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Original Research

Effectiveness of a Work Readiness Program for People Diagnosed with Schizophrenia: A Pilot Study

Şizofreni Tanısı Olan Bireylerde İşe Hazırlık Programının Etkinliği: Bir Pilot Çalışma

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ABSTRACT

Purpose: This study aimed to evaluate the effectiveness of the Work Readiness Program (WRP) on anxiety levels and coping ways of people diagnosed with schizophrenia. **Material and Methods:** WRP consists of 7 sessions, in which two 1 hr meetings were held weekly for 5 weeks. A total of 7 participants enrolled into WRP were assessed before, immediately after and 6 months after the program. Sociodemographic Form, State/Trait Anxiety Inventory and Coping Styles Inventory were administered. **Results:** The results revealed that there was a statistically significant difference in terms of the trait anxiety scores (p=0.034) and the total score of coping ways (p=0.002) in pre-intervention, post-intervention and 6-month follow-up; however, no significant difference was found in terms of state anxiety scores (p>0.05). Paired comparisons showed that the trait anxiety scores were higher at 6-month follow-up compared to the scores at baseline (p<0.05). It was found that CSI-total score decreased gradually at post-intervention and at 6-month follow-up compared to the scores at baseline (p < 0.05). **Discussion:** WRP reduced the trait anxiety levels and improved coping skills of the participants who completed the program. Our study results showed the necessity and importance of work readiness programs in people diagnosed with schizophrenia.

Keywords: Schizophrenia; Work; Vocational rehabilitation; Anxiety; Coping skills

ÖZ

Amaç: Bu çalışma, İşe Hazırlık Programının (İHP) şizofreni tanısı olan bireylerde anksiyete düzeyleri ve başa çıkma stratejileri üzerindeki etkililiğini değerlendirmeyi amaçlamaktadır. **Gereç ve Yöntem:** İHP, her hafta 5 hafta boyunca 1 saatlik iki toplantının yapıldığı 7 oturumdan oluşmaktadır. İHP'ye kayıtlı toplam 7 katılımcı programdan önce, hemen sonra ve 6 ay sonra değerlendirildi. Sosyodemografik Form, Durumluk / Sürekli Kaygı Envanteri ve Başa Çıkma Tarzları Envanteri uygulandı. **Sonuçlar:** Sonuçlar müdahale öncesi, müdahale sonrası ve takipte sürekli kaygı puanları (p = 0,034) ile stresle başa çıkma toplam puanı (p = 0,002) açısından istatistiksel olarak anlamlı bir fark olduğunu ortaya koymuştur; ancak durumluk kaygı puanları açısından anlamlı bir fark bulunmadı (p> 0.05). İkili karşılaştırmalar, sürekli anksiyete puanlarının başlangıçtaki puanlara göre 6 aylık takipte daha yüksek olduğunu gösterdi (p <0.05). CSI-toplam puanının başlangıçtaki puanlara göre müdahale sonrası ve 6 aylık takipte kademeli olarak azaldığı görüldü (p <0.05).**Tartışma:** İHP, programı tamamlayan katılımcıların sürekli kaygı düzeylerini azalttı ve stresle başa çıkma becerilerini geliştirdi. Çalışma sonuçlarımız şizofreni tanısı olan bireylerde işe hazırlık programlarının gerekliliğini ve önemini göstermiştir.

Anahtar kelimeler: Şizofreni; İş; Mesleki rehabilitasyon; Anksiyete; Başa çıkma yöntemleri

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People are known and assessed by their roles they realized in society. Work is one of these roles. Illness or injury may lead to changes in roles about working, and these changes can result in temporary or permanent loss of work (Cook and Lukersmith, 2010). Schizophrenia is a chronic mental disorder that negatively affects productivity skills and obtaining employment. On the contrary, the literature showed that working in a job had positive effects on people with schizophrenia (Dunn, Wewiorski and Rogers, 2008; Iannelli and Wilding, 2007; Leufstadius, Erlandsson and Eklund, 2006; Provencher, Gregg, Mead et al., 2002). Participation in a productive activity increases the sense of responsibility, identity, and self-esteem (Iannelli et al., 2007). Also, individuals with schizophrenia who spend more time working and education become healthier and more functional (Leufstadius et al., 2006). It has also been shown that working and earning money increase people's self-esteem, make them proud, and improve their ability to cope with psychiatric symptoms. Furthermore, working facilitates the recovery process besides providing financial benefits (Cook and Razzano, 2000; Dunn et al., 2008).

In addition to the positive effects of working mentioned above, people with schizophrenia face many difficulties in working despite expressing their willingness to work (McGurk, 2000). Schizophrenia negatively affects the working life of individuals and leads to problems in starting and maintaining work. It also causes problems in fulfilling the requirements of the job (Waghorn and Lloyd, 2010a). Cognitive, emotional, and motivational difficulties are at the core of most mental illnesses and may affect a worker's ability to perform their essential work tasks efficiently and accurately. Also, people with schizophrenia experience considerable stigma and discrimination from employers, colleagues at work, and the general community (Waghorn et al., 2010a; Lysaker, Bell, Milstein et al., 1993). Furthermore, those with working experience stated that they had to leave their jobs due to communication problems with their colleagues (Can Öz and Ünsal Barlas, 2017).

People with schizophrenia spend most of their time at home alone in quiet activities. They are socially isolated and don't participate in productive activities such as working or education (Bejerholm and Eklund, 2006; Chapleau, 2012). Hence, they are not ready to perform full-time, competitive work (Lee, Tan, Ma et al., 2006). In addition, they are exposed to work stress due to their symptoms and cognitive difficulties. Especially stressful conditions such as unregulated work conditions, excessive or insufficient expectations, and stigmatization can increase the risk for relapse. Also, they may report continued problems with symptoms such as sleep disturbance, poor concentration, reduced appetite, or suicidal thinking. Therefore, as stated in the relevant literature, long-term supportive vocational rehabilitation programs are needed for individuals with schizophrenia.

Current literature showed that supporting people with mental health problems via vocational rehabilitation programs at the employment stage and afterward created positive results (Cook et al, 2000; Rüesch, Graf, Meyer et al., 2004; Waghorn, Lloyd and Tsang, 2010; Yam, Lo, Chiu et al., 2016). Anthony, Rogers, Cohen et al. (1995) observed an increase in working skills and a decrease in negative symptoms in clients who participated in psychosocial programs for at least one year. Burns, Catty, Becker et al. (2007) demonstrated that supported employment programs were more effective than occupational centers in individuals with schizophrenia. Individuals participating in these supported programs were found to be able to stay in the hospital for less than 18 months and to be able to work longer hours. Similarly, the participants who received the vocational program consisting of 6-month internships showed significant improvement in negative symptoms and quality of life compared to controls (Bio and Gattaz, 2011). Engaging in a vocational intervention increases the likelihood of obtaining a competitive job and has a positive impact on hours worked in any job (Carmona, Gomez-Benito, Huedo-Medina and Rojo, 2017). Therefore, preparation programs can make it easier for individuals with schizophrenia to cope with the job challenges.

Prevocational training assumes that people with schizophrenia require a period of preparation before entering competitive employment (Crowther, Marshall, Bond et al., 2001). Waghorn et al. (2010b) suggest that participants must learn pre-vocational and work readiness skills before considering placing in a competitive work setting. Prevocational training prepares the person for a new and stressful situation. The "Work Readiness" concept defined by Potkin et al. (2016) includes many aspects of psychosocial functioning, such as accepting authority figures and their criticism, controlling impulses, and getting along with colleagues and clients. Lysaker, Bell, Milstein et al. (1993) showed that people with schizophrenia who were placed in jobs couldn't adapt to the rules and

regulations with working at the beginning of the working program and also, they had problems relating to other co-workers. Same as, mental health consumers participating in the individual placement supported (IPS) employment program reported that encountering new situations at the first stage of the program created discomfort and anxiety. Participants also expressed that they were unprepared for not having the skills and strategies to manage the job search process itself (Coombes, Haracz, Robson and James, 2016). On the other hand, participants who were afraid to expose their mental illness (an aspect of self-stigmatization) were also fearful of getting a job (Hielscher and Waghorn, 2017; Işık, Savaş and Kılıç, 2019). Therefore, for people with schizophrenia, individual or group preparation programs before starting a new job can be useful in adaptation to work (Coombes et al., 2016).

In Turkey, the employment of people with disabilities is carried out by legal interventions of the state with systems such as Sheltered Workplaces and Working at Home. Another way is that people with disabilities have been employed to the positions in government with an examination recently. Individuals who won the exam are settled into positions with disability by the government in the current system. Individuals are placed in positions by the government, but they do not receive any support other than job orientation programs to adapt to work. Therefore, we developed WRP for people with schizophrenia who were placed in government positions for disabled people. Thus, in this study, we aimed to evaluate the effectiveness of WRP on anxiety levels and the ways of coping in people with schizophrenia.

MATERIAL AND METHODS

Participants

Seven participants currently receiving services at the Community Mental Health Centre (CMHC) were recruited in the study. The psychiatrist of the center was involved in the evaluation of meeting the criteria for schizophrenia according to DSM-5. Inclusion criteria for the study were at least able to read, between ages of 18-59, using their medication regularly and being in remission period. The participants hospitalized in the last six months, and having a psychiatric comorbidity such as mental retardation, organic brain disease, alcohol/ substance abuse were excluded. All of the participants were in the follow-up of CMHC for at least one year and all of them were employed by the government as civil servants after the nationwide employment exam for disabled people. The study was conducted from January 2017 to August 2017. The study was conducted by the rules of the Declaration of Helsinki. The ethical committee approval was obtained from T.C. Ministry of Health, University of Health Sciences X Training and Research Hospital Clinical Research Ethics Committee.

Instruments

The instruments consist of a Sociodemographic Data Form and two self-report questionnaires, State-Trait Anxiety Inventory (STAI), and Coping Styles Inventory. The baseline demographic and clinical characteristics, including age, gender, education level, marital status, diagnosis, age of illness onset were gathered at baseline using a Sociodemographic Data Form.

STAI was developed by Spielberger and colleagues (1970) to assess levels of state and trait anxiety using 20 items separately on a 4-point Likert-type scale. Öner and Le Compte (1985) completed the adaptation of the questionnaire and reported Cronbach's alpha coefficient as 0.83 for State Anxiety Scale and 0.92 for the Trait Anxiety Scale and the inventory was accepted as reliable. The total score ranged from 20 to 80. According to the STAI, higher scores indicate higher levels of anxiety, lower scores indicate lower levels of anxiety.

Ways of Coping Inventory was developed by Folkman and Lazarus (1985). The Turkish version of the scale, Coping Styles Inventory (CSI) including 30 items modified by Şahin and Durak (1995). The factor analyses revealed five factors, namely, optimistic approach (α =.68), self-confident approach (α =.80), helpless approach (α=.73), submissive approach (α=.70), and receiving social support (α=.47). The subscales self-confident approach, optimistic approach, and receiving social support are assessed as effective coping ways with stress, while helpless and submissive approaches are named as ineffective ways.

Intervention

WRP was a structured psychosocial rehabilitation program and planned as a work-adaptation and preparation program. WRP was developed as a combination of prevocational training (work-related skills training and vocational preparation before entering open employment) and supported employment (ongoing support and counseling for clients, active support for employers) approaches by the researchers (Rinaldi and Perkins, 2007). The researcher who has clinical experience in psychosocial rehabilitation of schizophrenia (first author)

administered the WRP.

WRP had three aims. The first aim was preparing and giving information about what they will encounter in the working and working environment. Second, work-related skills training (personal presentation: hygiene, appropriate dressing, appearing; social skills: interactions with co-workers and managers; money management, consistent attendance, coping with stigmatization, e.g.) was implemented after participants whose worries and expectations about work were shared. The third aim was ongoing support enabled to employers and clients over six months. Even though the clients started to work, they were under CMHC's follow-up. During the follow-up, they received consultancy about problems they experienced at work and problems related to their treatment. The consultancy was provided by the program manager and CMHC team on issues the clients had difficulty with after starting to work. The program manager collaborated with employers, clients, and family members to keep clients in employment. If participants experiencing difficulties in the workplace, they gave their consent and the program manager planned a telephone or face-to-face meeting with their workplace manager.

WRP was carried out in two stages.

A. Work readiness training: At first stage, work readiness training was delivered. WRP training consists of 7 group sessions. The training content of the sessions are as follows:

1. Expectations about work and working life of participants
2. Creating realistic expectations about working.
3. Sharing fears and worries about working
4. The conditions of working life and rules at work
5. Interpersonal relationships at work and the relationship with employer and co-workers
6. Management of salary
7. Family session: Giving information about the process and consultancy with family members.

B. Support and Consultancy: The aim was providing ongoing support and consultancy after the participants start to work. This stage included visits to the workplaces, informing the managers, and individual counseling on daily work problems.

Procedure

The voluntary participants joined the WRP. WRP applied as a group a total of 7 sessions, in which two 1 hr meetings were held weekly for 5 wk by the researcher. STAI and CSI were applied to participants in pre-intervention, post-intervention, and 6-month follow-up. The measures took approximately 30-40 minutes, and the psychiatry assistant who was blinded to the study applied the tests.

Statistical Analysis

Data obtained in the study were analyzed statistically using SPSS 17.0 for Windows Evaulation Version statistical package program for the social sciences. Continuous variables were presented as mean and standard deviation (SD) values, and categorical variables as numbers and percentages. The compliance of the variables to normal distribution was examined by visual (histogram) and analytical methods (Kolmogorov – Smirnov and Shapiro-Wilk tests). Since the data did not show normal distribution and parametric conditions could not be fulfilled, the time-dependent change in the evaluations was analyzed using Friedman variance analysis. Paired comparisons between measurements were performed using the Wilcoxon paired two sample test, if necessary. In the interpretation of all results, p value <0.05 was considered statistically significant.

RESULTS

Characteristics of the participants

7 male participants were included in our study. The youngest age was 25 years, the highest age was 38 years and the mean age was 31.42 (± 4.35) years. All participants were single. Most of them had a high school level of education (71.4%) and no previous work experience. The mean age of illness onset was 18.11 (± 4.75).

Table 1. Socio-demographic and clinical details of the participants (n: 7)

		Mean (SD), %	Range
Age, years		31.42 ± 4.35	25-38
Gender	*Male*	100	
Marital status	*Single*	100	
Education, years	*High school*	71.4	
	University	28.6	
Age of illness onset		18.11 ± 4.75	12-26
Previous-work experience	*Yes*	0	
	No	100	

Effect of intervention on participants – Anxiety levels

The STAI trait-state anxiety, CSI total and subscales scores of the study participants at pre-intervention, post- intervention, and at the 6-month follow-up are shown in Table 2. The results revealed that there was a statistically significant difference between the means of the trait anxiety scores in pre- intervention, post- intervention and follow-up ($p < 0.05$) (Table 2). To find out where the differences occurred in each group on different occasions, post-hoc analysis with the Wilcoxon signed rank test was used. There was a significant difference between pre- intervention and the 6-month follow-up in the trait anxiety scores of the STAI (Z: -1.690, $p<0.05$). The trait anxiety scores were lower at 6-month follow-up compared to the scores at baseline ($p<0.05$). While trait anxiety scores decreased significantly at post- intervention, the difference between pre-intervention and post-intervention in terms of trait anxiety scores ($p>0.05$) and post-intervention and 6-month follow-up were not significant ($p>0.05$). However, there was no statistically significant difference in terms of the state anxiety scores at all three measurement times (χ2:2.000; p:0.368).

Table 2. The effects of the Work Readiness Program on STAI and CSI total and subscales of the participants at pre-, post-intervention and at 6-month follow-up

Study variables	Pre-WRP Med (Min-Max)	Post-WRP Med (Min-Max)	Follow-up Med (Min-Max)	χ^2	p
STAI-State Anxiety	45 (38-60)	44 (34-46)	41 (36-48)	2.000	0.368
STAI-Trait Anxiety	51 (37-59)	47 (37-52)	41 (39-49)	6.741	0.034*
CSI-Self Confident	9 (2-14)	11 (8-16)	17 (13-18)	12.000	0.002*
CSI -Optimistic	7 (4-9)	8 (6-12)	10 (7-14)	8.615	0.013*
CSI-Receiving Social Support	6 (3-10)	6 (5-10)	8 (7-11)	6.320	0.042*
CSI -Helpless	15 (8-22)	11 (9-17)	7 (2-11)	9.652	0.008*
CSI-Submissive	8 (3-13)	5 (3-8)	3 (2-7)	8.857	0.012*
CSI-Total Score	45 (22-62)	51 (47-61)	66 (55-73)	12.074	0.002*

*Note. *p<0.05. STAI: State-Trait Anxiety Inventory; CSI: Coping Styles Inventory*

Effect of intervention on participants – Ways of coping

The results revealed that there was a statistically significant difference between the means of CSI total and subscales scores in pre-intervention, post-intervention and 6-month follow-up ($p < 0.05$) (Table 2). To find out where the differences occurred in each group on different occasions, post-hoc analysis with the Wilcoxon signed rank test was used. There was a significant difference between pre-intervention and the 6-month follow-up (Z: -2.371, $p<0.05$) and post-intervention and 6-month follow-up (Z: -2.375, $p<0.05$) in the CSI-self confident scores. The CSI-self confident scores were higher at 6-month follow-up compared to the scores at baseline and at the post-intervention ($p<0.05$). The difference between pre-intervention and post-intervention in terms of CSI-self confident scores was not significant ($p>0.05$). The paired comparisons revealed a significant increase in CSI- Optimistic scores was found both from baseline to 6-month follow-up (Z: -2.384, $p<0.05$) and from post- training to the 6-month follow-up period (Z: -2.124, $p<0.05$). The CSI-Receiving Social Support scores showed a gradual increase from baseline to 6-month follow-up (Z: -2.047, $p<0.05$) and from post-intervention to the 6-month follow-up period

(Z: -1.983, p<0.05). The statistically significant differences in participants' CSI- Helpless scores were noted between baseline and post-intervention (Z = -1.992, p < 0.05), baseline and 6-month follow-up (Z = -2.207, p < 0.05), and post-intervention to the 6-month follow-up period (Z = -6.219, p < 0.05). It was found that CSI-Helpless scores decreased gradually at post-intervention and at the 6-month follow-up compared to the scores at baseline. The CSI-submissive scores were higher at 6-month follow-up compared to the scores at baseline. Also, the CSI- submissive scores at the 6-month follow-up remained higher than the post-intervention scores (p<0.05). The difference between pre-intervention and post-intervention in terms of CSI- submissive scores was not significant (p>0.05). Finally, the paired comparisons revealed that a significant increase in the CSI-total scores was found both from baseline to post-intervention (Z = -1.992, p < 0.05), from post-intervention to the 6-month follow-up (Z = -2.366, p < 0.05) and from baseline to the 6-month follow-up (Z = -2.366, p < 0.05). Table 3 shows the change in CSI total and subscales during the program.

Table 3. Comparison of the STAI-Trait Anxiety and CSI Total and Subscales results of the participants at pre-intervention/ post-Intervention, pre-Intervention/Follow-Up, and Post-Intervention/Follow-Up

Variables	Pre-WRP/ Post-WRP		Pre-WRP/ Follow-up		Post-WRP/ Follow-up	
	z	p	z	p	z	p
STAI-Trait Anxiety	-1.577	0.115	-2.028	0.043*	-1.690	0.091
CSI-Self Confident	-1.355	0.176	-2.371	0.018*	-2.375	0.018*
CSI -Optimistic	-1.089	0.276	-2.384	0.017*	-2.124	0.034*
CSI-Receiving Social Support	-0.756	0.450	-2.047	0.041*	-1.983	0.047*
CSI -Helpless	-1.992	0.046*	-2.207	0.027*	-2.032	0.042*
CSI-Submissive	-1.461	0.144	-2.032	0.042*	-2.214	0.027*
CSI-Total Score	-1.992	0.046*	-2.366	0.018*	-2.366	0.018*

DISCUSSION

This study aimed to investigate the effectiveness of a pilot work readiness program on anxiety levels and coping ways of people with schizophrenia in a CMHC and to provide preliminary findings of the program. To our knowledge, this was the first study that developed and examined the effect of WRP in people with schizophrenia in Turkey. Results showed that WRP was effective on reduction of trait anxiety levels of people with schizophrenia and improved coping skills of the participants who completed the program. In literature, vocational training programs are reported beneficial for people with schizophrenia both vocational and non-vocational outcomes (Waghorn et al., 2010a). Our results consistent with the literature (Yau, Chan, Chan et al., 2005; Lee et al., 2006; Yam et al., 2016) and showed the benefits of the work readiness program for people with schizophrenia.

Study findings showed that the trait anxiety levels of study participants decreased in the 6-month follow-up compared to the baseline. This result can be attributed to the work preparation program. Decreased uncertainty and starting to a new job may have made participants feel good and reduced their anxiety levels. In addition, it can be said that psychological counseling and ongoing support about job-related difficulties are beneficial in reducing anxiety symptoms. High levels of anxiety may impair the worker's ability to interact effectively with others or work independently, so ongoing support and consultancy are very important at this state (Swart and Buys, 2014). Similarly, in a case report, a person with severe mental illness could work for 8 months and his quality of life and self-sufficiency of the person improved at the end of a supported

employment program (Chan, Tsang and Li, 2009). Pre-measures of trait anxiety scores were higher than post and follow-up intervention ones. The participants in the study had moderate trait anxiety, as evidenced by their initial scores in the STAI (range 20-80). Working is perceived as a stressful situation for individuals with schizophrenia and causes anxiety (Lee et al., 2006). Individuals with schizophrenia participating in WRP study didn't have any long-term and satisfying previous work experience and their social participation and social connectedness were limited. Also, they reported that they had concentration, memory, and sleep problems. They mentioned about the fears that they couldn't maintain working. Therefore, everything about working can be threatening and anxious for them. Current study finding is in agreement of a qualitative study in which the experiences of clients participating in the Individual Placement and Support Program (IPS) were investigated. The clients participating in IPS stated that they felt discomfort, frustration and anxiety. They described this discomfort as a result of encountering new situations (Coombes et al., 2016). Similarly, participants in our study can be expected to be anxious as they will be starting work for the first time. The conclusion to be drawn that individuals must be supported by employment specialists for workplace arrangements and provided the close collaboration between the vocational team (employment specialists) and the mental health treatment team (Rinaldi et al., 2007). In Turkey, people with schizophrenia are employed with disability positions by the government; however, their follow-up and support are not provided. Allen, Hodgson, Marlow et al. (1994) proposed that the vocational readiness model must constitute education, support, and intensive case management and provided by the same professional. Therefore, only preparatory programs are not sufficient in chronic illnesses, but ongoing support with vocational rehabilitation programs at the beginning of the employment process and afterward is suggested in the related literature (Cook et al., 2000; Rüesch et al., 2004; Waghorn et al., 2010b).

According to the current study findings prep the people with schizophrenia to working led to improve coping skills with stress. In terms of coping strategies, people who joined WRP used more "self-confident coping", "optimistic coping" and "receiving social support" in other words active ways of coping and they used less "helpless coping" and "submissive coping" in other words passive ways of coping at post-intervention and 6-month follow-up compared to baseline. This conclusion can be attributed to both the preparation training and also regular consultancy after starting to work. With WRP, giving information about rules in work, preparation for work situations, knowing the rules in work and also individual counseling on daily work problems may have contributed to the use of more effective ways of coping. Apart from training, interviewing with the employer and family, providing ongoing one-to-one support and counseling to the client may lead to an increase in the coping skills of the individuals. This finding is consistent with the literature (Yam et al., 2016; Yau et al., 2005). Three months' participation in the clubhouse program that aimed to preparation about work and work-related abilities on simulated work tasks had positive effects on emotional coping abilities (impulsive-frustration and depression-withdrawal) and work personality (task orientation, social skills, and teamwork) (Yau et al., 2005). Another vocational program, Job Buddies Training Program (JBTP) included one session preparatory workshop and skills training such as basic and work-related social skills, communication skills, managing conflicts, combating stigma, and job coaching to support the participants. Results demonstrated that JBTP led to an increase in occupational competence and problem-solving skills of participants at the end of the training. Moreover, participants perceived positive personal growth and discovered their strengths (Yam et al., 2016). Wysokinski and Kloszewska (2011) reported that people with schizophrenia often use passive/avoiding coping ways. Maladaptive coping strategies may adversely disturb the overall functioning of people with mental disorders and lead to a great perception of personal failure and distress. (Holubova, Prasko, Hruby et al., 2015; Cooke, Peters, Fannon et al., 2007). Therefore, community-based mental health professionals should assist to develop coping skills in people with schizophrenia who are vulnerable to stress. It is particularly important for people with schizophrenia to receive supportive consultancy which introduce long-term strategies for coping with difficulties about working.

This pilot study is an example of work readiness program in CMHCs and the provision of a structured module for the clients who will be employed for the first time. People with schizophrenia may face some problems if not prepared for working and supported with vocational programs. The risk of psychotic relapse due to work stress, giving to unqualified jobs, no person-

centered assessment, not matching between the qualifications of the job and the characteristics of the person are some of these problems. The aforementioned problems are best addressed in a comprehensive vocational rehabilitation program. Vocational rehabilitation is a newly recognized and developing field in Turkey. There are not yet any comprehensive and systematic vocational rehabilitation programs. In this sense, Vocational Rehabilitation Center under the Occupational Therapy Department at Hacettepe University (Kayıhan and Köse, 2018) and the Blue Horse Cafe which is a non-governmental organization (Soygür, Yüksel, Eraslan et al., 2017) are the rare examples. Another problem is the inadequacy of measurement and evaluation tools. To our knowledge, The Work Rehabilitation Questionnaire (WORQ-Turkish) that is an instrument based on the International Classification of Functioning Vocational rehabilitation core set is one of the newly acquired instruments to the field for analyzing vocational rehabilitation process of people with disabilities (Aran, Abaoğlu, Ekici Çağlar et al., 2020). More work is needed on measurement tools to assess working skills and program outcomes.

There were some limitations in our study. First, the small sample size and lack of control group for comparison limited the overall generalization of the results. It is difficult to solve the sample size problem due to the episodic nature of mental health problems and the relatively small number of people with schizophrenia who are looking for jobs and entering jobs. Another limitation is that we followed the clients only 6 months after beginning to work, the results of one year could be examined. Lastly, the findings are based on self-reported data that may lead to bias. Further studies with long term follow up, including a comparison group and larger samples are needed to support these results. Despite the limitations, this work readiness program may be useful to consider the current results when designing employment or other work programs for individuals with psychiatric disabilities in CMHC and beneficial for support the clients who are employed with government positions.

In summary, results show that WRP decreased the trait anxiety levels and improved the ability to coping with stress in participants who completed the program. This preliminary study, which we can foresee as the first of vocational rehabilitation program in the CMHC and have an important role in the work functioning and social participation of individuals with schizophrenia in Turkey, should be supported with more comprehensive studies.

Contributors

SED conducted the study, organized data bank, performed the intervention and wrote the paper; AKK performed statistical analysis and wrote the paper. SÖ, principal investigator, planned and reviewed the research. All authors read and approved the final manuscript and agreed to be accountable for all aspects of the work.

Conflicts of interest

The authors declare that they have no conflict of interest.

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