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Psychosocial Rehabilitation and Quality of Life for Older Adults with Serious Mental Illness: Recent Findings and Future Research Directions

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Abstract

Purpose of Review—The projected increase of Americans age 65 years and older will have an unprecedented impact on the health care delivery system. As a result, new models to support individuals with serious mental illness (SMI) will become increasingly more important. This selective overview highlights recent reports addressing psychosocial functioning and interventions for older adults with SMI.

Recent Findings—Recently published descriptive studies suggest that poor functional outcomes and lower quality of life among older people with SMI are strongly associated with social isolation, depression, cognitive impairment, and chronic medical illness. Recent research on psychosocial interventions include evaluations of three different models of skills training, a supported employment intervention, and cognitive remediation. This research establishes psychosocial rehabilitation as feasible and potentially effective in improving functioning and quality of life in older adults with SMI.

Summary—Several important directions for future research focused on older adults with SMI are suggested by this overview. They include: individually tailored rehabilitation, interventions that optimize social integration and decrease depressive symptoms, techniques that blend cognitive remediation with vocational rehabilitation, and integration of health promotion with psychosocial rehabilitation.

Keywords

Psychosocial rehabilitation; quality of life; serious mental illness; functional capacity; older adults

Introduction

The next two decades will witness an unprecedented increase in the population of older adults with serious mental illness (SMI) [1]. The challenges of treating the growing numbers of older adults with SMI and the associated high costs and service use, will become a major focus of mental health service delivery systems. Compared with the large body of research focusing on psychosocial interventions for younger adults with SMI, the specific needs of older adults have received limited attention. This has important implications as impaired psychosocial functioning is highly associated with increased health care costs, premature

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institutionalization, increases in hospitalizations, and poor physical and health outcomes in older adults with SMI.

This selective review highlights recent advances in the research literature on psychosocial functioning and interventions for older adults with SMI with respect to the following questions:

1. What conceptual models can be used to describe positive outcomes in psychosocial functioning, and quality of life among older adults with SMI?
2. What factors are associated with greater independent functioning and quality of life in older adults with SMI?
3. What can be done to improve functioning and quality of life in persons with SMI as they age? Specifically, what interventions hold promise for improving functioning, independent living skills, community tenure, and health in older adults with SMI?

This selective review considers literature published in peer-reviewed journals over the last 18 months.

Conceptualizing functioning and quality of life in aging persons with SMI

The field of geriatrics and psychosocial rehabilitation share the common view that maximizing functioning and quality of life are the ultimate measures of a successful intervention. Though difficult to achieve and to measure, these goals supersede more conventional, medically-oriented outcomes such as symptom reduction. As such, identifying the critical variables associated with these outcomes is an important step in designing targeted services and interventions. Several recent reports shed light on the complex question of quality of life and social well-being in aging adults with SMI.

Cohen and colleagues [2**] reviewed 24 studies published over the past 28 years to examine the relationship between aging, severity of symptoms, and quality of life in schizophrenia. This review concluded that positive symptoms decrease with age, negative symptoms and depression are similarly prevalent in younger and older adults, and cognitive impairment tends to increase with age. Surprisingly, no significant associations were found between age and quality of life in schizophrenia. Quality of life in older adults with schizophrenia was only modestly lower than in older adults without a major mental illness. Irrespective of age, lower quality of life in people with schizophrenia was strongly associated with more depression, more positive symptoms, greater cognitive deficits, and more physical disorders. This review identified potentially mutable targets for enhancing rehabilitation outcomes including depressive symptoms, cognition, and physical health.

A second paper, also by Cohen and colleagues [3**], complements the Cohen et al. [2**] review with a theoretical approach to evaluating functional outcomes for older adults with SMI. The authors applied five constructs, including three taken from the field of mental health (remission, recovery, and community integration), and two from the field of aging research (subjective and objective indicators of “successful aging”). The conceptual framework for “successful aging” is drawn from work by Rowe and Kahn [4], reflecting three domains: avoiding disease and disability, retaining good cognitive and physical functioning, and sustaining engagement with life. Comparing a sample of almost 200 older adults with schizophrenia (age 55 and older) to a community comparison group, these five functional indicators were all significantly lower in the schizophrenia group. Community integration was half as likely in the schizophrenia group and only two percent of persons met Rowe & Kahn’s criteria for “successful aging” compared to 19 percent of the comparison group. Examining the same study sample, Bankole and colleagues [5] found that

six variables explained 55 percent of the variance in quality of life, including fewer depressive symptoms, lower cognitive functioning, fewer acute life stressors, fewer medication side effects, less financial strain, and better self-rated physical health.

Additional support for targeting depressive symptoms, cognitive functioning, and physical health, so as to enhance quality of life and functioning, comes from a series of recent correlational studies. The critical association of cognition and functioning was demonstrated by Leung and colleagues [6*], who found that neuropsychological status was a better predictor of functional outcome than severity of psychiatric symptoms. The importance of depressive symptoms in older adults with schizophrenia was similarly supported by recent reports on satisfaction with living and social activities [7*], sub-syndromal depression [8*], and suicidal ideation and attempts in middle-aged and older adults with schizophrenia [9*]. Finally, a provocative report by Diwan and colleagues [10**] suggested that depression in older adults with schizophrenia may be intrinsically related to health status. In this study of 198 persons age 55 and older with schizophrenia, clinically significant depression was strongly associated with physical illness (odds ratio 1.6), highlighting the significant relationship between physical illness, disability, and depression in older adults with schizophrenia [10**].

Additional support for extending the focus of rehabilitation to healthcare and health promotion is provided by Vahia and colleagues [11**], who evaluated rates of treatment for common medical problems experienced by older adults with schizophrenia. Older adults with schizophrenia (n=119) received lower rates of treatment than older adults without mental illness (n=57) for hypertension (75% versus 93%), heart disease (38% versus 75%), and for gastrointestinal ulcers (53% versus 100%). There were no differences between the groups on the number of visits to a physician for physical health problems in the prior 12 months. This report suggests that, despite similar numbers of medical visits, the quality of care between the groups is different. Of note, positive symptoms and depression were associated with lower rates of medical care in the schizophrenia group. The authors suggested that medical physicians may lack the appropriate skills and knowledge about how best to communicate with persons with SMI and how to coordinate health care for persons with complex conditions. These factors may result in disparities in health care quality [11**].

In summary, recently published descriptive studies support the need to develop rehabilitative interventions that enhance independent living skills, health, and overall quality of life. Furthermore, specific attention must be given to the critical roles of social integration, mood, cognition, and wellness.

Psychosocial rehabilitation in older adults with serious mental illness: What can be done?

A small, but growing research literature on interventions suggests the potential effectiveness of psychosocial rehabilitation for older adults with SMI. In the following section, we provide an overview of five psychosocial rehabilitation interventions. This includes three skills training models described in a recent review by Pratt and colleagues [12**] and two recent reports, including a vocational rehabilitation intervention [13**] and a cognitive remediation study involving older adults with SMI [14**].

Pratt and colleagues [12**] reviewed psychosocial rehabilitation in older adults with SMI. This review included a description of three skills training interventions that hold promise for improving the health and functioning of older adults with SMI. These interventions include Functional Adaptation Skills Training (FAST), Cognitive Behavioral Social Skills Training

(CBSST), and Helping Older People Experience Success (HOPES). The summary below highlights the findings from this literature review and supplements them with additional research that supports the effectiveness of these models.

The first model, Functional Adaptation Skills Training (FAST), provides group sessions aimed at improving community living skills such as managing finances, making/keeping a schedule, taking transportation, communicating, and managing illness. Developed and evaluated by Patterson and colleagues [15,16], this approach uses modeling, rehearsal of skills, and positive reinforcement. A recently published report on a randomized trial (older patients [n = 240] with schizophrenia age 40 and older) found that FAST participants showed significant improvement in social skills and everyday functional skills compared to an attention controlled group. In addition, FAST participants were almost half as likely to use emergency medical services during the active six-month treatment phase of the study, though no difference in service use was found in the subsequent year of follow-up [17*].

Building on these findings, Patterson adapted FAST for Latino adults with schizophrenia and reported favorable outcomes in an initial pilot study [18] of PEDAL (Programa de Entrenamiento para el Desarrollo de Aptitudes para Latinos). The cultural tailoring of PEDAL included: (1) translating the intervention and assessment materials into Spanish, (2) using bicultural/bilingual group facilitators, (3) including culture specific icons and idioms in the handouts for participants, and (4) altering the format and content based on Mexican cultural values. While results from a larger randomized trial are pending, a preliminary report on PEDAL by Mausbach and colleagues [19**] indicated that the tailored intervention was effective in improving functioning and well-being in Latinos with persistent psychotic illness. Overall, the strengths of the FAST and PEDAL programs lie in their positive effects on psychosocial skills, as demonstrated with performance-based measures of function. Additionally, evaluations of PEDAL provide important information on the adaptation of psychosocial rehabilitative approaches for ethnic minority populations.

The second model reviewed is a combined cognitive behavioral and social skills training (CBSST) intervention developed and evaluated by Granholm and colleagues [20]. CBSST provides training in psychiatric illness self-management skills in three modules for a total of 24 weeks. In a randomized trial of CBSST with 76 outpatients with schizophrenia and schizoaffective disorder, the researchers found significant improvements at post-treatment in the CBSST, as compared to the treatment as usual (TAU) group, in social functioning (specifically, involvement in leisure activities), cognitive insight, and performance on a comprehensive module test. No differences were found in symptoms, hospitalizations, or living skills [20]. At one-year follow-up, knowledge scores on the comprehensive module test continued to be higher for participants who received CBSST [21]. The CBSST group also reported better living skills at one-year follow-up than the TAU group [21]. The studies of CBSST demonstrate that the blending of cognitive restructuring techniques with traditional skills training is a uniquely effective method for enhancing living skills in older people with SMI. The lack of effect on symptoms or hospitalizations appears surprising given the focus of the intervention on psychiatric illness self-management.

The third model reviewed combines skills training and a health management intervention. Developed and evaluated by Bartels and colleagues [22], this intervention consists of weekly skills training on living skills and medication self management, together with nurse preventive health care management, to address the significant co-occurrence of medical comorbidity in older adults. In this pre-post pilot study (n = 24), social functioning and living skills improved in conjunction with improvements in access to health care and identification of previously undetected medical problems [22]. Based on this pilot study, a model of integrated psychosocial rehabilitation and healthcare management for older adults

with SMI, the Helping Older People Experience Success (HOPES) program, has been developed and described in a recent report by Pratt and colleagues [23*]. Preliminary results from the randomized trial of HOPES indicate that this skills and training preventive healthcare intervention model is effective in improving community living skills [24].

The three models evaluated in these studies include several common components. First, all are group-based, as opposed to individually-focused, which supports the feasibility and practical application of group-based interventions in older adults with SMI. Second, these interventions provide accommodations for individuals with physical or cognitive disabilities and develop skills in incremental steps. Finally, these interventions employ age-appropriate cognitive behavioral principles and skills training techniques to meet the specific needs of older persons. Based on the outcomes reported in these studies, Pratt and colleagues [12**] conclude that social skills training is feasible and is associated with improvement in key dimensions of social functioning and independent community living for older adults with SMI.

Twamley and colleagues [13**] complement these studies of skills training interventions with a study comparing the outcomes of two different work rehabilitation programs for middle-aged and older adults with schizophrenia. The authors analyzed vocational outcomes for participants (n=50) age 45 and older, of which over half were age 50 or older. This study capitalized on numerous randomized trials demonstrating that individualized placement and support (IPS) is superior to conventional vocational rehabilitation and work preparation studies in younger adults. Twamley and colleagues [13**] found that IPS groups were associated with better employment and quality of life outcomes than the comparison group that received conventional vocational rehabilitation support. This important study underscores the concept that competitive employment is not constrained by the boundaries of disability or age. The IPS model does not include volunteer work and meaningful community activities as vocational outcomes. Adapting IPS to include these outcomes may make the model more relevant and applicable to older adults with SMI.

Finally, the use of rehabilitative strategies to improve cognition is addressed in a recent report by McGurk and Mueser [14**]. They compared the outcomes of cognitive remediation in older versus younger adults with SMI. This secondary analysis of data from two randomized studies found that cognitive remediation improved cognitive functioning in the younger group (age 18–44); however, middle-aged and older participants (age 45 and older) showed only minimal improvements in cognitive functioning. The authors speculated that increasing age may be associated with reduced brain plasticity and responsiveness to cognitive rehabilitation, perhaps diminishing the impact of a psychological intervention in older people. At the same time, a significant improvement in negative symptom severity occurred in the older adults, which may suggest a more subtle impact on cognitive functioning in older people [14**]. Given the complexity of these findings, further studies of cognitive remediation in older people are warranted.

Conclusions and Future Directions for Research

This selective overview of recent findings pertaining to rehabilitation for older adults with SMI suggests several areas for development, evaluation, and potential dissemination of rehabilitative interventions for this rapidly growing segment of the population. First, the limited literature on skills training and related rehabilitative interventions largely focuses on group-based interventions. While group-based interventions may have economies of scale, individually-based rehabilitative strategies are also needed that match the specific needs and preferences of the older adult consumer and their targeted rehabilitation goals. Second, studies on quality of life and functioning in older adults with SMI suggest that interventions

are needed that optimize social integration, support involvement in meaningful activities, and diminish depressive symptoms. Third, cognitive functioning should be considered as a key variable when assessing critical outcomes for older adults with SMI. Blending cognitive remediation with rehabilitative interventions may hold promise for enhancing the effects of a variety of rehabilitative approaches among older adults. For example, cognitive remediation may improve the success of supported employment interventions for older adults with SMI who are seeking gainful part-time or full-time employment. Finally, there is an urgent need to integrate health promotion, health care, and illness self-management interventions into psychosocial rehabilitative interventions for older adults. Finally, strategies are needed that address the "whole person" as an integrated approach to psychosocial rehabilitation for older adults with SMI, including both the mental and physical health needs [25].

References

1. Jeste DV, Alexopoulos GS, Bartels SJ, et al. Consensus statement on the upcoming crisis in geriatric mental health: research agenda for the next 2 decades. Arch Gen Psychiatry. 1999 Sep; 56(9):848–853. [PubMed: 12884891]

2**. Cohen CI, Vahia I, Reyes P, et al. Focus on geriatric psychiatry: schizophrenia in later life: clinical symptoms and social well-being. Psychiatr Serv. 2008 Mar; 59(3):232–234. The authors reviewed 24 studies published over the last 2 decades identifying factors associated with positive outcomes and quality of life in older adults with schizophrenia. Depression, cognitive impairment, and physical health care problems were associated with worse quality of life, suggesting critical areas for interventions. [PubMed: 18308900]

3**. Cohen CI, Pathak R, Ramirez PM, Vahia I. Outcome among community dwelling older adults with schizophrenia: results using five conceptual models. Community Ment Health J. 2008 Sep 12. This interesting paper applied five functional indicators associated with favorable mental health outcomes (e.g. recovery, remission) and successful aging to older adults with schizophrenia. Only two percent of older adults with schizophrenia met criteria for "successful aging", compared to 19% of a community comparison sample of older adults.

4. Rowe JW, Kahn RL. The future of aging. Contemp Longterm Care. 1999 Feb; 22(2):36–8. 40, 42–4. [PubMed: 10346507]

5. Bankole AO, Cohen CI, Vahia I, et al. Factors affecting quality of life in a multiracial sample of older persons with schizophrenia. Am J Geriatr Psychiatry. 2007 Dec; 15(12):1015–1023. [PubMed: 18056820]

6*. Leung WW, Bowie CR, Harvey PD. Functional implications of neuropsychological normality and symptom remission in older outpatients diagnosed with schizophrenia: a cross-sectional study. J Int Neuropsychol Soc. 2008; 14(3):479–488. This cross-sectional study found that cognitive impairment was more highly associated with functional outcomes than psychiatric symptoms in older adults with schizophrenia. [PubMed: 18419846]

7*. Mausbach BT, Cardenas V, Goldman SR, Patterson TL. Symptoms of psychosis and depression in middle-aged and older adults with psychotic disorders: the role of activity satisfaction. Aging Ment Health. 2007 May; 11(3):339–345. This interesting descriptive study reports on the significant relationship between depression and diminished satisfaction in social and community living activities in middle-aged and older adults with chronic psychotic disorders. [PubMed: 17558585]

8*. Zisook S, Montross L, Kasckow J, et al. Subsyndromal depressive symptoms in middle-aged and older persons with schizophrenia. Am J Geriatr Psychiatry. 2007 Dec; 15(12):1005–1014. The authors of this interesting report contribute to the prior literature on depression in older adults with schizophrenia by describing the prevalence, phenomenology, and correlates of subsyndromal versus secondary major depressive disorder. [PubMed: 18056819]

9*. Montross LP, Kasckow J, Golshan S, et al. Suicidal ideation and suicide attempts among middle-aged and older patients with schizophrenia spectrum disorders and concurrent subsyndromal depression. J Nerv Ment Dis. 2008 Dec; 196(12):884–890. This paper reports on the important topic of suicidal ideation and attempts in middle-aged and older adults with schizophrenia.

Current suicidal ideation was most associated with past attempts and hopelessness; yet, surprisingly, did not differ by demographic characteristics, including diagnosis, race/ethnicity, marital status, living situation, age, education, or severity of medical illness. [PubMed: 19077855]

10**. Diwan S, Cohen CI, Bankole AO, et al. Depression in older adults with schizophrenia spectrum disorders: prevalence and associated factors. Am J Geriatr Psychiatry. 2007 Dec; 15(12):991–998. This interesting study describes the prevalence and correlates of depression in older adults with schizophrenia and reports the intriguing finding that depression is strongly associated with physical illness and disability. This study suggests that addressing physical health may be critical in improving affective symptoms in older adults with schizophrenia. [PubMed: 18056817]

11**. Vahia IV, Diwan S, Bankole AO, et al. Adequacy of medical treatment among older persons with schizophrenia. Psychiatr Serv. 2008 Aug; 59(8):853–859. This study found that older adults with schizophrenia are less likely than other older adults to receive treatment for common chronic medical disorders, including diabetes, hypertension, heart disease, and gastrointestinal ulcers, despite having a similar number of medical visits. [PubMed: 18678681]

12**. Pratt SI, Van Citters AD, Mueser KT, Bartels SJ. Psychosocial rehabilitation on older adults with serious mental illness: a review of the research literature and recommendations for development of rehabilitative approaches. Am J Psychiatr Rehabil. 2008; 11(Number 1):7–40. This review of the research literature on psychosocial rehabilitation models in older adults with serious mental illness identified three models that have been evaluated, including Functional Adaptation Skills Training (FAST), Cognitive-behavioral Social Skills Training (CBSST), and Helping Older People Experience Success (HOPES), an integrated model of psychosocial rehabilitation and health care management. Each of these models is associated with preliminary positive outcomes.

13**. Twamley EW, Narvaez JM, Becker DR, et al. Supported employment for middle-aged and older people with schizophrenia. Am J Psychiatr Rehabil. 2008 Jan; 11(1):76–89. This comparison study found similar results to studies with younger adults on the greater effectiveness of the individualized placement and support (IPS) model over conventional vocational rehabilitation. This study underscores the importance of work in psychosocial outcomes for older adults with serious mental illness. [PubMed: 19212460]

14**. McGurk SR, Mueser KT. Response to cognitive rehabilitation in older versus younger persons with severe mental illness. Am J Psychiatr Rehabil. 2008; 11(1):90–105. This paper considers the important question of addressing the significant relationship of cognition to psychosocial outcomes in older adults with serious mental illness with cognitive remediation. This secondary analysis comparing outcomes of cognitive remediation in younger versus older (age 45+) with serious mental illness found minimal improvement in cognition in the older group, but reported decreased negative symptoms, suggesting a need for future research.

15. Patterson TL, McKibbin C, Taylor M, et al. Functional adaptation skills training (FAST): a pilot psychosocial intervention study in middle-aged and older patients with chronic psychotic disorders. Am J Geriatr Psychiatry. 2003 Jan-Feb; 11(1):17–23. [PubMed: 12527536]

16. Patterson TL, Mausbach BT, McKibbin C, et al. Functional adaptation skills training (FAST): a randomized trial of a psychosocial intervention for middle-aged and older patients with chronic psychotic disorders. Schizophr Res. 2006 Sep; 86(1–3):291–299. [PubMed: 16814526]

17*. Mausbach BT, Cardenas V, McKibbin CL, et al. Reducing emergency medical service use in patients with chronic psychotic disorders: results from the FAST intervention study. Behav Res Ther. 2008 Jan; 46(1):145–153. This analysis of service use outcomes found that middle-aged and older adults with schizophrenia were half as likely as the comparison control group to use emergency services during the six month active phase of the intervention; however, this difference did not persist over one-year follow-up. [PubMed: 17997395]

18. Patterson TL, Bucardo J, McKibbin CL, et al. Development and pilot testing of a new psychosocial intervention for older Latinos with chronic psychosis. Schizophr Bull. 2005; 31(4):922–930. [PubMed: 16037481]

19**. Mausbach BT. Evaluation of a culturally tailored skills intervention for Latinos with persistent psychotic disorders. Am J Psychiatr Rehabil. 2008; 11(1):61–75. This paper describes the cultural adaptation and associated outcomes of the FAST model for Latinos or PEDAL (Programa de Entrenamiento para el Desarrollo de Aptitudes para Latinos). This interesting

report addresses the importance of developing culturally appropriate and sensitive psychosocial interventions for the rapidly growing population of ethnic and racial minority elderly. [PubMed: 19779589]

20. Granholm E, McQuaid JR, McClure FS, et al. A randomized, controlled trial of cognitive behavioral social skills training for middle-aged and older outpatients with chronic schizophrenia. Am J Psychiatry. 2005 Mar; 162(3):520–529. [PubMed: 15741469]
21. Granholm E, McQuaid JR, McClure FS, et al. Randomized controlled trial of cognitive behavioral social skills training for older people with schizophrenia: 12-month follow-up. J Clin Psychiatry. 2007 May; 68(5):730–737. [PubMed: 17503982]
22. Bartels SJ, Forester B, Mueser KT, et al. Enhanced skills training and health care management for older persons with severe mental illness. Community Ment Health J. 2004 Feb; 40(1):75–90. [PubMed: 15077730]
23*. Pratt SI, Bartels SJ, Mueser KT, Forester B. Helping older people experience success: an integrated model of psychosocial rehabilitation and health care management for older adults with serious mental illness. Am J Psychiatr Rehabil. 2008; 11(1):41–60. This report describes a study of an innovative psychosocial intervention that combines community living, social, and self-management skills training with nurse health management.
24. Bartels SJ, Mueser KT, Pratt SI, et al. Randomized trial of social rehabilitation and integrated health care for older people with severe mental illness. Under review.
25. Bartels SJ. Caring for the whole person: integrated health care for older adults with severe mental illness and medical comorbidity. J Am Geriatr Soc. 2004 Dec; 52(12 Suppl):S249–57. [PubMed: 15541165]