Diabetes Self-Care Views of Individuals With Severe Mental Illness and Comorbid Type 2 Diabetes and of Those Only With Type 2 Diabetes

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Diabetes mellitus type 2 (T2DM), impaired glucose tolerance and insulin resistance are more commonly observed in individuals with a severe mental illness (SMI), such as schizophrenia, bipolar disorder and schizoaffective disorder, than in those individuals within the general population (El-Mallakh, 2006; Goldberg et al., 2007; Hardy & Gray, 2010). Individuals with a SMI exhibit behaviors that negatively affect their health, such as smoking, eating foods that are unhealthy, and not getting adequate exercise. These behaviors are more prevalent in individuals with a SMI, than among those within the general population (Peet, 2004; Salokangas, 2007). Furthermore, sedation, psychiatric symptoms, and metabolic problems induced by antipsychotic medication affects the health and quality of life of individuals with a SMI. This can increase the risk for diabetes (Chen, Chien, Kang, Jeng, & Chang, 2014; Goldberg et al., 2007; Hardy & Gray, 2010).

It is crucial for individuals with diabetes to develop good self-care activities, such as adhering to a diabetes diet, regular exercise, blood glucose control, and avoiding smoking and alcohol, and complying with lifelong drug therapy. These practices can greatly improve the quality of life (Chen et al., 2014; McKibbin, Golshan, Griver, Kitchen, & Wykes, 2010; Thomas, Raymondet, Charbonnel, & Vaiva, 2005). It is widely reported that individuals with diabetes fail to adequately practice good self-care. Self-care activities provides for better metabolic control (Özçakar, Kartal, & Kuruoğlu, 2009). The patients' quality of life is poorer when their metabolic control is inadequate, and the risk is high for diabetes complications (diabetic nephropathy, retinopathy, neuropathy, cardiovascular diseases, etc.) induced by increased hyperglycemia (Altunoglu et al., 2012).

Individuals with a SMI have to cope with chronic diseases, such as diabetes, in addition to the symptoms which result from their disorders (McDevitt, Snyder, Breitmayer, Paun, & Wojciechowski, 2003). Individuals with a SMI have difficulty managing their diabetes when they give priority to taking care of their psychotic symptoms, when they have difficulty performing their self-care activities, and when their SMI lead to cognitive disorders (Chen et al., 2014; Hultsjö & Hjelm, 2012; McDevitt et al., 2003). El-Mallakh (2006) conducted a qualitative study to evaluate the self-care activities of individuals with schizophrenia and with diabetes and found that patients had difficulty in managing their illness during the process of being diagnosed with schizophrenia and with diabetes. This study also reported that psychiatric symptoms posed a major obstacle for patients in performing their diabetes self-care activities. Chen et al. (2014) conducted a study on the self-efficacy and self-care behaviors of individuals with schizophrenia along with T2DM in comparison to those of patients with T2DM only. In this study, they concluded that the self-efficacy and self-care scores of the patients with schizophrenia and with T2DM were significantly lower than those patients with T2DM but not diagnosed with schizophrenia.

Despite many pharmacologic treatment efforts for SMI and symptoms, the number of initiatives for important diabetes self-care behaviors is limited (Chen et al., 2014; McKibbin et al., 2010). Providing healthcare for patients diagnosed with a SMI along with diabetes requires a multidisciplinary team collaboration (Chen et al., 2014; Meetoo, 2013). Nurses, particularly those who work in the mental health field, have important roles in providing holistic care for comorbid

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physical diseases, such as diabetes that is commonly observed in patients (Bradshaw & Pedley, 2012; Kayar Erginer & Partlak Günüşen, 2013). Although it is the responsibility of the patients to perform their self-care activities, it is the responsibility of the nurses to motivate them and providing training and counseling, and closely follow the probable symptoms (Meetoo, 2013).

In conclusion, it is important for all individuals with diabetes to perform their diabetes self-care activities. However, all individuals with diabetes are observed to have problems in managing their illness. It is assumed that difficulties experienced by people with diabetes along with a mental illness while performing their diabetes self-care activities can be different from those experienced by individuals with diabetes only. Therefore, this study will determine the similar and different cases experienced by each group while implementing their diabetes self-care practices. There is limited information on diabetes management for individuals with a SMI in the literature, and it is obvious that there are problems in their management of diabetes (Chen et al., 2014; El-Mallakh, 2006). This study will provide information about how patients diagnosed with a SMI and with diabetes and with only T2DM perform their self-care activities, and what the influencing factors are in performing these activities. It is expected that the findings of this study will provide information and guidelines about how patients diagnosed with diabetes in addition to a SMI and with only T2DM should complete their self-care. This study aimed to explore diabetes self-care as related to beliefs and practices of individuals with a SMI (schizophrenia or bipolar disorder), along with T2DM, and of those with T2DM only.

METHODS

STUDY DESIGN

This study was conducted using a qualitative phenomenological approach to explore diabetes self-care related beliefs and activities of individuals with a SMI (schizophrenia or bipolar disorder) and comorbid T2DM, and the self-care of those with T2DM only.

SETTING AND PARTICIPANTS

The study was conducted in a university hospital in İzmir, Turkey. The study included individuals with T2DM only who presented at a diabetes outpatient clinic, as well as individuals diagnosed with a SMI along with diabetes who presented at the psychiatry department outpatient and inpatient unit. The study sample was determined using the purposeful sampling method. The sample included 14 individuals diagnosed only with type T2DM, and 12 individuals diagnosed with a SMI and T2DM. The total sample size was 26. Interviews were conducted until the researchers determined that data saturation was reached.

DATA COLLECTION

The researchers completed a literature review (Chen et al., 2014; El-Mallakh, 2006) and used two forms that were prepared according to the aim of the study, and for both patient groups. The first form included demographic data, such as age, gender, marital status and education level, as well as questions about T2DM, the duration of the SMI, and use of diabetic and psychiatric medications. The second form that is a semi-structured form included questions that were prepared to gain a better understanding of how diabetes self-care activities of the participants were implemented (Table 1). This second form consists of open-ended 4–5 questions planned to be asked in the interview. On the other hand, sub-questions were asked during the interview depending on the flow of the interview. In both groups, individuals who met the inclusion and exclusion criteria (Table 2) were informed about the study. Then interviews were conducted with individuals who agreed to participate in the study. The interviews were recorded on audiotape. The study data were collected by the first researcher using the questions

Table 1
Semi-structured interview questions.

Interview questions of individuals with only type 2 diabetes	Interview questions of individuals with severe mental illness and comorbid type 2 diabetes
What kind of disease do you see as diabetes?	What kind of disease do you see as diabetes?
What kind of activities are you doing to manage your diabetes?	What kind of activities are you doing to manage your diabetes?
How does having diabetes affect your life?	How does having a diabetes and a severe mental illness affect your life?
What are the conditions that affect your ability to manage your diabetes?	How does severe mental illness affect your ability to manage your diabetes?
	What are the conditions that affect your ability to manage your diabetes?

on the forms. The in-depth interviews were conducted in an appropriate, quiet, well-lit interview room, in the relevant unit of the hospital. The patients were able to express themselves well, and the interviews were not interrupted. Interview appointments were made with the patients who came to the outpatient clinics. The interviews were audio-taped and lasted 15 to 50 min.

DATA ANALYSIS

The data that were obtained through the interviews, using the interview form, were evaluated using the "Content Analysis", one of the qualitative data analysis methods (Yıldırım & Şimşek, 2011). The data were read a few times. The data were evaluated by researchers independent of each other. Each person created codes that can be derived from each word and sentence. Codes were categorized into themes and sub-themes. After the coding was completed, the researchers discussed the codes and agreed on the thematic statements. The researchers discussed the differences between their separate analyses, and then organized and documented the data.

ETHICAL CONSIDERATIONS

Permission was obtained from the Noninvasive Research Ethics Board in the relevant university, and written permission was obtained from the institution where the study was conducted. The participants were informed about the aim of the study, and their verbal and written permissions were obtained.

RESULTS

The sample included a total of 26 individuals: 12 individuals with a SMI along with the T2DM, and 14 individuals with the T2DM only.

Table 2
Sample selection criteria for both groups of patients.

Inclusion criteria
Having type 2 diabetes for at least 6 months
Ages of 18–65
Being literate
Volunteering to participate in the research
Speaking and understanding Turkish
Decision to discharge (for inpatient severe mental illness)
Having at least one of schizophrenia, bipolar disorder for at least 5 years (for those with a severe mental illness)

Exclusion criteria
Having a sense of type 1 diabetes
Having any stories that can lead to mental retardation or organic brain damage that may interfere with interviewing
Having a life-threatening disease (AIDS, cancer, etc.)
Pregnancy
Vision, hearing, perception and any physical disability