[2015]

Recovery-oriented psychosocial strategies enhancing independent living and social skills (such as life skills and social skills training)

SCOPING QUESTIONS: In people with psychotic disorders (including schizophrenia and bipolar disorder) are recovery-oriented psychosocial strategies enhancing independent living and social skills (such as life skills and social skills training) feasible and effective?

BACKGROUND

Psychotic disorders, including schizophrenia and bipolar disorders, are severe mental disorders associated with considerable morbidity and mortality and that require a disproportionate share of mental health services (Mueser and McGurk, 2004; Hirschfeld and Vornik, 2005). These disorders often reduce the ability of self-care and functioning and can lead to great disability, even with medical treatment (Tungpunkom et al., 2012). Most studies and reviews carried out on treatment of psychotic disorders (including schizophrenia) and bipolar disorders explore pharmacological interventions. However, because of the impact of these disorders on a person's level of functioning, people with psychotic disorders (including schizophrenia) and bipolar disorder need psychosocial interventions that enhance the necessary skills to carry on daily life activities and social interactions, in addition to pharmacotherapy. Psychosocial rehabilitation was previously considered as tertiary prevention, but in the last two decades it has evolved into a variety of interventions subject to empirical validation aimed at preventing or reducing disabilities associated with mental disorders, while promoting recovery (WHO, 1996).

Life skills programmes that emphasize the needs associated with independent functioning are often a part of the rehabilitation process. These programmes have been developed to enhance independent living and quality of life for people with psychotic disorders. They can involve encouraging financial awareness, communication, domestic, personal self-care and community living skills (Tungpunkom et al.., 2012).

Social skills training is an empirically-based strategy included in illness management programs aimed at recovery (Mueser et al., 2002). It may be defined as those methods that use the specific principles of learning theory to promote the acquisition, generalization and durability of the skills needed in social and interpersonal situations (WHO, 1996).

People with psychotic disorders have a high risk of homelessness and housing instability (Padget et al., 2007; Fazel et al. 2008). Independent or assisted living facilities can act as a base from which people with severe mental disorders can achieve numerous recovery goals (Slade et al., 2014). Different housing strategies can be adopted, depending on local resources and local cultural norms. Normal housing (i.e., single or shared if

acceptable to the client) or group living alternatives with appropriate support from a specialist, may be crucial to promoting recovery in people with mental disorders (WHO, 1996).

The 2010 WHO mhGAP guidelines recommend psychosocial strategies to enhance independent living and social skills (including social skills and/or life skills training, assisted or independent living facilities) for psychotic and bipolar disorders as necessary for service planning and clinical practice. However, weak evidence on the effectiveness of these interventions was found and an update of this question is essential to confirm or change the recommendation.

PART 1: EVIDENCE REVIEW

Population/ Intervention / Comparison / Outcome (PICO)

- **Population:** Adults with psychotic disorders, including schizophrenia and bipolar disorder
- **Interventions:** Psychosocial interventions to enhance independent living and social skills (including social skills training and life skills training)
- **Comparison:** Care as usual
- **Outcomes:**
    - **Critical** – Prevention of relapses
    - **Important** – Disability/functioning, user and family satisfaction with care

Search strategy

The search was conducted in Week 42 of 2014 using the following databases: Cochrane Database of Systematic Reviews, PubMED (clinical queries), the Campbell Collaboration, LILACS, PsycINFO, Embase and PILOTS.

The keywords and search terms used were as follows:

- (mental disorder OR psychosis OR schizophrenia OR bipolar disorder) AND (psychosocial intervention* OR psychological intervention* OR life skill* OR social skill* OR housing OR independent living OR rehabilitation) AND "systematic review".

In databases that allowed specifically for selection of systematic reviews and meta-analyses (e.g., PubMed, psycINFO and Embase) this option was selected and used only the keywords *(mental disorder OR psychosis OR schizophrenia OR bipolar disorder) AND (psychosocial intervention* OR*

psychological intervention OR life skill* OR social skill* OR housing OR independent living OR rehabilitation)*. Studies were included if they were systematic reviews published from 2010 onwards.

The search strategy developed by the McMaster University was adapted and used to locate primary studies from the following databases: PubMED, PsycINFO, Embase and Google Scholar. Keywords used were: *(mental disorder OR psychosis OR schizophrenia OR bipolar disorder) AND (psychosocial intervention* OR psychological intervention* OR life skill* OR social skill* OR housing OR independent living OR rehabilitation)*.

A. Intervention – Social skills training

Systematic reviews or studies included in GRADE tables or footnotes

- Pilling S, Bebbington P, Kuipers E, Garety P, Geddes J, Martindale B, Orbach G, Morgan C (2002). Psychological treatments in schizophrenia: II. Meta-analyses of randomized controlled trials of social skills training and cognitive remediation. Psychological Medicine.32(5):783-791.

NOTE: This review was also used in the corresponding evidence profile from 2010.

Studies excluded from GRADE tables and footnotes

Armijo J, Mendez E, Morales R, Schilling S, Castro A, Alvarado R, Rojas G (2013). Efficacy of community treatments for schizophrenia and other psychotic disorders: a literature review. Frontiers in Psychiatry.4:116. doi:10.3389/fpsyt.2013.00116.
REASON FOR EXCLUSION: Studies are not pooled.

Chien WT, Leung SF, Yeung FKK, Wong WK (2013). Current approaches to treatments for schizophrenia spectrum disorders, part II: psychosocial interventions and patient-focused perspectives in psychiatric care. Neuropsychiatric Disorders Treatment.2013(9):1463-1481. doi:http://dx.doi.org/10.2147/NDT.S49263.
REASON FOR EXCLUSION: Studies on social skills training are not pooled.

Henderson AR (2013). The impact of social cognition training on recovery from psychosis. Current Opinion in Psychiatry.26(5):429-432. doi:10.1097/YCO.0b013e3283642cf1.
REASON FOR EXCLUSION: This review included studies conducted from 2011 to 2013 on social cognition training.

Kurtz MM and Mueser KT (2008). A meta-analysis of controlled research on social skills training for schizophrenia. *Journal of Consulting and Clinical Psychology,* 76(3):491-504. doi:10.1037/0022-006X.76.3.491.

REASON FOR EXCLUSION: This review included a number of studies that are beyond the scope of the definition of social skills used in the current profile. In particular, a number of papers were included that assessed vocational and supported employment-based interventions.

PICO Table

Population 1: Adults with psychotic disorders, including schizophrenia					
Intervention	**Comparison**	**Outcome**	**Systematic reviews used for GRADE**	**Justification for systematic review used**	**Relevant GRADE Table**
Social skills training	Care as usual	Prevention of relapses	Pilling et al. (2002)	This is the most recent and comprehensive systematic review available.	Table 1
		Disability	No evidence available		
		User and family satisfaction with care	No evidence available		
Population 2: Adults with bipolar disorder					
Social skills training	Care as usual	Prevention of relapses	No evidence available		
		Disability	No evidence available		
		User and family satisfaction with care	No evidence available		

Narrative description of the studies that went into the analysis

Pilling et al. (2002) included nine studies, comprising 471 patients. The mean age was 36 years (based on the seven studies that reported it), with a range of 18. In the studies where the sex of participants could be gleaned, 85% were male. Four studies reported mean duration of illness, which was 12±5 years overall. Due to problems in the literature concerning the definition of psychosocial interventions and of diagnosis, explicit inclusion criteria were specified. For social skills training, the necessary criteria for inclusion in the analysis were that the treatment was a structured psychosocial intervention (group or individual) intended to enhance social performance and reduce distress and difficulty in social situations. The intervention also had to include behaviourally-based assessments of a range of social and interpersonal skills, with importance placed on both verbal and non-verbal communication. Importance was also placed on the individual's ability to perceive and process relevant social cues and to respond to and provide appropriate social reinforcement. The included studies were based on samples of people with schizophrenia or related disorders, including delusional disorder, schizophreniform disorder and schizoaffective disorder. Participants were often reported to have co-morbid mental disorders, such as depression and anxiety disorder. The individual trials excluded subjects for a variety of reasons, such as organic brain syndromes, substance misuse and failing to reach a minimum IQ score.

GRADE Table

Table 1. Social skills training vs. standard therapy for treatment of schizophrenia

Authors: C Barbui and L Tarsitani
Question: Is social skills training effective for illness management for people with schizophrenia when compared to standard therapy?
Bibliography: Pilling S, Bebbington P, Kuipers E, Garety P, Geddes J, Martindale B, Orbach G, Morgan C (2002). Psychological treatments in schizophrenia: II. Meta-analyses of randomized controlled trials of social skills training and cognitive remediation. Psychological Medicine.32(5):783-791.

Quality assessment							Summary of findings					
							No. of patients		Effect		Quality	Importance
No. of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	Social skills training	Standard therapy	Relative (95% CI)	Absolute		
Relapse (1 year)												
4[1]	Randomized trials	Serious[2]	No serious inconsistency	No serious indirectness[3]	Very serious[4]	None	0/0 (0%)[5,6]	0%	RR 0.74 (0.40 to 1.39)	0 fewer per 1000 (from 0 fewer to 0 more)	⊕OOO VERY LOW	CRITICAL
Relapse (2 years)												
2[1]	Randomized trials	Serious[2]	Serious[5,7]	No serious indirectness[3]	Serious[8]	None	0/0 (0%)[5,9]	0%	RR 3.88 (0.22 to 69.67)	0 more per 1000 (from 0 fewer to 0 more)	⊕OOO VERY LOW	CRITICAL
Disability												
0	No evidence available					None	0	0	-			IMPORTANT
User and family satisfaction												
0	No evidence available					None	0	0	-			IMPORTANT

[1] From Table 2 of Pilling et al. (2002).
[2] It is unclear if outcome assessment was blind and there is no data reported on dropout rates.
[3] Specific training and supervision requirements, as well as requirements in terms of number of sessions and number of minutes per sessions, are addressed in the recommendation table.
[4] Less than 200 patients were included and confidence interval ranges from appreciable benefit to appreciable harm.
[5] Not reported.
[6] The total number of included patients was 125.
[7] Forest plot not reported but statistical test suggested some heterogeneity.
[8] Confidence interval ranges from appreciable benefit to appreciable harm.
[9] The total number of included patients was 264.

Additional evidence on social skills training not mentioned in GRADE tables

National Institute for Health and Care Excellence (NICE). 2014. Psychosis and schizophrenia in adults: treatment and management [CG178]. [online]. London: NICE. Available from: https://www.nice.org.uk/guidance/cg178.

The NICE (2014) guideline development group found "no clear evidence that social skills training was effective as a discrete intervention in improving outcomes in schizophrenia when compared with generic social and group activities, and suggested that the evidence shows little if any consistent advantage over standard care." Additionally, the committee advised, "Do not routinely offer social skills training (as a specific intervention) to people with schizophrenia."

World Health Organization (WHO), Division of Mental Health, WHO Initiative of Support to People Disabled by Mental Illness**. Psychosocial rehabilitation – A consensus statement. Geneva: World Health Organization; 1996 (http://apps.who.int/iris/handle/10665/60630, accessed in Autumn 2014).**

Independent living skills training concerns all those interventions related to basic daily activities (e.g., feeding, bathing, dressing, grooming). Social skills training may be defined as those methods which use the specific principles of learning theory to promote the acquisition, generalization and durability of skills needed in social and interpersonal situations. Both types of training have to take place in the context of real, everyday life experiences, not in closed unrealistic settings. Social skills training is most useful when given as part of an overall rehabilitation package, several equally effective approaches are available (WHO, 1996, p.4). This evidence is relevant to both independent living skills and social skills traini

B. Intervention – Life skills training (including supported housing)

Systematic reviews or studies included in GRADE tables or footnotes

- Tungpunkom P, Maayan N, Soares-Weiser K 2012. Life skills programmes for chronic mental illnesses. Cochrane Database of Systematic Review.1:CD000381. doi:10.1002/14651858.CD000381.pub3

Studies excluded from GRADE tables and footnotes

Chilvers R, Macdonald GM, Hayes AA (2006). Supported housing for people with severe mental disorders. Cochrane Database of Systematic Reviews.18(4):CD000453. doi:10.1002/14651858.CD000453.pub2
REASON FOR EXCLUSION: This review found no randomized controlled trials (RCTs).

PICO Table

Population 1: Adults with psychotic disorders, including schizophrenia					
Intervention	**Comparison**	**Outcome**	**Systematic reviews used for GRADE**	**Justification for systematic review used**	**Relevant GRADE Table**
Life skills training	Care as usual	Prevention of relapses	No evidence available		
		Disability/functioning	Tungpunkom et al. (2012)	This is the most recent Cochrane Review available.	Table 2
		User and family satisfaction with care	No evidence available		
Population 2: Adults with bipolar disorder					
Life skills training	Care as usual	Prevention of relapses	No evidence available		
		Disability	No evidence available		
		User and family satisfaction with care	No evidence available		

Narrative description of the studies that went into the analysis

Tungpunkom et al., 2012 included seven randomized studies with a total of 483 participants. Most trials were undertaken for no longer than 3 months. The longest trial lasted for 24 weeks. All participants were people with a chronic mental illness, mostly with schizophrenia and schizophrenia-like disorders. One of the studies randomized only men, two studies randomized only women and the others included both sexes. The mean age for three studies was 32 to 38 years and for three studies the mean age was 45 to 50 years. Six studies used a hospital setting and in one study the participants attended a day hospital. Life skills programmes consisted of a mixture of interpersonal skills, grooming and personal hygiene,

stress management, nutrition, time management skills, communication skills, organization and planning skills and financial management skills. The comparison groups were treatment as usual, traditional rehabilitation involving recreation, art and occupational therapy or attention control condition that provided group support for participants. The intensity of input was 4 hours/day, 5 days/week for 7 weeks or four weekly sessions of an hour each for 12 weeks. Only one study reported global functioning scores (Zheng et al., 2006) and randomized 80 female inpatients with schizophrenia or other psychotic disorders (mean age 32 years) to life skills training or routine care for 6 weeks.

[2015]

GRADE Table

Table 1 Life skills training vs. care as usual for psychotic disorders

Authors: L Tarsitani and C Barbui
Question: In adults with psychotic disorders (including schizophrenia), is life skills training effective for illness management compared to care as usual?
Bibliography: Tungpunkom P, Maayan N, Soares-Weiser K 2012. Life skills programmes for chronic mental illnesses. Cochrane Database of Systematic Review.1:CD000381. doi:10.1002/14651858.CD000381.pub3.

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Life skills training	Care as usual	Relative (95% CI)	Absolute		
Prevention of relapses - Not reported												
0	-	-	-	-	-	None	0 (0%)	-	-	-		CRITICAL
Disability - Functioning (follow-up 6 weeks; measured with average endpoint score - at 6 weeks [Scale of Social-skills for Psychiatric Inpatients - SSPI, high score = worse]; better indicated by lower values)												
1	Randomized trials	Very serious[1]	No serious inconsistency	Very serious[2,3]	Serious[4]	Reporting bias[5]	40	40	-	MD 4.33 lower (5.23 to 3.43 lower)[6]	⊕OOO VERY LOW	CRITICAL
User and family satisfaction with care - Not reported												
0	-	-	-	-	-	None	0 (0%)	-	-	-		IMPORTANT

[1] Blinding is not stated.
[2] Only one study contributed to the analysis.
[3] The study was on inpatients.
[4] The overall number of individuals included is 80 .
[5] High risk of reporting bias according to Tungpunkom et al. (2012). Not all expected outcomes were reported.
[6] Estimates < 0 favour treatment.

Additional evidence not mentioned in GRADE tables

There were 14 studies identified as relevant to the scoping questions.

Chilvers R, Macdonald GM, Hayes AA (2006). Supported housing for people with severe mental disorders. Cochrane Database of Systematic Reviews.18(4):CD000453. doi:10.1002/14651858.CD000453.pub2.

Support for people with severe mental illness may be provided through supported housing schemes with the intention of increasing treatment success rates and reducing cycles of hospital readmissions. Many of these initiatives are based on informal reports of effectiveness and they are costly in terms of development, capital investment and on-going care provision. Chilvers et al. (2006) sought to compare supported housing schemes with outreach support schemes or 'standard care' for people with severe mental disorder(s) living in the community. They did not identify any studies from randomized trials in this review. There are a number of supported housing options funded by local authorities, as well as charities, which may be beneficial but could equally increase levels of dependence on professionals and provide greater exclusion from the community. Whether or not the benefits outweigh the risks are currently only a matter of opinion, debate and informal reports. There is an urgent need to assess the effectiveness of these schemes using well-conducted randomized trials.

Dobson DJ, McDougall G, Busheikin J, Aldous J (1995). Effects of social skills training and social milieu treatment on symptoms of schizophrenia. Psychiatric Services.46(4):376-380.

This study compared the effects of social skills training and social milieu treatment on symptoms of schizophrenia, particularly on negative symptoms.
The sample comprised 33 patients aged 18–55 years with a diagnosis of schizophrenia were randomly assigned to a 9-week programme of social skills training or social milieu treatment. Patients were assessed at 3-, 6-, and 9-week intervals during treatment and at follow-up using the Positive and Negative Syndrome Scale (PANSS), which measured both positive and negative symptoms of schizophrenia and general psychopathology. There were 15 patients who completed social skills training and 13 who completed social milieu treatment. Comparison of PANSS scores at different assessment times showed that both treatments were effective in reducing symptoms, but that social skills training appeared to be more effective in reducing negative symptoms. No differences were found between treatment groups in relapse rates or in symptom measures at 3-month follow-up. However, 6-month follow-up data available only for the social skills training group showed that improvement in negative symptoms had begun to decline. The study concluded that psychosocial approaches are a necessary component in the treatment of patients with schizophrenia and that social skills training appears to be particularly helpful. The gradual decline in improvement in negative symptoms at 6-month follow-up suggests the need for more extended treatment.

Gilmer TP, Folsom DP, Hawthorne W, Lindamer LA, Hough RL, Garcia P, Jeste DV (2003). Assisted living and use of health services among medicaid beneficiaries with schizophrenia. Journal of Mental Health Policy and Economics.6(2):59-65.

This study aims at comparing the use of mental and medical health services among persons with schizophrenia who were residing in assisted living facilities (ALFs) compared to those received by patients living independently and those who were homeless. Medicaid claims were combined with person-level data on living situation and psychological and social functioning from 1998 to 2000. Regression models were used to analyze whether living in a board-and-care facility was related to use of outpatient mental health services, including: case management; therapy; crisis stabilization; medication supervision; day treatment and medication treatment; the probability of acute psychiatric hospitalization; the probability of hospitalization for physical health; and costs.

Residents of board-and-care facilities had greater use of outpatient mental health services and lower rates of psychiatric and medical hospitalization. Pharmacy costs and total health care costs were highest in ALFs. An implications for health policy is that ALFs may provide a suitable environment through which to provide outpatient mental health services. Policy makers interested in reducing homelessness through interventions might consider subsidizing these facilities.

Granholm E, Holden J, Link PC, McQuiad JR (2014). Randomized Clinical Trial of Cognitive Behavioural Social Skills Training for Schizophrenia: Improvement in Functioning and Experiential Negative Symptoms. Journal of Consulting and Clinical Psychology.82(6):1173-1185. doi:10.1037/a0037098.

This randomized clinical trial aims at identifying treatments to improve functioning and reduce negative symptoms in consumers with schizophrenia. Participants with schizophrenia or schizoaffective disorder (N = 149) were randomly assigned to Cognitive Behavioural Social Skills Training (CBSST) or an active goal-focused supportive contact (GFSC) control condition. CBSST combined cognitive behaviour therapy (CBT) with social skills training and problem-solving training to improve functioning and negative symptoms. GFSC was comprised of weekly supportive group therapy focused on setting and achieving functioning goals. Blind raters assessed functioning (i.e., primary outcome: Independent Living Skills Survey [ILSS]), CBSST skill knowledge, positive and negative symptoms, depression, and defeatist performance attitudes). In mixed-effects regression models in intent-to-treat (ITT) analyses, CBSST skill knowledge, functioning, amotivation/asociality negative symptoms and defeatist performance attitudes improved significantly more in CBSST compared to GFSC. In both treatment groups, comparable improvements were also found for positive symptoms and a performance-based measure of social competence. The results suggest that CBSST is an effective treatment to improve functioning and experiential negative symptoms in consumers with schizophrenia. As well, CBSST and supportive group therapy can improve social competence and reduce positive symptoms when these interventions are actively focused on setting and achieving functioning goals.

Granholm E, McQuaid JR McClure FS, Link PC, Perivoliotis D, Gottlieb JD, Patterson TL, Jeste DV (2007). Randomized controlled trial of cognitive behavioural social skills training for older people with schizophrenia: 12 month follow-up. Journal of Clinical Psychiatry.68(5):730-737.

CBSST is a 24-session weekly group therapy intervention that combines cognitive-behavioural therapy with social skills and problem-solving training to improve functioning. This article reports 12-month follow-up results of a trial (conducted from October 1999 to September 2004) that compared treatment as usual (TAU) with TAU + group CBSST in 76 outpatients (aged 42–74 years) with schizophrenia or schizoaffective disorder (using DSM-IV criteria). Blind raters obtained assessments of CBSST skill mastery, functioning, psychotic symptoms, depressive symptoms and cognitive insight (i.e., belief flexibility). There was significantly **greater skill acquisition and self-reported performance of living skills in the community seen in the CBSST group** compared to TAU patients at the end of the treatment period. These results were were maintained at 12-month follow-up ($p <= .05$). Participants in CBSST also showed significantly greater cognitive insight at the end of treatment relative to TAU, but this improvement was not maintained at follow-up. The treatment-group effect was not significant for symptoms at any assessment point; however, symptoms were not the primary treatment target in this stable outpatient sample. The study concludes that older people with very chronic schizophrenia were able to learn and maintain new skills with CBSST and showed **improved self-reported functioning one year after the treatment ended**. Longer treatment and/or booster sessions may be required to maintain gains in cognitive insight.

Hogarty GE, Anderson CM, Reiss DJ, Komblith SJ, Greenwalk DP, Ulrich RF, Carter M (1991). Family psychoeducation, social skills training and maintenance chemotherapy in the aftercare treatment of schizophrenia: II. Two-year effects of a controlled study on relapse and adjustment. Archives of General Psychiatry.48(4):340-347.

In a previous study, the authors demonstrated that a novel family psycho-educational approach and an individual social skills training approach designed for patients living in high-expressed emotion households each reduced schizophrenic relapse by half when compared with medication controls in the first year after hospital discharge. The combination of treatments resulted in no relapse. The current study details results after 24 months of continuous treatment. By 24 months, a persistent and significant effect of family intervention on forestalling relapse was observed, but the effect of social skills training was lost late into the second year of treatment. There was no additive effect on relapse that accrued to the combination of treatments. However, the effect of family intervention was likely compromised as well beyond 24 months. Treatment effects on the adjustment of survivors were circumscribed due in part to study design characteristics. Effects generally favoured the social skills-alone condition at 12 months and the family condition or combined family/social skills condition at 24 months.

Mairs H and Bradshaw T (2004). Life skills training in schizophrenia. The British Journal of Occupational Therapy.67(5):217-224. doi:10.1177/030802260406700505.

Rehabilitation approaches to incorporate life skills training are widely employed in the treatment of individuals with schizophrenia. However, whether such approaches are effective is unknown (Nicol et al., 2003). This pilot study assessed the effectiveness of a life-skills training intervention

for people with a diagnosis of schizophrenia that was facilitated by occupational therapists working in community mental health teams. There were 17 clients with a diagnosis of schizophrenia and a life skill deficit (or deficits) who were recruited from two National Health Service (NHS) trusts and participated in up to 12 sessions of life skills training, based upon a treatment manual written specifically for the study. The intervention was facilitated by eight occupational therapists who received training in life skills therapy. A pre-intervention and post-intervention experimental design was used to assess the effectiveness of the programme, with measures of psychiatric symptoms and social functioning conducted by an independent assessor who was unaware that an intervention was being used.

For the 13 participants who completed the life skills intervention, participation was found to reduce negative symptoms and overall levels of general psychopathology, although this was not reflected in social functioning. Indeed, a statistically non-significant deterioration in social functioning was found at the completion of the intervention. This uncontrolled study does not allow definitive evaluation of the value of life skills training in schizophrenia, but it does provide justification for a larger-scale controlled trial of a manual-based approach to life-skills training with this client group.

Mausbach BT, Depp A, Cardenas V, Jeste DV (2008). Relationship between functional capacity and community responsibility in patients with schizophrenia: differences between independent and assisted living settings. Community Mental Health Journal.44(5):385-391. doi:10.1007/s10597-008-9141-z.

The authors examined factors potentially associated with levels of community responsibility among middle-aged and older patients with schizophrenia. Participants in residential care facilities (RCFs) engaged in significantly fewer community responsibilities than those residing in the community. However, demographic and clinical characteristics did not explain these differences. Furthermore, greater functional capacity was associated with greater community responsibility among participants residing in the community, but not among those in RCFs. These results suggest that, despite capacity, patients residing in RCFs are not engaging in community responsibilities. Additionally, among participants residing in the community, functional capacity may predict level of responsibility.

Mueser KT, Drake RE, Bond GR (1997). Recent advances in psychiatric rehabilitation for patients with severe mental illness. Harvard Review of Psychiatry.5(3):123-137.

The authors of this systematic review reported:

> "Over the past decade substantial advances have been made in the psychiatric rehabilitation of persons with severe mental illnesses such as schizophrenia and bipolar disorder. In this review we highlight progress in several areas that have been the focus of extensive research, including case management, social skills training, supported employment, family intervention, and integrated treatment for comorbid substance use disorders. We also identify characteristics of successful psychiatric rehabilitation programs: (1) effective interventions tend to be direct and behavioural; (2) rehabilitation programs have specific effects on related outcomes, with limited generalization to other domains; (3) short-term interventions are less effective than long-term ones; (4) interventions

need to be delivered close to patients' natural environments; and (5) effective programs often combine skills training and environmental support," (p. 133).

Mueser KT, Pratt SI, Bartels SJ, Swain K, Forester B, Cather C, Feldman J (2010). Randomized trial of social rehabilitation and integrated health care for older people with severe mental illness. Journal of Consulting and Clinical Psychology.78(4):561-73. doi:10.1037/a0019629.

The Helping Older People Experience Success (HOPES) program was developed to improve psychosocial functioning and reduce long-term medical burden in older people with severe mental illness (SMI) living in the community. HOPES includes one year of intensive skills training and health management, followed by a 1-year maintenance phase. This RCT evaluated the effects of HOPES on social skills and psychosocial functioning in 183 older adults with SMI (58% schizophrenia spectrum), aged 50+ years at 3 sites who were assigned to HOPES or TAU with blinded follow-up assessments at baseline and 1- and 2-year follow-up. Retention in the HOPES program was high (80%). ITT analyses showed significant improvements for older adults assigned to HOPES compared to TAU in performance measures of social skills, psychosocial and community functioning, negative symptoms and self-efficacy, with effect sizes in the moderate (.37-.63) range. Exploratory analyses indicated that men improved more than women in the HOPES program, whereas benefit from the program was not related to psychiatric diagnosis, age or baseline levels of cognitive functioning, psychosocial functioning or social skill. The results support the feasibility of engaging older adults with SMI in the HOPES program, which is an intensive psychiatric rehabilitation intervention that incorporates skills training and medical case management and improves psychosocial functioning within this population. Further research is needed to better understand gendered differences in benefit from the HOPES program.

The Right to Adequate Housing. Geneva: Office of the United Nations High Commissioner for Human Rights ; 2014 (Fact Sheet No. 21/Rev.1; http://www.ohchr.org/Documents/publications/Fs21_rev_1_Housing_en.pdf, accessed Autumn 2014).

The International Covenant on Economic, Social and Cultural Rights is widely considered as the central instrument for the protection of the right to adequate housing. The Covenant refers to the right of everyone to an adequate standard of living, including adequate food, clothing and housing and to the continuous improvement of living conditions (see OHCHR, 2014, Article 11: p. 28).

The Convention on the Rights of Persons with Disabilities requires states to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by persons with disabilities, including their right to adequate housing.

- *Article 1* requires Member States to promote respect for the inherent dignity of persons with disabilities.
- *Article 9* further requires that States adopt measures to identify and eliminate obstacles and barriers to accessibility, notably in relation to housing.

- *Article 12* recognizes that persons with disabilities enjoy legal capacity on an equal basis with others and requires States to take appropriate measures to enable persons with disabilities to exercise legal capacity.
- *Article 28* recognizes the right of persons with disabilities to an adequate standard of living for themselves and their families, including adequate housing, and requires States to take appropriate steps to safeguard and promote the realization of this right without discrimination on the basis of disability (for instance, by ensuring that persons with disabilities have access to public housing programmes).

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Patterson TL, Mausbach BT, McKibbin C, Goldman S, Bucardo J, Jeste DV (2006). Functional Adaptation Skills Training (FAST): A randomized trial of a psychosocial intervention for middle-aged and older patients with chronic psychotic disorders. Schizophrenia Research. 86(1-3):291-299.

This study evaluated a psychosocial intervention designed to improve everyday living skills of middle-aged and older outpatients with chronic psychotic disorders. A total of 240 patients with a DSM-IV-based chart diagnosis of schizophrenia or schizoaffective disorder participated in a 24-week RCT comparing a behavioural group intervention called "Functional Adaptations and Skills Training" ([FAST]; n = 124) to a time-equivalent attention-control group ([AC]; n = 116) focused on improving functional skills. Compared to participants randomized to AC, those in the FAST intervention demonstrated significant improvement in everyday living skills (p =.046) and social skills (p=.003), but not in medication management skills (p=.268).

Thorup A, Petersen L, Jeppesen P, Ohlenschlaeger J, Christensen T, Krarup G, Jorgensen P, Nordentoft M (2005). Integrated treatment ameliorates negative symptoms in first episode psychosis - results from the Danish OPUS trial. Schizophrenia Research.79(1):95-105.

This study investigated the effect of integrated treatment on negative, psychotic and disorganised symptoms in patients with first-episode psychosis. The authors conducted an RCT comparing integrated treatment (IT) with standard treatment (ST), which included 547 patients, aged 18-45 years and diagnosed with schizophrenia spectrum disorders. All patients were assessed with SCAN, SAPS and SANS at entry and after 1- and 2-years follow-up. The IT consisted of assertive community treatment, multifamily groups, psycho-education and social skills training, with a caseload of 1:10 compared with 1:25 in ST. Since attrition was considerable, a mixed model analysis with repeated measurements was used to examine the possible effects of IT statistically. IT reduced both negative and positive symptoms significantly better than ST. Most marked were the results from the negative dimension, where all five global scores from SANS had a significantly better reduction in IT. Sub-analyses did not single out any one element in the integrated treatment that could explain this result. The results indicate that the integrated approach is crucial, since, most likely, many aspects of the integrated treatment have contributed to the reduction of symptoms.

[2015]

World Health Organization (WHO), Division of Mental Health, WHO Initiative of Support to People Disabled by Mental Illness. Psychosocial rehabilitation – A consensus statement. Geneva: World Health Organization; 1996 (http://apps.who.int/iris/handle/10665/60630, accessed in Autumn 2014).

From p. 5 of the consensus statement:

> "**Housing.** A serious effort to set up living alternatives to the mental hospital is an essential component of PSR. Different housing strategies can be adopted, depending on local resources and local cultural norms. Ideally, normal housing (single, or shared if acceptable to client) with appropriate support from specialist staff should be provided. If sufficient resources are not available, group living alternatives may have to be considered. The risks of maintaining large groups of disabled people together in institutional settings should not be overlooked. While alternatives are most desirable, the environment of many mental hospitals can and must be improved."

Notice that this evidence is relevant to both independent living kills and social skills training.

PART 2: FROM EVIDENCE TO RECOMMENDATIONS

Summary of quantitative evidence table

Intervention vs. control		
Outcome	**Social skills training vs. standard care** *(Number of studies, RR [95% CI], quality)*	**Life skills training vs. standard care** *(Number of studies, MD [95% CI], quality)*
Prevention of relapses (at 1-year follow-up)	4 studies, RR 0.74 (0.40 to 1.39) No difference, VERY LOW	
Prevention of relapses (at 2-years follow-up)	2 studies, RR 3.88 (0.22 to 69.67) No difference, VERY LOW	
Disability/Functioning		1 study, MD -4.33 (-5.23 to -3.43) In favour of life skills training, VERY LOW

User and family satisfaction		

Evidence to recommendation table

Benefits	The evidence is inconclusive. Therefore, it is not possible to determine if social skills training is associated with reduced relapse rates in patients with schizophrenia and other psychotic disorders, when compared to standard care. There is no evidence was available, in terms of disability and user and family satisfaction with care. In terms of global functioning, there is evidence from one study that life-skills training is significantly more effective than standard care. In terms of relapse prevention and user and family satisfaction with care, there was no evidence available. , There is also no evidence on these interventions for patients with bipolar disorder. In addition to randomized evidence, there are findings from a number of observational studies carried out in a very diverse range of settings. The implications of these findings include: • Social skills training may have a positive impact on functioning (i.e., social functioning) and on relapse prevention. • Living arrangements in the community have potential for great benefit for people with schizophrenia. Assisted living arrangements may be associated with lower rates of psychiatric and medical hospitalization. • Independent living is associated with greater community responsibility (and social inclusion). • Safe and secure housing is a key element to increase the possibility of recovery from mental disorders. • Supportive housing (offered together with social and life skills training to individuals with psychotic disorders) has been shown to help people achieve better quality of life while reducing

	the overall cost of care. • Permanent housing associated with supportive services was found to be effective at maintaining housing stability, as well as at improving health outcomes and decreases the use of publicly funded institutions.
Harms	No significant harm has been reported.
Summary of the quality of evidence	The evidence was limited and quality of the evidence available is VERY LOW.

Value and preferences	
In favour	Communities and society value psychosocial interventions, which also improve the social inclusion of people with severe mental, neurological and substance use disorders, as well as family members and caregivers, while reducing disability and preventing human rights violations. Access to adequate independent or assisted housing is a basic human right and supports recovery from mental disorders.
Against	Some schemes can marginalize groups if the intervention does not encourage community engagement in real-world settings.
Uncertainty or variability?	There is major variability.

Feasibility (including resource use considerations)	Social skills training interventions are resource-consuming and their benefits may not be sustainable in the long term. These interventions can reduce symptoms severity and relapse rate, while improving functioning; however, benefits occur slowly and the interventions need to be conducted with highly structured instructional techniques and accompanied by sufficient and careful training. Furthermore, the effects are not sustained and require long-term and/or chronic interventions. Involvement of the family and the community in psychosocial intervention programs are crucial to their sustainability.
Uncertainty or variability?	There is major variability in the feasibility of these interventions.

Recommendation and remarks

Recommendation

Recovery-oriented psychosocial interventions (e.g., life skills training, social skills training) to enhance independent living skills can be offered for people with psychotic disorders (including schizophrenia and bipolar disorder) and for their families and/or caregivers.
Facilitation of assisted living, independent living and supported housing that is culturally and contextually appropriate may be considered as an option for people with psychotic disorders (including schizophrenia and bipolar disorder). Careful consideration should be given to the functional capacity and the need for stability and support when advising and facilitating optimal housing arrangements.

Rationale: Randomized evidence supporting the efficacy of recovery-oriented psychosocial interventions is sparse and inconclusive. However, findings from a number of observational studies carried out in a very diverse range of settings suggest that benefits outweigh the harms. Overall there is substantial certainty in the value of psychosocial interventions, which may improve the social inclusion of people with psychotic disorders, as well as family members and caregivers, while reducing disability and preventing human rights violations.

Remarks

Life skills training is a recovery oriented psychosocial intervention that emphasises the needs associated with independent functioning, and is usually part of the rehabilitation process. Social skills training is a recovery oriented psychosocial interventions included in illness management programs aimed at recovery.
Facilitation of assisted living and supported housing can act as a base from which people with severe mental disorders can achieve numerous recovery goals. Different housing strategies can be adopted depending on local resources and local cultural norms. Normal housing (single or shared, if acceptable to the user) or group living alternatives with appropriate support from a specialist may be crucial in promoting recovery in people with mental disorders.
Users, their families/caregivers and the community should be involved in the design, implementation and evaluation of these psychosocial interventions, in coordination with health and social professionals. Professionals delivering psychosocial interventions should have an appropriate level of competence and, wherever possible, be regularly supervised by the relevant specialists. Psychosocial interventions should be continued as long as needed by the user and his/her family and therefore should be planned and developed in a sustainable way.

Judgements about the strength of a recommendation

Factor	**Decision**
Quality of the evidence	□ High □ Moderate □ Low **X Very low**
Balance of benefits vs. harms	**X Benefits clearly outweigh harms** □ Benefits and harms are balanced □ Potential harms clearly outweigh potential benefits
Values and preferences	□ No major variability **X Major variability**
Resource use	□ Less resource-intensive **X More resource-intensive**
Strength	**CONDITIONAL**

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