the ROM group (15) or TAU group (15) by using computer-generated random sequence numbers, considering the dropout rate (Figure 1).

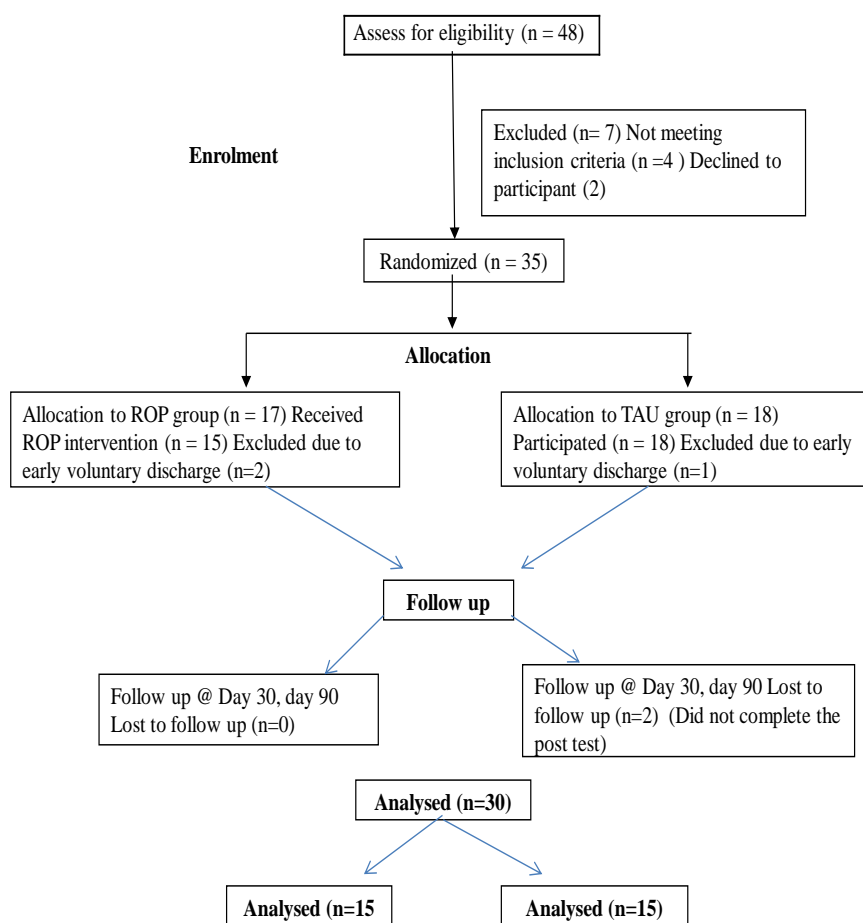


Fig 1: Consort diagram

Setting

The current study was conducted between September and December 2021 at the family ward of the Institute of Mental Health and Hospital, situated at Agra, Uttar Pradesh, in India. It is a 718-bedded inpatient hospital. The hospital facility includes an outpatient department, an inpatient ward (male and female), a family ward, an occupational therapy unit, counselling services, an electroconvulsive therapy room, and psychotherapies. The inpatient service in the family ward includes a comprehensive treatment program including pharmacology and psychosocial treatment, and usually spans 1-3 weeks.

Data collection

Data were collected using a structured interview technique in the family ward of the Institute of Mental Health and Hospital in Agra, Uttar Pradesh, India. After obtaining prior informed consent, screening of samples was done based on inclusion criteria, and data was collected by the researcher with study participants in the ROM group and the TAU group on days 1, 30, and 90 using the following tools:

Adult state hope scale: ASHS was developed by Synder et al 1996. ASHS is a brief six-item scale comprised of two subscales: agency (4 items) and pathway (4 items), with each item scored between 1 (definitely true) and 8 (definitely false).

World Health Organization 5-Wellbeing Index: The WHO regional office in Europe developed the WHO 5-Wellbeing Index in 1988. The percentage score, which varies from 0 to 100, is calculated by multiplying the raw value by 4. The percentage score goes from zero, which denotes the lowest life quality, to one hundred, which denotes the highest life quality.

Illness Management and Recovery Scale- clinician version: IMRS was developed in 2004 by Mueser, Gingerich, Salyers, McGuire, Reyes, and Cunningham. The scale has 15 items designed to assess the outcome of psychosocial intervention. The response range for each item spans from 1, indicating minimal recovery, to 5, indicating a substantial amount of recovery.

The SOFAS rating scale was developed to assess the clinician's evaluation of the overall level of functioning in Axis V of the DSM 4th Edition. The SOFAS is an international assessment of contemporary functioning that spans from 0 to 100, where lower scores indicate lower levels of functioning. The SOFAS is a global rating of current functioning ranging from 0 to 100.

Internal consistency of tools both in English (ASHS = 0.74, WHO-5 WI = 0.72, IMRS = 0.72, SOFAS = 0.68, YMRC=0.80, HDS=0.74, BPRS=0.78) and Hindi language (ASHS = 0.76, WHO-5 WI = 0.78, IMRS = 0.72, SOFAS = 0.74, YMRC=0.76, HDS=0.78, BPRS=0.80) found reliable by Cronbach's Alpha method.

Intervention

This study was divided into three phases. In the first phase, the baseline period (day 1), started the day after the consent was signed, and 15 severe mental ill patients were randomly assigned to the control and experimental groups. Only the experimental group received intervention as a group approach; each group had at least 3-4 participants. A pre-test was done for both groups. The second phase began on the second day and ended on the fifteenth. A two-week recovery programme included five therapy sessions that lasted 60 to 90 minutes and were held on days 2, 5, 8, 11, and 14. The therapy intervention consisted of five sessions, each lasting one day. A total of five therapy sessions were given to participants in a group approach. The third phase consisted of the follow-up period and data collection in both groups. A post-test was conducted on days 30 and 90 in both groups through telephonic communication. In the TAU group, no therapy intervention was given to the patient.

The conceptual framework of a recovery-oriented program was developed on the basis of the integrated recovery-oriented model (IROM) presented in figure no. 2 [14]. The IROM focuses on three key components: remediation of functioning, restoration of competencies, and reconnection with place and society.

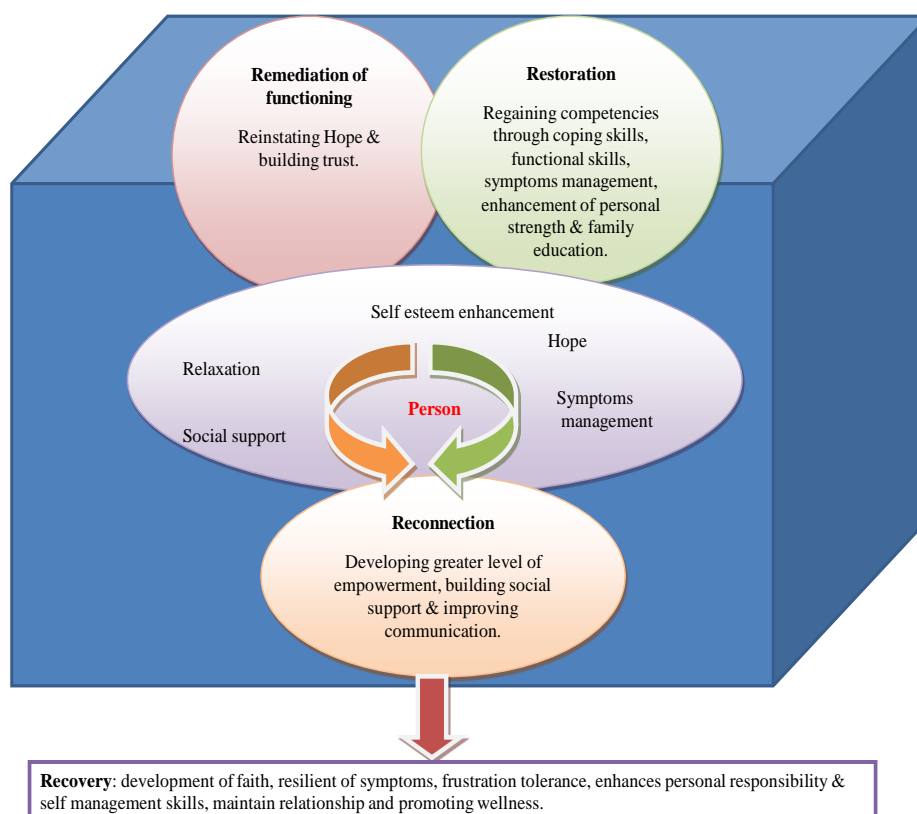


Fig 2: Conceptual Framework

TAU

Treatment as usual is an intensive inpatient program consisting of psychopharmacological interventions, formal psychosocial therapy, elective electroconvulsive therapy, and formal psychiatric nursing care.

ROP

The recovery oriented program included five therapy sessions as therapeutic modules, as shown in Table 1. The first session, Building Hope & Trust, focused on increasing hope and building trust in oneself and

treatment through therapeutic activities. The second session, Symptom Management, helped clients enhance personal responsibility and manage specific symptoms of illness. The third session, Enhancing Self-Esteem, focused on developing self-confidence and a positive self-image among participants. The fourth session, Building Peer & Caregiver Support, aimed at learning effective communication skills and improving mutual relationships. The fifth session, Relaxation & Rebalance, helped participants enhance their mental wellbeing and mental relaxation.

Table 1: Overview of recovery orientated program sessions

Session	SESSION TITLE	MAJOR SESSIONAL ACTIVITIES	PARTICIPANTS
1	Building hope & trust	<ul style="list-style-type: none"> Positive self talk Goal Setting 	Patient
2	Symptoms management	<ul style="list-style-type: none"> Enhance personal responsibility Managing specific symptoms 	Patient
3	Enhancing self esteem	<ul style="list-style-type: none"> Confidence building COMET training 	Patient
4	Building peer & caregiver support	<ul style="list-style-type: none"> Getting closer to people Social Skill training 	Patient & caregiver
5	Relaxation and rebalance	<ul style="list-style-type: none"> Breathing for relaxation Relax and Calm 	Patient

Ethical considerations

The study was carried out following the principles outlined in the Declaration of Helsinki. Prior to starting, all necessary approvals were secured from the Ethics Committee of U.P. University of Medical Sciences, Saifai, Etawah, Uttar Pradesh, India (approval date: December 31, 2020; letter number: 1496/UPUMS/Dean(M)/Ethical/2020-21). Additionally, permission for data collection was obtained from the Institute of Mental Health and Hospital, Agra, U.P. (approval date: August 8, 2021; letter number: Dir/Training/2021/4993).

Results

The data were analyzed using the Statistical Package for Social Sciences (SPSS). Categorical variables were assessed using χ^2 statistics, while the impact of ROP

on outcome measures was evaluated through t test and repeated-measures analysis of variance (ANOVA) from baseline to 1-month, and 3-month follow-ups.

Pre-intervention comparison

The representation of sample characteristics in the TAU group and the ROM group is presented in table 2, Out of the total 30 samples, 40% were between the ages of 30 and 40, 66.66% were male, 46.67% were educated up to the secondary level, 73.33% were living with their family, 43.33% were unemployed, 50% of the participants' illnesses began more than 5 years ago, 83.33% lived in nuclear families, and 53.33% were married, lived in urban areas, and were primarily diagnosed with schizophrenia.

Table 2: Baseline comparison of demographic variables between ROP and TAU groups participants (N = 30).

Demographic Variables	Categories	Total (n=30) Frequency (%)	TAU group (n = 15) Frequency (%)	ROP group (n = 15) Frequency (%)
Age (in year)	20-30	8 (26.67)	4 (26.67)	4 (26.67)
	30-40	12 (40)	8 (53.33)	4 (26.67)
	40-50	7 (23.33)	3 (20)	4 (26.67)
	50-60	3 (10)	0 (0)	3 (20)
Gender	Male	20 (66.66)	8 (53.33)	12 (80)
	Female	10 (33.33)	7 (46.67)	3 (20)
Marital status	Married	16 (53.33)	7 (46.67)	9 (60)
	Unmarried	10 (33.33)	5 (33.33)	5 (33.33)
	Divorced	4 (13.33)	3 (20)	1 (6.67)
Area of residence	Rural	16 (53.33)	8 (53.33)	8 (53.33)
	Urban	14 (46.67)	7 (46.33)	7 (46.33)
Education status	Illiterate	7 (23.33)	3 (20)	4 (26.67)
	Primary	4 (13.33)	2 (13.33)	2 (13.33)
	Secondary	14 (46.67)	7 (46.67)	7 (46.67)
	Tertiary & above	5 (16.67)	3 (20)	2 (13.33)
Living with -	Family	22 (73.33)	9 (60)	13 (86.67)
	Alone	8 (26.67)	6 (40)	2 (13.33)
Occupational status (before admission)	Unemployed	13 (43.33)	9 (60)	4 (26.67)
	Employed	11 (36.67)	3 (20)	8 (53.33)
	Vocational training	6 (20)	3 (20)	3 (20)
Onset of illness	Less than 1 year	1 (3.33)	0 (0)	1 (6.67)
	Between 1 & 2 years	3 (10)	2 (13.33)	1 (6.67)
	Between 2 & 5 years	11 (36.67)	6 (40)	5 (33.33)
	More than 5 years	15 (50%)	7 (46.67)	8 (53.33)
Family type	Nuclear	25 (83.33)	12 (80)	13 (86.67)
	Joint	5 (16.67)	3 (20)	2 (13.33)
Primary diagnosis	Schizophrenia	16 (53.33)	7 (46.67)	9 (60)
	MDD	3 (10)	2 (13.33)	1 (6.67)
	Bipolar	11 (36.67)	6 (40)	5 (33.33)

In table 3, chi square analysis showed no significant differences between demographic factors- such as age, gender, marital status, area of residence, education status, occupational status (before admission), onset of illness, and family type with

outcome variables i.e., hope, mental wellbeing, and recovery, but a statistically significant association is found between demographic variables i.e., primary diagnosis and hope ($\chi^2 = 8.331$, $p = .016$) and living with and recovery (SOFAS) ($\chi^2 = 4.455$, $p = .035$).

Table 3: Association of socio-demographic variables with outcome variables

Demographic Variables	ASHS		WHO MWELL		Recovery (IMRS)		Recovery (SOFAS)	
	Value	P value	x ² Value	P value	x ² Value	P value	x ² Value	P value
Age (in year)	2.972	.396	1.805	.614	7.384	.061	1.445	.695
Gender	.271	.602	.072	.789	.068	.794	1.086	.297
Marital status	.730	.694	.556	.757	2.359	.307	2.155	.340
Area of residence	.621	.431	.433	.510	.621	.431	.475	.491
Education status	2.453	.484	1.025	.795	1.988	.575	.824	.844
Living With -	.197	.657	.835	.361	.151	.697	4.455	.035*
Occupational status (before admission)	1.047	.592	1.538	.464	2.186	.335	1.047	.592
Onset of Illness	3.690	.297	1.814	.612	3.690	.297	3.690	.297
Family Type	.027	.869	.029	.865	.027	.869	1.330	.249
Primary diagnosis	8.311	.016*	1.365	.505	2.365	.307	4.586	.101

Post intervention comparison

At both the 30th and 90th days, the ROP group showed significantly higher scores than the TAU group on the Adult State Hope Scale (ASHS), with t-values of 4.70 ($p < 0.0001$) at the 30th day and 6.29 ($p < 0.0001$) at the 90th day, and the WHO-5 Wellbeing Index (WHO MWELL), with t-values of 4.28 ($p < 0.0001$) at the 30th day and 6.86 ($p < 0.0001$) at the 90th day. Additionally, the Illness Management and Recovery Scale (IMRS) showed a

statistically significant improvement, with t-values of 2.47 ($p = 0.0198$) at the 30th day and 4.47 ($p < 0.0001$) at the 90th day.

On the other hand, the Social and Occupational Functioning Assessment Scale (SOFAS) showed a marginally non-significant difference at the 30th day ($t = 1.96$, $p = 0.0608$), but a significant difference at the 90th day ($t = 2.73$, $p = 0.0108$), indicating an improvement in functioning for the ROP group at the later time point. (table 4).

Table 4: Post intervention comparison of hope, mental wellbeing, and recovery score from baseline to 30th & 90th day follow-up among ROM and TAU group (N = 30)

Outcome variables	ROP group Mean (SD) (n=15)	TAU group Mean (SD) (n=15)	t-value	p value	ROP group Mean (SD) (n=15)	TAU group Mean (SD) (n=15)	t-value	P value
	30th day (T₁)	30th day (T₁)			90th day (T₂)	90th day (T₂)		
ASHS	30.53 (7.899)	18.4 (6.080)	4.70	0.0001	33.67 (6.629)	19.07 (6.041)	6.29	0.0001
WHO MWELL	17.27 (2.914)	12.4 (3.312)	4.28	0.0001	19.67 (2.093)	12.53 (3.440)	6.86	0.0001
SOFAS	65.73 (18.467)	51.73 (20.727)	1.96	0.0608	71.07 (16.122)	52.93 (20.055)	2.73	0.0108
IMRS	40.6 (4.484)	36.07 (5.509)	2.47	0.0198	45.47 (7.278)	35.73 (4.290)	4.47	0.0001

After the intervention, the Recovery Oriented Program (ROP) was evaluated at different time points by comparing the ROP and TAU groups using repeated measures ANOVA. The findings revealed notable changes between the groups at the 30-day and 90-day follow-ups. Statistically significant differences were identified in the following outcome

variables: hope ($F = 31.836$, $p = 0.000$), mental wellbeing ($F = 35.087$, $p = 0.000$), recovery based on the Illness Management Recovery Scale – Clinician Version ($F = 9.360$, $p = 0.005$), and recovery as measured SOFAS ($F = 5.464$, $p = 0.027$) at the various follow-up points (see Table 5).

Table 5: Post intervention recovery oriented program status of participants across the time points between ROP and TAU groups (N = 30).

Outcome Variables	Type III Sum of Squares	df	Mean Square	F	Sig. value)	(p
Hope	2680.017	1	2680.017	31.836	.000	
Mental wellbeing	540.000	1	540.000	35.087	.000	
Recovery (IMRS - Client version)	528.067	1	528.067	9.360	.005	
Recovery (SOFAS)	3872.067	1	3872.067	5.464	.027	

Discussion

Severe mental illnesses (SMI), such as schizophrenia, psychosis, and bipolar disorder, are marked by symptoms like hallucinations, mood swings, anxiety, delusions, self-harm, social withdrawal, and difficulties with work, self-care, and daily functioning. There are, however, bundles of strategic interventions that can be used to prevent these psychiatric symptoms, promote mental wellbeing, and aid recovery among those with SMI by fostering hope, reducing SMI symptoms, improving cognitive functioning, enhancing social skills and support, improving day-to-day functioning abilities, and improving coping abilities. The current study developed and evaluated the effect of a recovery oriented program on hope, mental wellbeing, and recovery experienced by patients with SMI.

Werner S. 2012 [15] discovered a strong positive correlation between hope and subjective wellbeing in 172 severe mentally ill patients ($r = 0.57$, $p = 0.001$). The results of this study back up the current study's conclusion that hope is integral part of recovery for people with SMIs. At the 30th follow-up day, the experimental group with SMI participants had a significantly higher hope level (mean score of 30.53 with SD of 7.899 vs. control group participants' mean scores of 18.4 with SD of 6.080) and a significantly higher hope level (mean score of 33.67 with a standard deviation of 6.629) at t . The results of the current study are contradictory to studies conducted by **Copic V et al 2011 [16]**. Both studies demonstrated a negative correlation between hope and psychiatric symptoms in severe mentally ill patients ($p > 0.05$). Both studies concluded that being hopeful and initiating recovery is markedly difficult among people living with SMI.

Slade, M. 2010 [11] wrote a research paper that focused on recovery-oriented services' efforts to be person-centred, respect decision-making, identify the critical role that self-determination plays in recovering well-being, and suggest that mental health professionals should use approaches such as personal support, relevant goal setting, and spiritual development and healing to promote mental well-being in individuals rather than treat mental illness. A meta-analysis by Bolier et al. (2013) [17],

encompassing 40 studies and 6,139 participants, concluded that positive psychology interventions—including self-help techniques, group sessions, and individual therapy—are effective in enhancing both subjective and psychological well-being. In a retrospective study of 63 Chinese clients with SMI, **FH et al. 2016 [12]** discovered a significant difference in their mental well-being before and after the recovery programme ($t = 2.15$, $p = 0.05$). The current study supported and verified these studies, concluding that participants in the experimental group had shown a statistically significant increase in mental wellbeing score ($p = 0.0002$) at the 30th follow-up day and showed a marked increase in mean scores of mental wellbeing (19.67) with SD 2.093 compared to control group participants' mean scores of 12.53 with SD 3.440 at the 90th post-interventional follow-up day.

Drake RE, Whitley R, 2014 [9] conducted a study on recovery and SMI and found that recovery can be enhanced by a range of evidence-based approaches such as supported employment, secure housing, social connectedness, supportive mental health systems, and clinical approaches such as shared decision-making and peer support. In a 2016 retrospective study by **Lai FH et al. [12]**, 63 Chinese individuals with conditions such as schizophrenia, bipolar disorder, depression, and adjustment disorder were involved in a three-week recovery program. The study found that participants showed significant gains in understanding recovery, developing strategies to reach their recovery goals, and improving their ability to take and maintain actions necessary for recovery. **Grover S. et al. 2016 [18]** performed a factor analysis on 285 patients with SMI (185 with bipolar disorder and 100 with schizophrenia) and found high recovery in both groups. The current study supports these results, revealing a significant difference in recovery between the experimental and control groups. This was measured using the instruments - IMRS ($F = 9.360$, $p = 0.005$) and SOFAS ($F = 5.464$, $p = 0.027$) through repeated measures ANOVA.

Implications for psychiatric nursing practice

ROP was primarily designed to promote hope, mental wellbeing, and recovery. Therapy sessions can increase participants' trust in therapy, improve their mental health, and reduce or eliminate psychiatric symptoms, all of which lead to better clinical outcomes. Before patients with SMI enter rehabilitation services, healthcare providers, including psychiatric nurses, should have sound knowledge, the necessary skills, and the ability to assess them [19]. Psychiatric nurses must include trust building, symptoms management, self-learning, empowerment and social support building skills, and the development of coping skills components in therapy and recovery planning for severe mental ill patients.

Limitation of research

Patient stays in the family ward of the Institute of Mental Health and Hospital in Agra, Uttar Pradesh, were limited to a maximum of 15 days due to the COVID-19 pandemic protocol. As a result, ROP was only implemented for two weeks. The follow-up was telephonic, not in person. The sample size was small, and the current study only included patients with schizophrenia or affective disorder, or major depressive disorder under the category of SMI. In addition, a few uncooperative severe mental ill patients refuse to participate or consent to study. Further research with larger samples from more diverse populations is recommended in order to generalise the findings.

Conclusion

The current study demonstrates that a recovery-oriented intervention can significantly improve hope, mental well-being, and recovery outcomes for individuals with severe mental illness (SMI). The findings highlight that recovery is achievable through this approach, which not only promotes hope but also fosters trust, reduces psychiatric symptoms, enhances cognitive function, and improves goal-setting, social skills, and decision-making abilities. These outcomes underscore the potential of such programs in supporting overall recovery and improving daily functioning for patients with SMI.

Acknowledgement

The authors would like to thank to Guide Dr. R. Sreevani, Professor & HOD, DIMHANS, Dharwad.

Declaration of competing interests

None. This article was prepared as part of a PhD thesis.

Funding

No grant/ funding received for this research.

References

1. Charlson, F., Baxter, A., Cheng, H., Shidhaye, R., & Whiteford, H. (2016). The burden of mental, neurological, and substance use disorders in China and India: A systematic analysis of community representative epidemiological studies. *The Lancet*, 388(10042), 376-389. doi: 10.1016/s0140-6736(16)30590-6.
2. Dattani, S., Ritchie, H., & Roser, M. (2021, August 20). Mental health. Retrieved November 10, 2022, from <https://ourworldindata.org/mental-health>
3. Kar, S., Sharma, E., Agarwal, V., Singh, S., Dalal, P., Gururaj, G., & Rao, G. (2021). The socioeconomic burden and disability linked with mental illnesses: Findings from the National Mental Health Survey of India 2015-16 in Uttar Pradesh. *GLOBAL PSYCHIATRY ARCHIVES*, 4(2), 191-200. doi:10.52095/gp.2021.3586.1024
4. Murthy, P., Kumar S., Desai N., Teja B.K. (2016). Report of the Technical Committee on mental health. National Human Rights commission. Available at http://nhrc.nic.in/Documents/Mental_Health_report_vol_I_10_06_2016.pdf.
5. Schrank, B., Slade, M., (2007). Recovery in psychiatry. *Psychiatric Bulletin*, 31(9), 321-325. doi: 10.1192/pb.bp.106.013425.
6. Jacobson, N., & Greenley, D. (2001). What is recovery? A conceptual model and explication. *Psychiatric Services*, 52(4), 482-485. doi:10.1176/appi.ps.52.4.482
7. Williams, J., Leamy, M., Bird, V., Harding, C., Larsen, J., & Boutillier, C. et al. (2012). Measures of the recovery orientation of mental health services: systematic review. *Social Psychiatry And Psychiatric Epidemiology*, 47(11), 1827-1835. doi: 10.1007/s00127-012-0484-y.
8. Crosse, C., Hocking, B. (2004). Discussion Paper: Social Rehabilitation: What are the Issues? Canberra: Department of Veteran Affairs. https://www.aph.gov.au/~media/wopapub/sebate/committee/mentalhealth_ctte/submissions/sub116a_attach1_pdf.ashx
9. Drake, R. E., & Whitley, R. (2014). Recovery and SMI: Description and analysis. *The Canadian Journal of Psychiatry*, 59(5), 236-242. doi:10.1177/070674371405900502
10. Hayes, L., Herrman, H., Castle, D., & Harvey, C. (2017). Hope, recovery and symptoms: The importance of hope for people living with severe mental illness. *Australasian Psychiatry*, 25(6), 583-587. doi:10.1177/1039856217726693
11. Slade, M. (2010). Mental illness and well-being: the central importance of positive psychology and recovery approaches. *BMC Health Services Research*, 10(1). doi: 10.1186/1472-6963-10-26.
12. Lai F.H., Chiu, J.C., Tse, P.L.-C., Tsui, J.P., Cheung, J.P.-H., Chen, E.W., Chan, S.H., Fan, S.H., Chan, A.S.,

- Cheung, J.C., Wong, S.K. (2015). Effectiveness of a Recovery Program for Chinese Psychiatric Inpatients. *International Journal of Psychosocial Rehabilitation*, 20 (1) 15-26. 10.37200/V2011/8239
13. Nasrallah, H., Targum, S., Tandon, R., McCombs, J., & Ross, R. (2005). Defining and Measuring Clinical Effectiveness in the Treatment of Schizophrenia. *Psychiatric Services*, 56(3), 273-282. doi: 10.1176/appi.ps.56.3.273
14. Frost, B., Tirupati, S., Johnston, S., Turrell, M., Lewin, T., Sly, K., & Conrad, A. (2017). An Integrated Recovery-oriented Model (IRM) for mental health services: evolution and challenges. *BMC Psychiatry*, 17(1). doi: 10.1186/s12888-016-1164-3.
15. Werner, S., (2012). Subjective well-being, hope, and needs of individuals with serious mental illness. *Psychiatry Research*, 196, 214-219. 10.1016/j.psychres.2011.10.012
16. Copic, V., Deane, F.P., Crowe, T.P., Oades, F.G. (2011). Hope, Meaning and Responsibility across Stages of Recovery for Individuals Living With an Enduring Mental Illness. *Australian Journal of Rehabilitation Counselling*, 17(02), 61-73. DOI:10.1375/jrc.17.2.61.
17. Bolier, L., Haverman, M., Westerhof, G. J., Riper, H., Smit, F., & Bohlmeijer, E. (2013). Positive psychology interventions: A meta-analysis of randomized controlled studies. *BMC Public Health*, 13(1). doi:10.1186/1471-2458-13-119
18. Grover, S., Hazari, N., Singla, N., Chakrabarti, S., Aneja, J., Sharma, S., & Avasthi, A. (2016). Recovery among patients with severe mental illness: Factor analysis of recovery assessment scale in Indian setting. *Indian Journal of Social Psychiatry*, 32(2), 92. doi:10.4103/0971-9962.181088
19. Arya, S., Rentala, S. (2021). Mental status examination: An assessment key to rehabilitation with implication in nursing. *Journal of Medical Pharmaceutical and Allied Sciences*, 10(3), 2753-2757. doi:10.22270/jmpas.v10i3.1111