mhGAP

[2015]

Recovery-oriented strategies enhancing vocational and economic inclusion (such as supported employment)

SCOPING QUESTION: In people with psychotic disorders, including schizophrenia and bipolar disorder, are recovery-oriented strategies enhancing vocational and economic inclusion (such as supported employment) feasible and effective?

Psychotic disorders, including schizophrenia and bipolar disorders, are severe mental disorders associated with considerable morbidity and mortality requiing a disproportionate share of mental health services resources (Mueser and McGurk, 2004; Hirschfeld and Vornik, 2005). These disorders, despite medical treatment, often reduce ability and functioning and lead to unemployment in around a half of the patients who suffer from them (Bond, 2004). Many people with mental disorders are unemployed but the majority of them want to work (Shepherd et al. 1994, Kinoshita et al 2013). Unemployment rates among people with severe mental disorders are higher than in other disabled groups (ONS, 1998) suggesting discrimination on the part of employers and that low priority is given to the importance of employment by psychiatric services (Lehman, 1995).

Unemployment has important negative psychological, social and economic consequences for people with severe mental disorders as well as for their families/caregivers. Unemployment is associated with cognitive impairment, more positive and negative symptoms of the mental disorder, stigma and lack of access to employment services (Kinoshita et al 2013, Cook 2006, Rosenheck 2006). Working and having a job can increase the patients' satisfaction and self-esteem and can break the cycle of poverty and dependence. In addition work gives an opportunity to socialize and communicate (WHO, 1996).

Different types of interventions that enhance vocational inclusion and employment of people with these disorders exist and are often referred to as recovery-orientated interventions (Slade et al. 2014). Supported employment is a technique aimed at helping people with severe mental disorders to obtain and maintain competitive employment. It involves trying to place patients in competitive jobs without any extended preparation (Bond 1992). It has been defined as 'paid work that takes place in normal work settings with provision for ongoing support services' (Becker 1994; Bond 1999).
These interventions are crucial, in addition to pharmacological treatment, to decreasing levels of disability and increasing the functioning, social and economic inclusion and the chances of recovery of people with these disorders. A clear recommendation on psychosocial strategies which enhance vocational and economic inclusion is necessary for service planning and clinical practice. The 2010 WHO mhGAP guideline recommends to actively encourage occupational activities as appropriate in patients with psychotic disorders. However, new evidence on the effectiveness of these interventions exists and an update of this question is essential to confirm or amend the recommendation.

PART 1: EVIDENCE REVIEW

Population/ Intervention / Comparison / Outcome (PICO)

- **Population:** Adults with psychotic disorders including schizophrenia and bipolar disorder
- **Interventions:** Psychosocial strategies enhancing vocational and economic inclusion
- **Comparison:** Care as usual/other vocational approaches
- **Outcomes:**
  - **Critical** - Prevention of relapses
  - **Important** - Disability and function, Employment, Users' and families' satisfaction with care

Search strategy

The search was conducted in week 41 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 serach terms used were as follows:
(mental disorder OR psychosis OR schizophrenia OR bipolar disorder) AND (supported employment OR augmented supported employment OR vocational OR individual placement OR individual placement and support OR pre-vocational training OR economic inclusion) 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 (supported employment OR augmented supported employment OR vocational OR individual placement OR individual placement and support OR pre-vocational training OR economic inclusion). 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 (supported employment OR augmented supported employment OR vocational OR individual placement OR individual placement and support OR pre-vocational training OR economic inclusion). Studies excluded from systematic reviews were considered.

Six reviews from 2010 to 2014 were found and 4 were excluded.

Included in GRADE tables or footnotes

- Crowther R, Marshall M, Bond G, Huxley P (2001). Vocational rehabilitation for people with severe mental illness. Cochrane Database of Systematic Reviews,(2):CD003080.
- Kinoshita Y, Furukawa TA, Kinoshita K, Honyashiki M, Omori IM, Marshall M, Bond GR, Huxley P, Amano N, Kingdon D (2013). Supported employment for adults with severe mental illness. Cochrane Database of Systematic Reviews, Sep 13;9:CD008297. doi: 10.1002/14651858.CD008297

Excluded from GRADE tables and footnotes

Arbesman M and Logsdon DW (2011). Occupational therapy interventions for employment and education for adults with serious mental illness: a systematic review. American Journal of Occupational Therapy, 65:238-46.
REASON FOR EXCLUSION: Kinoshita et al, 2013 included all pertinent studies.

Heffernan J and Pilkington P (2011). Supported employment for persons with mental illness: systematic review of the effectiveness of individual placement and support in the UK. Journal of Mental Health, 20:368-80.
REASON FOR EXCLUSION: Kinoshita et al, 2013 included all pertinent studies.

Marino LA, Dixon LB. An update on supported employment for people with severe mental illness. Curr Opin Psychiatry. 2014 May;27(3):210-5.
REASON FOR EXCLUSION: Studies are not pooled.

Marshall T, Goldberg RW, Braude L, Dougherty RH, Daniels AS, Ghose SS, George P, Delphin-Rittmon ME. Supported employment: assessing the evidence. Psychiatr Serv 2014;65:16-23.
REASON FOR EXCLUSION: Studies are not pooled.

PICO Table

Population 1: Adults with psychotic disorders including schizophrenia and bipolar disorders				
Intervention	Comparison	Outcome	Systematic reviews used for GRADE	Justification for systematic review used
Supported employment	Care as usual	Employment	Crowther et al, 2001	The only systematic review including one study of supported employment versus care as usual
		Prevention of relapses	Crowther et al, 2001	
		Disability/Functioning	Crowther et al, 2001	
		Users' and families' satisfaction with care	No evidence available	NA
Supported employment	Other vocational approaches	Employment	Kinoshita et al, 2013	The most recent and comprehensive Cochrane review
		Prevention of relapses	Kinoshita et al, 2013	
		Disability/Functioning	Kinoshita et al, 2013	
		users' and families' satisfaction with care	No evidence available	NA

Narrative description of the studies that went into analysis

Crowther et al, 2001 included one trial (Chandler-Long Beach, 1997) involving 256 patients with “serious and persistent mental disorder” who were randomized to receive Assertive Community Treatment (an intensive and highly integrated approach for community mental health service delivery) combined with Supported Employment or standard community care with follow ups at 12, 24, and 36 months. One third of the sample was over 45 years old, 43% were women, 32% non-white. Outcome was assessed by raters who were not involved in providing the treatment or control interventions. Loss to follow up rate was 21% at one year.

Kinoshita et al, 2013 included 14 randomized clinical trials with supported employment compared with other vocational approaches in people with severe mental disorders. Twelve studies were two-arm studies. All participants (N = 2265) were adult outpatients with severe mental disorders (schizophrenia, schizoaffective disorder, bipolar disorder, other psychotic and mood disorders). Study duration was from 6 to 24 months, with most studies lasting 18 or 24 months. Men were well represented. There were insufficient data to assess representation of people from ethnic minorities. All included studies compared supported employment with other vocational approaches. Among these, 13 studies implemented individual placement and support (IPS) as supported employment. There was no study comparing supported employment with treatment as usual. The primary study by Chandler et al, 1997 (which was included in Crowther et al [2001]) was not included in Kinoshita et al, 2013 because the intervention did not fulfil the definition of supported employment in this review.

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GRADE Tables

Table 1

Author(s): Corrado Barbui and Lorenzo Tarsitani
Question: Should supported employment be used in adults with severe mental illness when compared to care as usual?
Bibliography: Crowther R, Marshall M, Bond G, Huxley P (2001). Vocational rehabilitation for people with severe mental illness. Cochrane Database of Systematic Reviews , (2):CD003080

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Supported employment	Care as usual	Relative (95% CI)	Absolute		
Employment - not in competitive employment at 36 months (follow-up 36 months)												
1	Randomized trials	Serious[1]	No serious inconsistency	Serious[2]	No serious imprecision	None	111/127 (87.4%)	123/129 (95.3%)	RR 0.92 (0.85 to 0.99)[3]	76 fewer per 1000 (from 10 fewer to 143 fewer)	⊕⊕OO LOW	IMPORTANT
								0%		-		
Prevention of relapses - admission to hospital (follow-up 36 months)												
1	Randomized trials	Serious[1]	No serious inconsistency	Serious[2]	No serious imprecision	None	50/127 (39.4%)	61/129 (47.3%)	RR 0.83 (0.63 to 1.1)[3]	80 fewer per 1000 (from 175 fewer to 47 more)	⊕⊕OO LOW	CRITICAL
								0%		-		
Disability												
0	No evidence available					None	-	-	-	-		
								0%		-		
Users' and families' satisfaction with care												
0	No evidence available					None	-	-	-	-		IMPORTANT
								0%		-		

[1] It was not possible for participants or those administering the intervention to be masked to the participants' allocation status. Therefore, none of the studies were double-blinded.
[2] Only one study contributed to the analysis
[3] RR>1 favours control

Table 2

Author(s): Lorenzo Tarsitani and Corrado Barbui
Question: Should supported employment be used in adults with severe mental illness when compared to other vocational approaches?
Bibliography: Kinoshita Y, Furukawa TA, Kinoshita K, Honyashiki M, Omori IM, Marshall M, Bond GR et al. (2013). Supported employment for adults with severe mental illness. Cochrane Database of Systematic Reviews, Sep 13;9:CD008297

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Supported employment	Other vocational approaches	Relative (95% CI)	Absolute		
Employment - obtained any job during the study (follow-up 6-24 months)												
7	Randomized trials	Serious[1]	Serious[2]	No serious indirectness	No serious imprecision	None	312/501 (62.3%)	91/450 (20.2%)	RR 3.24 (2.17 to 4.82)[3]	453 more per 1000 (from 237 more to 772 more)	⊕⊕OO LOW	IMPORTANT
								0%		-		
Prevention of relapses - Number of participants admitted to hospital (follow-up 18 to 24 months)												
2	Randomized trials	Very serious[4]	No serious inconsistency	No serious indirectness	No serious imprecision	None	53/222 (23.9%)	78/233 (33.5%)	RR 0.71 (0.53 to 0.96)[5]	97 fewer per 1000 (from 13 fewer to 157 fewer)	⊕⊕OO LOW	CRITICAL
								0%		-		
Disability - Global/Social functioning (follow-up 18 to 36 months; measured with: Average endpoint general functioning score - GAS (high = better); Better indicated by higher values)												
3	Randomized trials	Serious[1]	No serious inconsistency	No serious indirectness	Serious[6]	None	317	306	-	MD 0.70 lower (2.82 lower to 1.41 higher)[7]	⊕⊕OO LOW	IMPORTANT
Users' and families' satisfaction with care												

0	No evidence available					None	-	-	-	-		IMPORTANT
								0%		-		

[1] It was not possible for participants or those administering the intervention to be masked to the participants' allocation status. Therefore, none of the studies were double-blinded.
[2] I squared = 74%
[3] RR>1 favours Supported Employment
[4] In one out of two studies dropout rate is > 30%. Participants could identify the given intervention by contents of the program in both studies.
[5] RR>1 favours control
[6] CI includes both no effect and appreciable benefit.
[7] MD>0 favours supported employment

Additional evidence not mentioned in GRADE tables

As there was limited direct evidence available on recovery-oriented strategies enhancing vocational and economic inclusion for people with psychotic disorders, including schizophrenia and bipolar disorder, studies including people with other mental and neurologic disorders were included to address the scoping questions.

Systematic reviews and guidelines:

Bond GR, Drake RE and Becker DR (2012). Generalizability of the Individual Placement and Support (IPS) model of supported employment outside the US. World Psychiatry, 11:32-9.
This systematic review compared 9 US to 6 non-US randomized controlled trials of the Individual Placement and Support model (IPS) of supported employment for patients with severe mental disorders. The overall competitive employment rate for IPS clients in US studies was significantly higher than in non-US studies (62% vs. 47%). The employment outcomes strongly favoured IPS over a range of comparison interventions in international studies. It concluded that that IPS is an evidence-based practice that may transport well into new settings as long as programs achieve high fidelity to the IPS model, but further research is needed on international adaptations.

Luciano A, Bond GR and Drake RE (2014). Does employment alter the course and outcome of schizophrenia and other severe mental illnesses? A systematic review of longitudinal research. Schizophrenia Research, 159(2-3):312-21
This systematic review synthesized prospective evidence to assess whether achieving employment alters the course of schizophrenia-spectrum disorder. A total of 12 analyses representing eight cohorts (6844 participants) compared illness course over time by employment status in patients with severe mental disorders. Employment was consistently associated with reductions in outpatient psychiatric treatment and improved self-esteem. Employment was inconsistently associated with positive outcomes in several other areas, including symptom severity, hospitalization, life satisfaction, and global wellbeing. Employment was consistently unrelated to harms.

NICE (2008). Drug misuse – psychosocial interventions. ***National Clinical Practice Guideline*****, Number 51.**
These recommendations are based on a systematic search for RCTs that assessed the efficacy and/or safety of pre-vocational training, supported employment and enhanced vocational interventions. For pre-vocational interventions, two trials (Hall 1977; Zanis2001) met the eligibility criteria, providing data on 150 participants. The two included trials found some positive data suggesting pre-vocational training may improve the likelihood of being placed in a job for at least 1 day. For supported employment, no trials met the eligibility criteria. Further research is required.

NICE (2014). Psychosis and schizophrenia in adults: treatment and management. Clinical guideline 178. Available at URL: guidance.nice.org.uk/cg178
Employment, education and occupational activities recommendations included the following:
1.5.8.1 "Offer supported employment programmes to people with psychosis or schizophrenia who wish to find or return to work. Consider other occupational or educational activities, including pre-vocational training, for people who are unable to work or unsuccessful in finding employment." [new 2014]
1.5.8.2 "Mental health services should work in partnership with local stakeholders, including those representing black, Asian and minority ethnic groups, to enable people with mental health problems, including psychosis or schizophrenia, to stay in work or education and to access new employment (including selfemployment), volunteering and educational opportunities." [2009; amended 2014]
1.5.8.3 "Routinely record the daytime activities of people with psychosis or schizophrenia in their care plans, including occupational outcomes."

WHO (2008). Guidelines for the Psychosocially Assisted Pharmacological Treatment of Opioid Dependence.
http://www.who.int/substance_abuse/publications/Opioid_dependence_guidelines.pdf
Vocational training includes a range of programmes designed to help patients find and retain employment. The guidelines concluded that vocational training can include skills training, sheltered work environments and monitoring of medication use during employment (Magura, 2007; Silverman , 2001; Platt &Metzger , 1985)

Randomized studies:
Mueser KT, Bond GR, Essock SM, Clark RE, Carpenter-Song E, Drake RE and Wolfe R (2014). The effects of supported employment in Latino consumers with severe mental illness. Journal Psychiatric Rehabilitation, 37:113-22.
(Randomized Controlled Trial)
This RCT evaluated the effectiveness of supported employment compared with 2 other vocational rehabilitation programs in 3 ethnic/racial groups of individuals with severe mental illness: Latinos (64), non-Latino African Americans (91), and non-Latino Whites (43). Latinos randomized to supported employment had better competitive and all-paid work outcomes than those assigned to either standard services or the comparator "psychosocial clubhouse program". Rates of competitive work for consumers in supported employment were comparable across all 3 racial/ethnic groups. Supported employment was effective at improving competitive work in Latinos with severe mental illness.

Non-systematic literature reviews:

Marino LA and Dixon LB (2014). An update on supported employment for people with severe mental illness. Current Opinions in Psychiatry, May;27(3):210-5.
Individual Placement and Support (IPS) is an effective intervention for helping people with severe mental illness obtain competitive employment, yet it has not been widely implemented. Newer research is exploring non-vocational outcomes, such as quality of life and mental health services utilization and expanding the reach of IPS to include different countries and different population groups. There is also a growing literature exploring the cost-effectiveness of IPS compared with traditional vocational services, which favours IPS. Although the field of research continues to expand, it is clear that many barriers remain to broad implementation of IPS. The solution goes beyond further research and involves policies and practices that support a recovery oriented mental healthcare system.

Marshall T, Goldberg R, Braude L, Dougherty RH, Daniels AS, Ghose SS, George P et al (2014). Supported employment: assessing the evidence. *Psychiatric Services* 2014;65:16-23
Supported employment for individuals with mental disorders has consistently demonstrated positive outcomes, including higher rates of competitive employment, fewer days before the first competitive job, more hours and weeks worked, and higher wages. But how to expand the supported employment model to meet demand remains an open question, according to the authors of this review. Supported employment is a direct service with multiple components designed to help adults with mental and/or substance use disorders choose, acquire, and maintain competitive employment. Substantial evidence demonstrates the effectiveness of supported employment. Policy makers should consider including it as a covered service.

Sharker D (2013). Microfinance for Disabled People: How is it Contributing? Research Journal of Finance and Accounting, 4:9
Microfinance Institutions (MFIs) overlooked the responsibility to include disabled people into their mainstream program. Disabled people face extreme poverty and discrimination from family, society, institutions as well as government. Though it is claimed that microfinance aids poverty reduction, empowerment of poor and vulnerable people, there are very few examples of microfinance serving disabled people. Some MFIs or donor funded projects piloted some global experiments and found that disabled people are economically active. Disabled people also appear as the best clients, self-employed and confident, constituting a good market segment for MFIs. But locating and including disabled people in the conventional microfinance practices is also challenging. Providing a loan or savings service is not enough for them, but MFIs could offer credit plus approaches, recruit disability-friendly staff by developing policies for more concentration and implementation and including disability issue in the training curriculum to change mindset of staff etc. Beyond that, MFIs might build strategic partnerships with Disabled Peoples Organizations (DPOs) to facilitate information sharing, better access and ensure financial inclusion. This article focused on several issues of disability and poverty, forms of discrimination and obstacles faced by disabled people to get access to microfinance, contribution of microfinance for these disadvantaged people, challenges of MFIs for designing specific program and financial inclusion for disabled people.

Slade M (2014). Uses and abuses of recovery: implementing recovery-oriented practices in mental health systems. World Psychiatry, 13:12-20.
This narrative and non-systematic review identified individual placement and support among key empirically-validated interventions which support recovery, by targeting key recovery processes of connectedness, hope, identity, meaning and empowerment. Ten empirically-validated interventions were identified which support recovery, by targeting key recovery processes of Connectedness, Hope, Identity, Meaning and Empowerment (the CHIME framework). The ten interventions are peer support workers, advance directives, wellness recovery action planning, illness management and recovery, the REFOCUS intervention, strengths model, recovery colleges or recovery education programs, individual placement and support, supported housing, and mental health trialogues.

Thornicroft G and Tansella M (2013). The balanced care model for global mental health. *Psychological Medicine*, 43:849-63.
(Review)
Rates of unemployment among people with mental disorders are usually much higher than in the general population. Traditional methods of occupation have not been shown to be effective in leading to open market employment. For settings with medium levels of resources it is reasonable at this stage to make pragmatic decisions about the provision of work and day care services, especially based upon the priorities and preferences of the patient/service user and carer/family members concerned, where this is focusing increasingly upon the importance of personal recovery. At the same time, it is reasonable to take into account the accumulating evidence for supported employment models

<u>Observational studies:</u>

Chatterjee S, Patel V, Chatterjee A and Weiss HA (2003). Evaluation of a community-based rehabilitation model for chronic schizophrenia in rural India. British Journal of Psychiatry, 182:57-62.
This longitudinal study of outcomes in patients with chronic schizophrenia compared Community-Based Rehabilitation (CBR) with Out Patient Care (OPC). Outcome measures were assessed using the Positive and Negative Symptom Scale and the modified WHO Disability Assessment Schedule at 12 months. Altogether, 207 participants entered the study, 127 in the CBR group and 80 in the OPC group. Among the 117 fully compliant participants, the CBR model was more effective in reducing disability, especially in men. Within the CBR group, compliant participants had significantly better outcomes compared with partially compliant or non-complaint participants ($P<0.001$). Although the participants in the CBR group were more socially disadvantaged, they had significantly better retention in treatment. The study concluded that the Community-Based Rehabilitation model is a feasible model of care for chronic schizophrenia in resource-poor settings.

Chatterjee S, Pillai A, Patel V (2009). Outcomes of people with psychotic disorders in a community-based rehabilitation programme in rural India. British Journal of Psychiatry, 195(5):433-9.
This study describes the scaling up and impact of a community-based rehabilitation programme for people with psychotic disorders in a very-low-resource setting. People with psychotic disorders who had been ill for an average of 8 years in a rural Indian community received a community-

based intervention package comprising psychotropic medications, psychoeducation, adherence management, psychosocial rehabilitation and support for livelihoods. The primary outcome was change in disability scores. The sample consisted of 256 people with psychotic disorders (schizophrenia, bipolar affective disorder and other psychosis) of whom 236 people completed the end-point assessments (92%), with a median follow-up of 46 months. There were significant reductions (P<0.05) in the levels of disability for the cohort, the vast majority (83.5%) of whom engaged with the programme. On multivariate analyses, lower baseline disability scores, family engagement with the programme, medication adherence and being a member of a self-help group were independent determinants of good outcomes. Lack of formal education, a diagnosis of schizophrenia and dropping out of the programme were independent determinants of poor outcomes. The study concluded that community-based rehabilitation was a feasible and acceptable intervention with a beneficial impact on disability for the majority of participants with psychotic disorders in low-resource settings. The impact on disability is influenced by a combination of clinical, programme-raleted and social determinants.

Gilmore DS, Wachen JS, Timmons JC and Butterworth J (2000). An Analysis of Trends for People with MR, Cerebral Palsy, and Epilepsy Receiving Services from State VR Agencies. Ten Years of Progress. Rehabilitation Counseling Bulletin, 44:30-38.
This observational study was a secondary analysis of the RSA-911 database from the Rehabilitation Services Administration. All successful Vocational Rehabilitation (VR) closures for individuals with mental retardation, cerebral palsy, and epilepsy for five data points between 1985 and 1995 were investigated. Trends in the use of competitive employment versus sheltered workshops and employment outcomes (hours and earnings) were examined as well as the use of supported employment in the VR system and its outcomes. An additional analysis of the impact of the 1992 Rehabilitation Act amendments was also included. Findings include increased incidence of competitive employment and supported employment services but a decrease in real earnings.

Gustafsson G and Prave I (1972). Active work for epileptics who would otherwise be institutionalized. Epilepsia. 13:75-7.
This observational study showed that if sheltered work of sufficient quality and variety is provided, especially if there are good living quarters and a certain amount of social guidance and supervision, many people with epilepsy and other neurological disorders could live and work outside institutions, benefitting not only to themselves but also society. .

Suresh Kumar PN (2008). Impact of vocational rehabilitation on social functioning, cognitive functioning, and psychopathology in patients with chronic schizophrenia. Indian Journal of Psychiatry, 50:257-61.
(Observational study)
This study compared 34 patients with DSM IV diagnosis of chronic schizophrenia with 40 patients with same diagnosis but not attending vocational rehabilitation (using PANSS, SCARF social functioning index and MMSE). It concludes that there is a definite limitation in the domains of social functioning, cognitive functioning and psychopathology in chronic schizophrenia patients who had no rehabilitation. However vocational rehabilitation significantly improves these limitations, which in turn help these patients to integrate into the society so as to function efficiently in their roles as parents, home makers and social beings.

Thara R et al (2008). Community mental health in India: A rethink. *International Journal of Mental Health Systems*. Available at URL: http://www.ijmhs.com/content/2/1/11
(Observational study)
Background: The Schizophrenia Research Foundation (SCARF), an NGO in Chennai had established a community clinic in 1989 in Thiruporur, which was functional until 1999. During this period various programmes such as training of the primary health center staff, setting up a referral system, setting up of a Citizen's Group, and self-employment schemes were initiated. This observational study reports a follow up in 2005 to determine the present status of the schemes as well as the current status of the patients registered at the clinic.
Methods: 185 patients with chronic mental illness were followed up and their present treatment status determined using a modified version of the Psychiatric and Personal History Schedule (PPHS). The resources created earlier were assessed and qualitative information was gathered during interviews with patient and families and other stakeholders to identify the reasons behind the sustenance or failure of these initiatives.
Results: Of the 185 patients followed up, 15% had continued treatment, 35% had stopped treatment, 21% had died, 12% had wandered away from home and 17% were untraceable. Of the patients who had discontinued treatment 25% were asymptomatic while 75% were acutely psychotic. The referral service was used by only 15% of the patients and mental health services provided by the PHC stopped within a year. The Citizen's group was functional for only a year and apart from chicken rearing, all other self-employment schemes were discontinued within a period of 6 months to 3 years.
There were multiple factors contributing to the failure, the primary reasons being the limited access and associated expenses entailed in seeking treatment, inadequate knowledge about the illness, lack of support from the family and community and continued dependence by the family on the service provider to provide solutions.
“Community-based initiatives in the management of mental disorders however well-intentioned will not be sustainable unless the family and the community are involved in the intervention program with support being provided regularly by mental health professionals”.

Qualitative studies and case/pilot studies:

Higgins L, Dey-Ghatak P and Davey G (2007). Mental health nurses' experiences of schizophrenia rehabilitation in China and India: a preliminary study. International Journal of Mental Health Nursing, 16:22-7.
This paper reports preliminary open-ended discussions with mental health nurses in China and India in order to gain insights into the cultural and social issues that surround social rehabilitation of patients with schizophrenia. Rehabilitation methods included cognitive behavioural therapy, psychosocial methods, and employment/vocational training. Several cultural and social issues drive the rehabilitation process in both countries, including the use of traditional medicine and healers, emphasis on family involvement, stigma, gender inequality, and lack of resources. The study also highlights the marked differences in attitudes, values, and behaviours across cultural groups that need to be considered by nursing professionals to ensure that services are culturally competent. In both countries, success was hampered by lack of resources. A need for qualified

staff was identified, as well as a need for more resources around education and awareness efforts and patient confidence building. In Northern India, 25% of participants secured non-skilled labour following rehabilitation.

Raja S, Underhill C, Shrestha P, Sunder U, Mannarath S, Wood SK and Patel V (2012). Integrating Mental Health and Development: A Case Study of the Basic Needs Model in Nepal. PLoS Medicine, 9(7): e1001261. doi:10.1371/journal.pmed.1001261

BasicNeeds was founded in 2000 and developed its community-based integrated Mental Health and Development (MHD) model, inspired by development theory, which emphasizes user empowerment and community development, as well as strengthening health systems and influencing policy in LAMICs. This paper is focused on a description of one MHD program in Nepal. Interventions include involvement of persons with mental disorders and families in skills assessment and training on livelihoods activities.

Society for Disability Studies (2009). Access to Mainstream Microfinance Services for Persons with Disabilities — Lessons Learned from Uganda. Disability Studies Quarterly, 29:1.

This article reports from a pilot project in Uganda where the aim is to enable persons with disabilities to have access to mainstream microfinance services. Several lessons have already been learned: 1) entrepreneurs with disabilities are an untapped market opportunity for Micro Finance Institutions (MFIs); 2) to influence MFIs, it is important to understand their business model and team up with key actors from the industry; 3) persons with disabilities are often misinformed about MFIs' terms and services and don't know how to tap these opportunities. Gradually a change in attitudes in MFIs and Disabled Peoples Organizations (DPOs) is observed. All MFIs participating in the project now report an increase in the number of clients with disabilities served outside of the context of economic incentives.

<u>Reports and statements:</u>

WHO (1996). Psychosocial rehabilitation – a consensus statement. Geneva: World Health Organization.

“Vocational rehabilitation and employment. The importance of work and employment for people disabled by mental disorders cannot be overemphasized. Working and having a job increases the consumer’s satisfaction and self-esteem and breaks the cycle of poverty and dependence. In addition, work gives an opportunity to socialize and communicate. Therefore, it is essential to set up vocational training activities that are related to real and concrete work experiences. Some individuals may also greatly benefit from specific pre-vocational training as well as from transitional employment programmes. Vocational training should start in hospital settings and later move outside to protected workshops in contact with the labour market. An effective solution to the sometimes variable health of people disabled by mental disorders could be the creation of self-sufficient enterprises which, whilst ensuring permanent jobs for those people are organized in a very flexible way as cooperatives – or social enterprises. Having an independent income is a powerful tool in enhancing consumer empowerment” (p.5 and 6). “Social support networks. Social support networks are an enduring set of human relationships experienced by individuals in a positive light that are likely to have a lasting impact on their life through the exchange of emotional, physical, economical and intellectual influence. They work mostly by strengthening the individual’s cooping ability. Social support has a positive effect on mental health which may be direct (mental health is improved, irrespective of any stressors to which

the individual may be exposed) or indirect (a “buffer” effect, which manifests itself only when the individual is exposed to stressors). They can also provide an integrated and comprehensive framework for all PSR services available.” (p.6)

WHO (2006). Disease Control Priorities Related to Mental, Neurological, Developmental and Substance Abuse Disorders; chapter 3 - Learning and Developmental Disabilities. Available at URL: http://whqlibdoc.who.int/publications/2006/924156332x_eng.pdf
Community-based rehabilitation programs in the Philippines and Zimbabwe found gains in activities of daily living and communication as well as higher rates of starting school and employment after six months in the program (Lagerkvist 1992). Similarly, people with disabilities participating in a community-based rehabilitation program in Botswana showed high levels of independence in activities of daily living; 20 percent of adults were working, and most school-age children were attending class (Lagerkvist, 1992; Lundgren-Lindquist & Nordholm, 1996).

PART 2: FROM EVIDENCE TO RECOMMENDATIONS

Quantitative summary of evidence

Outcome	**Supported employment versus standard care** *(Number of studies, RR [95% CI], quality)*	**Supported employment versus other vocational approaches** *(Number of studies, RR [95% CI], quality)*
Employment	1 study RR 0.92 (0.85 to 0.99) In favour of supported employment LOW	7 studies RR 3.24 (2.17 to 4.82) In favour of supported employment LOW
Prevention of relapses	1 study RR 0.83 (0.63 to 1.1) LOW	2 studies RR 0.71 (0.53 to 0.96) In favour of Supported employment LOW
Disability/Functioning		2 studies MD -0.70 (-0.53 to 0.96) LOW
Users' and families' satisfaction		

Benefits	The efficacy of different types of recovery-orientated interventions that enhance vocational inclusion and employment of people with psychotic disorders has been investigated by means of both randomized and observational studies. **Findings from Randomized evidence:** In terms of the proportion of patients obtaining any job, just one randomized study provides evidence that supported employment significantly increased levels of any employment compared to standard care and other vocational approaches. The evidence is inconclusive and therefore it is unclear if supported employment, when compared to standard care, is associated with a reduction in hospitalizations. However, in comparison with other vocational approaches, supported employment was significantly more effective in reducing hospitalization. In terms of global functioning, there is evidence that supported employment was significantly more effective than other vocational approaches. In terms of users' and families' satisfaction with care no evidence was available. **Findings from observational evidence:** Evidence collected from other systematic reviews, observational studies and guidelines recommendations indicate that : - Community-Based Rehabilitation has shown better outcomes than outpatient care as usual in reducing disability and improving treatment adherence. - Observational evidence found that vocational rehabilitation increases social and cognitive functioning. - Supported Employment is more effective than pre-vocational training in helping severely mentally ill people to obtain competitive employment.

	No evidence has been found about the effect of psychosocial interventions on economic inclusion of people with neurological and substance use disorders.
Harms	No significant harm has been reported.
Summary of the quality of evidence	The quality of the evidence available was LOW.

Value and preferences	
In favour	Communities and the society value recovery-oriented psychosocial interventions, which also improve social inclusion of people with severe mental, neurological and substance use disorders and their family members/caregivers, reduce disability and prevent human rights violations. Strategies which enhance vocational and economic inclusion and opportunities support recovery by targeting key recovery processes. An intersectoral approach is required to mobilize resources and strategies which enhance vocational and economic inclusion.
Against	Some schemes can marginalise groups if the intervention does not encourage community engagement in real-world settings.
Uncertainty or variability?	Major variability in values and preferences possibly effected by the manner in which the intervention is delivered.

Feasibility (including resource use considerations)	Involvement of the family and the community in recovery-oriented psychosocial intervention programs are crucial to their sustainability. Supported employment may be a resource intensive approach, which may not be feasible in low income countries Supported employment may be dependent on the wider economic context of the community.
Uncertainty or variability?	May be demanding of resources in some areas.

Recommendation and remarks

Recommendation

Recovery-oriented strategies enhancing vocational and economic inclusion (e.g. supported employment) can be offered for people with psychosis (including schizophrenia and bipolar disorder). Such strategies should be contextualised to their social and cultural environment, using formal and non-formal recovery-oriented interventions that may be available, and using a multisectoral approach.

Rationale: Randomized evidence supporting the efficacy of recovery-oriented strategies enhancing vocational and economic inclusion 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 recovery-oriented strategies enhancing vocational and economic inclusion, 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

Non-specialist health care providers should facilitate opportunities for people with psychosis and their families/caregivers to be included in economic activities in real world settings. Implementation of recovery-oriented psychosocial intervention programs requires a multisectoral approach such as collaboration with housing, employment, education and social sector.

Judgements about the strength of a recommendation

Factor	Decision
Quality of the evidence	□ High □ Moderate **X Low** □ Very low
Balance of benefits versus 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**

[i] McMaster University search strategy: (http://hiru.mcmaster.ca/hiru/HIRU_Hedges_MEDLINE_Strategies.aspx).

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