Randomized controlled trial of the self-stigma reduction program among individuals with schizophrenia

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ABSTRACT

Research evidence suggests that individuals with schizophrenia are prone to self-stigmatization, which reduces their psychosocial treatment adherence. A self-stigma reduction program was developed based on a theoretical framework proposed by our team. The effectiveness of such program to reduce self-stigma, enhance readiness for change, and promote adherent behaviors among individuals with schizophrenia was investigated. This program consisted of 12 group and four individual follow-up sessions. An integrative approach including psychoeductaion, cognitive behavioral therapy, motivational interviewing, social skills training, and goal attainment program was adopted. Sixty-six self-stigmatized individuals with schizophrenia were recruited. They were randomly allocated to the self-stigma reduction program ($N = 34$; experimental protocol) or the newspaper reading group ($N = 32$; comparison protocol). Measures on participants' level of self-stigma, readiness for change, insight, general self-efficacy, and treatment adherence were taken for six assessment intervals. The findings suggested that the self-stigma reduction program has potential to reduce self-esteem decrement, promote readiness for changing own problematic behaviors, and enhance psychosocial treatment adherence among the self-stigmatized individuals with schizophrenia during the active interventional stage. However, there was a lack of therapeutic maintenance effects during the 6-month follow-up period. Recommendations for further improving the effectiveness of self-stigma reduction program are suggested.

1. Introduction

Schizophrenia is a severe and prevalent mental illness (Mueser and MuGurk, 2004; Lieberman et al., 2006). Individuals with schizophrenia are commonly undermined by the process of stigmatization (Corrigan, 2000; Corrigan and Watson, 2002; Fung et al., 2007). Mental illness stigma is widely endorsed in society (Phelan et al., 2000; Yang and Pearson, 2002; Tsang et al., 2003; Corrigan, 2004; Fung et al., 2008). Public stigma towards individuals with schizophrenia is mainly due to over-generalization of their dangerousness (Corrigan, 1998, 2004; Hayward and Bright, 1997).

In Chinese societies, public stigma is believed to be more severe than in Western societies, reflecting the collectivistic nature of Chinese culture (Nagayama Hall, 2002; Fung et al., 2007; Lam et al., 2010). Nagayama Hall (2002), Fung et al. (2007) and Lam et al. (2010) suggested that under the collectivistic ideation, deviant behaviors of schizophrenia are regarded as character flaws or low moral standards, an interpretation that in turn results in higher levels of discrimination. A cross-cultural qualitative study conducted by Tsang et al. (2007) in Hong Kong, Beijing, and Chicago revealed that Chinese employers were more prone to be influenced by collectivistic value when they need to make hiring decisions towards individuals with mental illness. The findings support that collectivistic value is likely to exacerbate mental illness stigma.

Under the influences of public stigma, individuals with mental illness who endorse stigma against themselves as legitimate are more likely to internalize it (Corrigan and Watson, 2002). Self-stigmatization is regarded as the self-discredit of individuals via the internalization of negative stereotypes towards themselves and/or their social group (Corrigan and Watson, 2002; Fung et al., 2007). Low perceived legitimacy of discrimination is believed to be a protective factor against self-stigmatization (Rusch et al., 2006, 2009). Rusch et al. (2010) suggested that automatically activated shame reactions were positively correlated to higher level of perceived legitimacy.

Self-stigmatization constitutes an impediment for individuals with schizophrenia to display treatment adherence (Ludwig et al., 1990; Tsang et al., 2006; Fung et al., 2008, 2010; Tsang et al., 2010) and thus their recovery (Ritsher and Phelan, 2004; Corrigan et al., 2006; Fung et al., 2007). Studies by our team (Fung et al., 2010; Tsang et al., 2010) have adopted the regression and path analyses to investigate the mechanism as to how self-stigma undermines psychosocial treatment adherence among individuals with schizophrenia. One hundred and five adults with schizophrenia in Hong Kong were recruited

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for a cross-sectional observational study. Findings suggested that individuals with lower level of self-stigma and better readiness for changing own problematic behaviors were more likely to have better adherence. The inadequate coping strategies and feeling of hopelessness adopted by self-stigmatized individuals may be regarded as the possible obstacles causing poor adherence (Tsang et al., 2010). For instance, self-stigmatized individuals may avoid the experience of public stigma by not seeking psychiatric services (Cooper et al., 2003; Corrigan, 2004; Wrigley et al., 2005; Corrigan and Wassel, 2008; Fung et al., 2008). The findings using path analysis (Fung et al., 2010) supported direct and indirect (mediated by insight and readiness for change) effects of self-stigma on reducing adherence. The construct of readiness for change has been commonly adopted in prior studies to explain treatment adherence among individuals with mental illness (Rusch and Corrigan, 2002; Finnell and Osborne, 2006). Following this approach, this construct was also employed and measured in the present study. Although the percentage of variance explaining the mediating effects of insight and readiness for change on psychosocial treatment adherence is not high, the results shed light on a plausible mechanism to explain how self-stigmatization may undermine treatment adherence.

With a deeper understanding on the mechanism explaining how self-stigmatization may undermine treatment adherence, an intervention program which targets at reducing self-stigma, enhancing readiness for change, and promoting psychosocial treatment adherence was formulated. Literature reviews that only two psychoeducational (Wieczynski, 2000; Link et al., 2002) and two cognitive behavioral therapy (Knight et al., 2006; Macinnes and Lewis, 2008) programs are available to help individuals with mental illness combat their negative consequences of self-stigma. Wieczynski (2000) has developed a three-session stigma management group for 27 individuals with mental illness. However, no significant improvement on participants' self-efficacy and stigma coping skills was shown. The 16-session educational group implemented by Link et al. (2002) focused on the discussion of personal stigmatizing experiences, and the recommendation of behavioral strategies to cope with stigma. As Link et al. recruited participants with different diagnoses, an obvious limitation is that the results did not improve our understanding of stigma on specific diagnosis including schizophrenia. Knight et al. (2006) have adopted a waiting-list control design to test the effectiveness of group cognitive behavioral therapy for 21 individuals with schizophrenia. Positive findings on self-esteem enhancement and depression reduction were obtained. Macinnes and Lewis (2008) adopted a strategy of unconditional self-acceptance to help individuals with severe mental illness reduce self-stigmatization. Significant reduction of self-stigma was demonstrated. Unfortunately, the power of the findings was weak based on the single group pre-test and post-test design. To date, the clinical outcomes of these programs remain inconclusive due to the lack of a consistent theoretical framework underpinning the questionable study design. We therefore developed a self-stigma reduction program which was underpinned by a sound theoretical framework. The effectiveness of the self-stigma reduction program was tested via the randomized controlled trial and reported in this paper.

2. Method

2.1. Development of treatment protocol

Fung et al. (2010) and Tsang et al. (2010) have provided a theoretical framework to explain how self-stigma may undermine psychosocial treatment adherence. We proposed that self-stigmatized individuals are more likely to demonstrate poor insight towards the beneficial effects of receiving psychiatric interventions. Their poor insight would further limit their readiness for changing own mental health problems, and thus result in treatment non-adherence. Based on this framework, we formulated a number of treatment strategies that would help achieve the goal of self-stigma reduction, and reduce its negative consequences. First, individuals with schizophrenia are able to acquire realistic and empirical information about their mental illness via psychoeduca-

tion to challenge their self-stigma (Holmes and River, 1998; Watson and Corrigan, 2001). Second, self-stigma may be regarded as a collection of irrational ideas on self-concept and abilities. Cognitive behavioral therapy could reconstruct and normalize their self-stigmatized beliefs, and thus promote their positive self-esteem (Kingdon and Turkington, 1991; Holmes and Rivers, 1998; Knight et al., 2006). The benefits of satisfactory psychosocial treatment adherence were emphasized in the session. Third, as many self-stigmatized individuals have poor readiness for change (Fung et al., 2010), motivational interviewing will move them forward towards the action stage to change their problematic behaviors (Miller and Rollnick, 2002; Rusch and Corrigan, 2002). Fourth, individuals with schizophrenia often have inadequate social skills which prevent them from effectively handling difficult social situations (Tsang, 2001; Kopelowicz et al., 2006). Adopting social skills training should enhance their specific skills to improve their daily life and social relationship (Lauriello et al., 1999). Thus, the program upgrades their social skills so as to facilitate their coping with stigmatized social conditions that they may encounter. Finally, self-stigmatized individuals often endorse the belief that they do not deserve for value which undermines their motivation to pursue meaningful life roles (Lysaker et al., 2007). The Goal Attainment Program which adopts the cyclical framework of affirming personal worth, imaging the future, establishing sense of control, and setting realistic goals is thus incorporated to instill hope on the individuals, and help them develop realistic life goals (Ng and Tsang, 2002).

The proposed self-stigma reduction program contains 16 sessions (12 group sessions and four individual follow-up sessions) which has integrated the five treatment strategies mentioned above. Table 1 illustrates contents of the program. The program has been pilot tested by an experienced occupational therapist and a research associate at the psychiatric wards of Kowloon Hospital. After the pilot test, certain culturally relevant scenes (e.g., "A person leaves his seat when I sit next to him") were added in the manual so as to make the discussion more personally relevant. PowerPoint slides were fabricated to provide visual input to enhance the implementation process.

2.2. Participants

The participants were required to be diagnosed by certified psychiatrists as suffering from DSM-IV schizophrenia. They were aged between 18 and 65, had at least completed primary school education, and had received psychosocial treatment for the past three months before commencement of the study. Moreover, we followed our previous attempt (Fung et al., 2010) that eligible participants should obtain at least the mean scores in either one of the self-stigma subscales (scoring ≥71.67 on stereotype agreement, ≥64.94 on self-concurrence, or ≥64.06 on self-esteem decrement) of the Chinese Self-stigma of Mental Illness Scale. This was to make sure that they had notable level of self-stigmatization in view of the fact that well established norms that helped us to make this classification are not available. Sixty-six individuals with schizophrenia who satisfied the inclusion criteria were recruited from the Baptist Oi Kwan Social Services, the Richmond Fellowship of Hong Kong, the Stewards Company, and the New Life Psychiatric Rehabilitation Association between October 2008 and December 2009. All of them were recipients of psychiatric services dwelling in the community. The randomization of participants to the experimental or comparison protocol for each participating organization was conducted via the generation of random numbers ranging from 0.1 to 1.0 by SPSS. Individuals who received random numbers ≥0.5 were allocated to the experimental protocol and those who received random numbers <0.5 were allocated to the comparison group. Thirty-four of them were allocated to the self-stigma reduction program (experimental protocol), whereas the remaining 32 participants were assigned to the newspaper reading group (comparison protocol). Identical treatment format and duration was provided for the two groups. Two group sessions per week were given to the corresponding participants. Due to administrative constraints, only one group session per week was offered to the participants from the New Life Psychiatric Rehabilitation Association. Individual follow-up sessions were scheduled in the first, second, third, and fourth month after the completion of the 12

Table 1
The contents of self-stigma reduction program.

Modalities	Sessions and contents
Psychoeducation	1. Beginning the journey towards recovery
	2. Confronting the myths of schizophrenia
Cognitive behavioral therapy/ motivational interviewing	3. Impact of social stigma on recovery
	4. Self-stigma as barriers to recovery
	5. Combating self-stigma I: affirming personal worth
	6. Combating self-stigma II: disputing by evidence
	7. Combating self-stigma III: the art of acceptance
Social skills training	8. Social skills training I: being assertive
	9. Social skills training II: dealing with stigmatizing social situation
Goal attainment program	10. Goal attainment I: goal setting
	11. Goal attainment II: action planning
Round-up	12. Round-up of group session
Individual follow-up	13.–16. Monitor of progress