ORIGINAL PAPER

Who Benefits from Peer Support in Psychiatric Institutions?

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Abstract This study examines the influence of recovery-oriented peer events on participants' recovery attitudes and explores who benefits most from such events. Changes in participants' recovery attitudes were evaluated (pre, post, follow-up), and compared with changes of control groups. Distributions of recovery-related values in subgroups were analyzed descriptively. The results of non-parametric tests (Friedman) showed participants with significantly higher values in the dimension Recovery is possible directly after the interventions (P = 0.006), but not 6 months later, and not in comparison with members of control groups. On a descriptive level, women, participants with schizophrenia and with two or more episodes of the disorder showed higher recovery-related values compared to men, participants with an affective disorder and only one episode. Within their feedback, organizations and peers express a positive view of peer support, but evidence for a positive impact of the evaluated peer events on recovery attitude is limited.

Keywords Peer support · User involvement · Recovery · Mental health

Introduction

A more positive, more person- and health-oriented approach in psychiatric services has recently been gaining ground, namely the Recovery approach, which was first criticized as

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being only "old wine in new bottles" [1, 2]. The growing interest in the Recovery concept can be seen in the fact that it is widely discussed and implemented in psychiatric services [3]. Unfortunately, however, it has acquired slightly different meanings [4, 5] and is implemented differently [6]. In the context of the study at hand, based on the definition of Slade et al. [5], Recovery is understood as a personal process in which individuals with a psychiatric disorder live a meaningful, active and content life, even with a psychiatric disability or ongoing symptoms [5, 7]. Basic to the Recovery concept is the focus on health and not on symptoms or the length or number of episodes of a psychiatric disorder. Furthermore, the recovery concept includes the fostering of hope and self-determination of the person, the acquisition of knowledge about the disorder and the possibilities of recovering. The aim of life satisfaction and the added involvement of peers [8, 9] are also mentioned in the according literature. A Recovery oriented approach in the treatment of persons with a psychiatric disorder starts from the assumption that involving trained peers or service users who are at a further point in their recovery process compared to those currently concerned is a promising strategy [10]. Peers are expected to have better social and emotional access to the individuals concerned than professionals [11]. Peer friendships can give a sense of connectedness to society, which can be transferred into natural community settings and activated in a supported employing-process [12]. The realization of a recovery-oriented practice and the involvement of peers in the treatment of individuals with a psychiatric disorder was first implemented in English speaking areas [13]. Meanwhile, the number of peer-supported or operated groups and services has outpaced traditional mental health services in the United States [6, 14, 15].

The forms of peer involvement as well the preparatory training for becoming a peer vary greatly. They range from no training (just the fact of having experienced a psychiatric disorder) over training of a few hours to longer training sessions. Two well-known and widely implemented examples of recovery-oriented peer support are the peer-to-peer program of the national alliance on mental illness (NAMI), and wellness recovery action planning (WRAP). The NAMI-project has offered—through its affiliates in 24 states—nine sessions (2 h each) of peer-to-peer support to mental health consumers in the US since 2000 [16]. Its effectiveness on participants' level of knowledge and illness-management, empowerment, confidence and social contacts has been evaluated positively [17]. The WRAP-project offers an 8-12-week program to consumers (2.5 h a week) for hope and recovery-orientation [18]. It was designed to help participants identify a variety of internal and external resources in order to facilitate the recovery process. It has also been evaluated in several studies and has been found to be effective for the level of recovery-related attitudes and knowledge [19–21], self reported symptoms and physical health [20]. All the evaluations mentioned measured recovery-related outcomes solely within a single-group, pre-post intervention design without comparison to a control group.

In Europe, peer education or training and subsequent engagement is, apart from smaller examples, undertaken by the transnational project EX–IN Europe [22]. The project aims at qualifying persons (in about 300 h of training) with lived experiences in mental health distress to work as supporters in mental health services. The impact of the EX–IN Europe training on the training members as well as on their clients has not yet been systematically analyzed. In Switzerland, peer support in a psychiatric setting has just become known in the last 2 years. Collaboration between a group in Switzerland and EX–IN Europe started in 2010. As the first in Switzerland, the Foundation Pro Mente Sana started a project in 2007, training persons (in 40 h of training) with expert knowledge of a psychiatric disorder to offer group sessions in psychiatric services. This project, whose impact on recovery



relevant attitudes is analyzed in this paper, will be described in more detail elsewhere in the paper.

The positive outcomes on recovery-oriented attitudes or the recovery orientation have been shown with the evaluations of the peer-projects described above and by other lesser known peer projects [23–25]. However, the evidence for peer-supported services seems to be weak [6]. Rogers et al. found in their systematic review that peer involvement delivered in a group context can be helpful for the engagement and retention of persons in mental health services [6]. But the difficulty remains that the different forms of training and the form and circumstances of peer-supported groups vary considerably. In addition, most of the studies conducted so far analyzed only short term effects of peer-to-peer interventions [17, 19–21, 24]. Thus, it remains unclear, whether observed positive effects of peer interventions are sustained over time.

The goal of this study was to analyze the influence of recovery-oriented peer interventions on recovery-related attitudes of persons with a psychiatric disorder. A further aim was to explore person- and disorder-related specifics to answer the question of whom peer support benefits the most. The research questions therefore are: Do the recovery-related attitudes of persons with a psychiatric disorder differ before and after one (or several) interventions? Do participants of peer interventions reveal more positive recovery-related attitudes compared with members of a control group? Do the peer interventions have different effects on different groups of participants or patients?

Methods

Sampling and Study Design

Psychiatric institutions or mental health services in any setting (wards or rehabilitative institutions for employment, leisure, social functioning or housing) hosted the subsequently described peer interventions. The participants in the present study represent a convenience sample, since they were recruited in institutions offering peer-to-peer trainings to their clients. Persons included were women and men of any age in any kind of psychiatric institution with different psychiatric disorders and both different durations of disorder and numbers of episodes. Those excluded were participants with such restriction of cognitive and language skills as to make it impossible to take part in the peer interventions and to fill in the questionnaire. Most of the institutions that could be gained for the interventions were from the outpatient sector. In the in-ward sector—with patients from two psychiatric hospitals—it was possible to match experimental and control groups due to the fact that most wards had a kind of twin or comparable ward. The criterion to match was the patient group concerning main diagnosis, age and therapeutic treatments.

This study uses a quasi-experimental design (control group, but no randomization) with repeated measures. Measurement points for the experimental group were 1–2 days prior to (one or several) peer interventions (t_1) , immediately afterwards (t_2) and 6 months later (t_3) ; for the control group, 1–2 days before (t_1) as well as 6 months after (t_3) the interventions.

Training and Subsequent Peer Interventions

The Swiss Foundation Pro Mente Sana started a project, training 24 persons (three of them men) with various psychiatric disorders in 2007. The training lasted 40 h over a period of 3 months. The peers were trained to reflect and report on their own history of illness and



recovery and to conduct a discussion. They were prepared to offer group sessions in pairs, for persons with a psychiatric disorder in psychiatric services. The training was goal-oriented and much shorter than the NAMI, WRAP or EX–IN-trainings, but consisted of comparable contents, namely reflecting on, recounting and presenting one's own recovery, empowering oneself and others, managing crisis and promoting strengths, hope and faith. The subsequently offered peer-to-peer interventions consisted of a part within which peers reported on their own health-related life history. Another was a discussion part within which participants could ask questions and discuss specific issues. The main target of these peer interventions was to promote hope and increased use of self-help possibilities according to the Recovery concept. The interventions could be offered by psychiatric services once or several times. They covered a period from June 2008 to May 2009, with the follow-up interviews in December 2009.

Thirty three interventions could be conducted during that timeframe, of which 27 were in the outpatient sector and six in a psychiatric admissions ward. They were hosted mostly as one-time-only interventions, with a second intervention occurring only 3 times and a third, only once. Each session lasted 2.5 h. The number of participants ranged from 4 to 50 people, but took place mostly with ten participants (mode 10). Professionals could join the sessions. Out of the 33 interventions, 19 groups could be evaluated, six of them served as control groups. The control groups received no interventions during the timeframe of the project.

Study Participants

Participants from 13 experimental groups (n = 115) and six control groups (n = 34) were surveyed regarding their Recovery attitudes. The sample is described in Table 1.

The experimental and control groups did not differ significantly in any of the variables: sex ($\chi^2 = 1.3$, P = 0.51), age (U = 37, P = 0.59), marital status ($\chi^2 = 0.54$, P = 0.91), working situation ($\chi^2 = 4.1$, P = 0.12), living situation ($\chi^2 = 2.4$, P = 0.65), episodes of disorder ($\chi^2 = 2$, P = 0.36), and diagnosis ($\chi^2 = 7$, P = 0.93).

Data Collection

Questionnaires for Measuring Recovery

The Recovery Attitudes Questionnaire 7 (RAQ 7) and the Recovery Process Inventory (RPI) were used to assess participants' recovery attitudes and potential changes in these attitudes over time. The two questionnaires are described in the following.

The Recovery Attitudes Questionnaire 7 (RAQ 7), developed by Borkin et al. [26] measures basic attitudes about Recovery with short, understandable items, and allows for the comparison of different attitudes towards Recovery [26, 27]. It is suitable for assessing changes in recovery relevant attitudes over time [26]. Factor analysis resulted in seven items which can be traced back to two underlying factors: Recovery is possible with four items, and Recovery is difficult and differs among people consisting of three items. The RAQ 7 has sufficient reliability and validity scores (Cronbach's alpha for factor Recovery possible was 0.65, factor Recovery difficult and differs 0.64, and 0.70 for both; Test–Retest Reliability 0.67, and 54% explained variance of the two factors).

The RPI developed by Jerrell et al. [28] shows psychosocial functioning, symptoms, satisfaction and recovery and is an outcome-measurement for a psychiatric institution. Psychometric testing resulted in six factors underlying 22 items: Anguish (8 items),



Table 1 Sample characteristics

	Experimental group $(n = 115)$	Control group $(n = 34)$
Sex		
Male	50 (43%)	12 (35%)
Age mean (sd)	42 (13.3)	43 (14.0)
Marital status		
Single	76 (66%)	22 (65%)
Divorced, separated, widowed	20 (17%)	7 (21%)
Married	17 (15%)	4 (12%)
Working situation		
Working in primary labor market	23 (20%)	10 (30%)
Working in sheltered workplace	71 (62%)	14 (42%)
Not working	20 (18%)	9 (27%)
Living situation		
Living alone	36 (31%)	12 (35%)
Living with partner/child	35 (30%)	10 (29%)
Assisted living	40 (35%)	12 (35%)
Episodes of disorder		
1×	21 (18%)	10 (29%)
2–5×	39 (34%)	11 (32%)
>5×	43 (37%)	10 (29%)
Diagnosis		
Affective disorder	34 (30%)	13 (38%)
Schizophrenia	47 (41%)	6 (18%)
Others	20 (17%)	10 (29%)
Unknown	14 (12%)	5 (15%)

Connection to others (3 items), Confidence and purpose (4 items), Others' care/help (3 items), Living situation (2 items), Hopeful/Care for self (2 items) [28]. The RPI has sufficient reliability and validity scores: internal consistency (Cronbach's alpha) ranges from 0.61 to 0.81, and explained variance of the six factors is 47.4%. So far, no study has been undertaken with the RPI to measure changes over time [28].

Both questionnaires were translated. The reliability of the translated questionnaire RAQ 7 indicated by Cronbach's alpha was 0.73 (factor *Recovery possible*), and 0.77 (factor *Recovery difficult*) and 0.68 for both; and for the RPI, 0.70 (*Anguish*), 0.68 (*Connection to others*), 0.66 (*Confidence and purpose*), 0.70 (*Other's care/help*), 0.72 (*Living situation*), 0.69 (*Hopeful/Care for self*), and 0.95 for all six categories.

Feedback from Institutions and Peers

In addition to questionnaire data, written feedback from the carrying psychiatric institutions and from the conducting peers was collected. They were asked about their satisfaction with the interventions as well their suggestions for improvement. Feedback from 24 institutions with peer interventions was analyzed descriptively.



Ethical Approval

After presenting our research project to the study participants, written informed consent was obtained. The ethical commission of Bern, Switzerland, examined the study protocol and approved it.

Results

Given the non-normal data distribution, hypothesized changes over time in recovery relevant attitudes of members of experimental groups were analyzed by non-parametric Friedman tests. Differences between Experiment and control group at baseline as well at the follow up 6 months later were analyzed with *U*-tests (Mann–Whitney). Varying effects of the described interventions on different subgroups were analyzed exploratorily. The reliability of the translated questionnaires was analyzed with Cronbachs' alpha on the factor-related level. The data was analyzed using the SPSS statistical package (version 12).

Differences Between Pre, Post and Follow-up and Between Experiment and Control Group

The participants of the peer interventions (experimental group) revealed significantly more positive attitudes in one out of two categories on *recovery is possible* from the RAQ 7 (mean ranks t_1 – t_2 = 1.38–1.62, means t_1 – t_2 = 3.66–3.82, P = 0.006**) after the interventions, but there was no significant effect after 6 months (mean ranks t_1 – t_3 = 1.53–1.47, means t_1 – t_3 = 3.70–3.64, P = 0.38). For the second factor of RAQ 7, *Recovery is difficult and differs among people*; there was no significant change between the measurement points. Also none of the categories from the RPI questionnaire showed any significance over the measurement times (error probability of 0.05 or less to indicate statistical significance). There was no overall significant change (questionnaires as a whole) between the measurement times.

The perception that Recovery is possible *before* the interventions was slightly lower for members of the control group (t_1 median 3.38) compared to members of experimental group (t_1 median 3.75). The perception that Recovery is possible showed nearly no difference between experimental and control group at the follow up 6 months later (t_3 median exp. Group 3.75, median control group 3.62), (Fig. 1). The difference was seen descriptively: experiment and control group did not differ significantly at baseline (t_1 U = 1804.5, P = 0.075), nor at the follow up 6 months later (t_3 U = 48.5, P = 0.943).

Do the Peer Interventions have a Varying Effect on different Consumer Groups?

One of the research questions was to clarify whether the peer interventions show different effects on different consumer groups. The variables diagnoses, number of episodes of disorder, and gender and the factor Recovery is possible of RAQ 7 were integrated in an explorative subgroup analysis. This factor (Recovery is possible) was chosen due to its significant change in perception after the interventions. The descriptive results follow.

Gender

Women and men did not differ from each other in their view that recovery is possible *before* the interventions (t₁ women median 3.75; men median 3.75); neither did male and



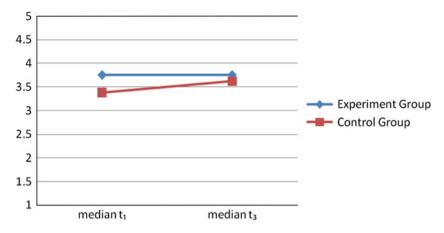


Fig. 1 Medians exp./control group with factor recovery is possible

female members of the control group differ (t_1 women median 3.75, men median 3.75). Just *after* the interventions the women's perception that recovery is possible was more distinct (t_2 median 4) but men's' perception did not change (t_2 median 3.75). Six months later, women still perceived a greater chance of recovery (t_3 median 3.87) compared with men (t_3 median 3.5), although both values decreased (Fig. 2). Women's perception of the possibility of recovery, although not significant, is still higher than before the intervention.

Diagnosis

The recovery-related values for participants in the experimental group *before* the interventions in terms of the variable *diagnosis* (*schizophrenia*, *affective disorders*, *others*) and the factor *recovery is possible*, are slightly higher for those with the diagnosis *schizophrenia* (t₁ median 3.75) compared to *other* (t₁ median 3.62) and *affective disorder* (t₁ median 3.25). Just *after* the interventions persons with the diagnosis schizophrenia perceived the possibility of recovery more distinctly, but again to a lesser extent at the follow-up 6 months later (t₂ med. schizophrenia 4, t₃ med. schizophrenia 3.75), (Fig. 3). The values for persons with another diagnosis (neurosis, personality disorder, addiction) did not change *just after* the interventions (t₂ median other 3.62), and decreased very slightly at the follow-up 6 months later (t₃ median other 3.5). The perception of participants with an affective disorder that recovery is possible grew stronger *just after* the interventions and remained as strong 6 months later (t₂ median affective disorder 3.75, t₃ median affective disorder 3.75) (Fig. 3).

Episodes of Disorder

With the variable *number of episodes* (1x, 2-5x, >5x) the participants with 2-5 and more than 5 episodes of their disorder perceive a possible recovery at exactly the same level at every measurement time $(t_1 \text{ medians } 3.75, t_2 \text{ medians } 4, t_3 \text{ medians } 3.75)$. They perceive recovery as possible more distinctly compared with those with 1 episode $(t_1 \text{ median } 3.5, t_2 \text{ median } 3.75, t_3 \text{ median } 3.5)$. All values for the perception that Recovery is possible with the variable *number of episodes* rose *just after* the interventions and decreased again 6 months later (Fig. 4).



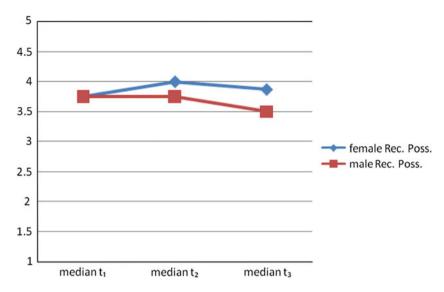


Fig. 2 Median recovery values t_1 – t_3 and gender, factor recovery is possible

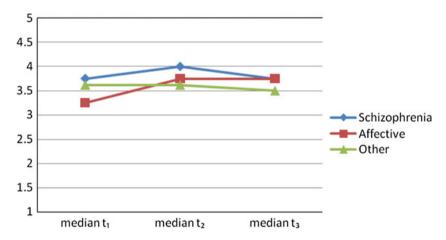


Fig. 3 Median recovery values t_1-t_3 and diagnoses, factor recovery is possible

Feedback

The overall feedback from 24 institutions was, without exception, very positive: the organizer gave the interventions (1 = very unsatisfied to 6 = very satisfied) a mean grade of 5.5 (range from 5 to 6). They reported the impression that the targeted aims (hope and health are "infectious") were reached. Two of them suggested discussing other mental disorders additional to those of the conducting peers. One acute ward stated that the peer intervention led to a participant's short-term crisis.

The peers conducting the interventions (n = 12) also mostly reported receiving positive reactions from their participants. Furthermore, the targeted topics and course of action could be dealt with in all settings. Twice the peers received feedback from participants that



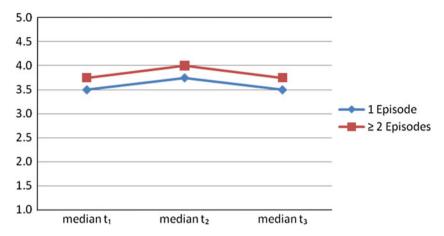


Fig. 4 Median recovery values t₁-t₃ and episodes of disorder, factor recovery is possible

they doubted ever being able to reach the same state of recovery as the peers. For example, one said "you were never in such a bad state as I am". At every event the peers stated their preference to conduct the interventions in pairs. The conducting peers described the presence of professionals at the peer interventions as less positive and at the same time less necessary in outpatient settings, but more positive and more necessary in in-ward settings.

Discussion

The aim of the present article was to determine the influence of recovery-oriented peer interventions on recovery-related attitudes of persons with a psychiatric disorder, and to explore whether the interventions show person- and disorder-related specifics. The events were analyzed by written feedback and by measuring participants' recovery relevant attitudes (pre, post and follow-up 6 months later) by means of two questionnaires. In addition to changes in recovery-relevant attitudes of the peer-to-peer interventions, as explored in previous research, participant groups were compared to control groups.

A difference in recovery-relevant attitudes before and just after the peer interventions, was shown to be significant for one of two factors (recovery is possible, recovery is difficult and differs among people) from the questionnaire RAQ 7. This backs up the strongly expressed perception by the participants that recovery is possible, compared to their perception before the interventions. Although experiment and control group did not differ significantly, the perception that recovery is possible was lower for members of the control groups at baseline, and their perception of the possibility to recover increased without interventions during the study time. This reflects probably the fact, that control groups could be formed out of the inward sector with persons being more acute diseased.

Another question of the current study was whether patients with certain characteristics might profit more than others from the peer-to-peer interventions. In attempting to answer this question, we analyzed the data on a merely descriptive level to determine whether patient characteristics like gender, the type of psychiatric diagnosis, or the number of previous episodes of the disorder have an impact on changes in recovery attitudes. It was hypothesized that the peers, as persons with an experienced psychiatric disorder, could act as role models for current patients [29]. Data exploring these person-related effects was



analyzed descriptively. Initially, i.e., before the intervention, women and men in the control and experimental groups perceived the possibility of recovery in the same way. Just after, and also 6 months after, the interventions women showed higher recovery-related values compared to men. These differences however, failed to reach statistical significance and were only observed on a descriptive level. Most of the trained peers in this project were women, hence it is not known if this fact could have influenced the results. But in line with our observations, Resnick et al. [30] in their study on recovery-orientations of persons with schizophrenia, found that being female was positively associated with more hope. Also Schon [31] found in her qualitative study that being female was related to a more positive recovery process, since women were more likely to make sense and meaning out of their disorder, while men tended to focus more on symptom control, occupation and independence. Taken together, existing evidence implies potential gender differences in the recovery process that should be taken into account in further studies, as Johnson and Stewart [32] and others recommend for every intervention involved with mental health.

Again, considered descriptively, for participants diagnosed with the disorder schizophrenia, the impression that Recovery is possible was slightly higher than for participants with an affective disorder or with another diagnosis (e.g., addiction). The recovery-oriented values of participants with the diagnosis schizophrenia were more positive just after the interventions, but decreased again at the follow-up 6 months later. Participants diagnosed with an affective disorder have the lowest perception of the possibility of recovery before the interventions, but show a clear increase just after and 6 months after the interventions. This increase is in line with study results showing a possible association of depressive symptoms and the recovery-orientation of a person [30].

Participants with two or more episodes of a disorder have a higher perception of the possibility of recovery compared to those with one episode at every measurement time. This may indicate that persons with a first episode could particularly benefit from recovery-oriented peer-interventions. Persons in their first episode of mental disorder usually first enter a traditional inpatient setting, at least in Switzerland, but recovery-oriented and peer-supported services are traditionally and still more often found in an outpatient, rehabilitative setting [6, 15, 33]. Moreover Tsai and Salyers [4] found that the recovery-orientation in state hospitals is significantly weaker than in community mental health settings and could be boosted by a person-centered and shared-decision making strategy [34].

Although this study failed to provide clear evidence for a positive impact of recoveryoriented peer interventions on clients' recovery attitudes, the written feedback from the
organizations and the conducting peers themselves all in all express great enthusiasm for
the peer interventions. Only once was it reported that the interventions led to a crisis for a
participant. But since the institutions chose to have such an intervention it could be argued
that they prepared themselves in a positive way and were thus biased. This study has
several further limitations: first of all fewer repeated interventions, especially within the
in-ward context, and fewer control groups than expected could be carried out and evaluated. The power of the results is moreover weakened by the fact that many questionnaires
were returned incomplete or were not filled in at every measuring point, as well as by a too
small sample. The response rate differed between control and experimental group, with
many fewer questionnaires returned by the control group.

Despite these limitations, the results of this study reinforce arguments for recoveryoriented peer support for persons with a first episode and for the inpatient sector, as well for peer support with a gender specific approach. This study analyzes—as first in German speaking areas—peer support within a follow-up design and in comparison with a control group. Additional research is needed to explore the effectiveness of recovery-oriented peer



support with regard to participants' person-related or sector specifics (in-ward or outpatient).

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References

- White WL: Recovery: old wine, flavor of the month or new organizing paradigm? Substance Use and Misuse 43(12–13):1987–2000, 2008.
- 2. Eplov LF, Kistrup KR, Lajer IM, et al.: Recovery and rehabilitation in the field of psychiatry: old wine in new bottles or a new concept with fresh content?. Ugeskr Laeger 167(11):1269–1271, 2005.
- 3. Meehan TJ, King RJ, Beavis PH, et al.: Recovery-based practice: do we know what we mean or mean what we know? Australian and New Zealand Journal of Psychiatry 42(3):177–182, 2008.
- Tsai J, Salyers MP: Recovery orientation in hospital and community settings. Journal of Behavioral Health Services & Research 37(3):385–99, 2008.
- Slade M, Amering M, Oades L: Recovery: an international perspective. Epidemiology Psychiatry Social 17(2):128–37, 2008.
- Rogers ES, Farkas M, Anthony WA, et al: Systematic Review of Peer Delivered Services Literature 1989-2009, http://drrk.bu.edu/research-syntheses/psychiatric-disabilites/peer-services ed. Edited by Center for Psychiatric Rehabilitation. Boston, http://drrk.bu.edu/research-syntheses/psychiatric-disabilites/peer-services, 2010.
- Knuf A: Vom demoralisierenden Pessimismus zum vernünftigen Optimismus. Eins Annäherung an das Recovery, Konzept. Soziale Psychiatrie 1:38–41, 2004.
- Resnick S, Fontana A, Lehman A, et al.: En empirical conceptualization of the recovery orientation. Schizophrenia Research 75:119–128, 2005.
- Amering M, Schmolke M (2006) Hoffnung Macht Sinn. Recovery-Konzepte in der Psychiatrie. Managed Care 1:20–22.
- Mueser KT, Corrigan PW, Hilton DW, et al.: Illness management and recovery: A review of the research. Psychiatric Services 53(10):1272–1284, 2002.
- Peebles SA, Mabe PA, Davidson L, et al.: Recovery and systems transformation for schizophrenia. Psychiatric Clinics of North America 30:567–583, 2007.
- 12. Barreira PJ, Tepper MC, Gold PB, et al.: Social value of supported employment for psychosocial program participants. Psychiatric Quarterly 82(1):69–84, 2011.
- 13. Amering M, Schmolke M: Recovery: Das Ende der Unheilbarkeit.s Bonn, Psychiatrie-Verlag, 2007.
- Goldstrom ID, Campbell J, Rogers JA, et al.: National estimates for mental health mutual support groups, self-help organizations, and consumer-operated services. Administration and Policy in Mental Health 33(1):92–103, 2006.
- Tsai J, Salyers MP, Lobb AL: Recovery-oriented training and ataff attitudes over time in two state hospitals. Psychiatric Quarterly 81(4):335–347, 2010.
- National Alliance on Mental Illness: NAMI: Peer-to-Peer, In: http://www.nami.org/template.cfm? section=Peer-to-Peer, vol 2011, National Alliance on Mental Illness, 2011.
- Lucksted A, McNulty K, Brayboy L, et al.: Initial evaluation of the peer-to-peer program. Psychiatric Services 60(2):250–253, 2009.
- Copeland Center 2011 what is wrap? In: www.copelandcenter.com Website , Recovery CCfWa. Prattleboro Copeland Center for Wellness and Recovery (Ed), 2011.
- 19. Starnino VR, Mariscal S, Holter MC, et al.: Outcomes of an illness self-management group using wellness recovery action planning. Psychiatric Rehabilitation Journal 34(1):57–60, 2010.
- 20. Cook JA, Copeland ME, Hamilton MM, et al.: Initial outcomes of a mental illness self-management program based on wellness recovery action planning. Psychiatric Services 60(2):246–249, 2009.
- Doughty C, Tse S, Duncan N, et al.: The wellness recovery action plan (WRAP): workshop evaluation. Australasian Psychiatry 16(6):450–456, 2008.
- Experienced Involvement: Experienced Involvement, In: http://www.ex-in.info/english Website ed, vol 2010, Website 2010.



- 23. Hutchinson D, Anthony W, Ashcraft L, et al.: The personal and vocational impact of training and employing people with psychiatric disabilities as providers. Psychiatric Rehabilitation Journal 29(3):205–213, 2006.
- Fukui S, Davidson LJ, Holter MC, et al.: Pathways to recovery (PTR): impact of peer-led group participation on mental health recovery outcomes. Psychiatric Rehabilitation Journal 34(1):42–48, 2010.
- Barber JA, Rosenheck RA, Armstrong M, et al.: Monitoring the dissemination of peer support in the VA healthcare system. Community Mental Health Journal 44(6):433

 –441, 2008.
- Borkin J, Steffen J, Ensfield L, et al.: Recovery attitudes questionnaire: development and evaluation. Psychiatric Rehabilitation Journal 24(2):95–107, 2000.
- Ralph RO, Kidder K, Phillips D: Can We Measure Recovery? A Compendium of Recovery and Recovery-Related Instruments. Cambridge, MA, The Evaluation HSRI Center (Human Services Research Institute), 2000.
- Jerrell JM, Consius V, Roberts KM: Psychometrics of the recovery process inventory. (Mental Health Statistics Improvement Program Adult Consumer Survey). Journal of Behavioral Health Services & Research, 2006.
- Craig A: Public involvement in health care: every voice counts, not just that of patients. Bmj 328:462–1, 2004.
- Resnick S, Rosenheck R, Lehman A: An exploratory analysis of correlates of recovery. Psychiatric Services 55(5):540–547, 2004.
- Schon UK: Recovery from severe mental illness, a gender perspective. Scandinavian Journal of Caring Sciences 24(3):557–564, 2010.
- Johnson J, Stewart D: DSM-V toward a gender sensitive approach to psychiatric diagnosis. Archives of Women's Mental Health 13:17–19, 2011.
- 33. Walsh J, Boyle J: Improving acute psychiatric hospital services according to inpatient experiences. A user-led piece of research as a means to empowerment. Issues in Mental Health Nursing 30(1):31–38, 2009
- 34. Storm M, Davidson L: Inpatients' and providers' experiences with user involvement in inpatient care. Psychiatric Quarterly 81(2):111–125, 2010.

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