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Original Research

Symptoms of Mental Illness and Their Impact on Managing Type 2 Diabetes in Adults

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Key messages

1. The prevalence of type 2 diabetes and diabetes-related complications are higher in adults with mental illness (96 characters).
2. The experience of mental illness symptoms and the socioeconomic implications that often co-occur can create challenges for effective diabetes self-management (135 characters).
3. Tailoring diabetes education to the challenges and barriers experienced by people with mental illness may help to improve diabetes outcomes (128 characters).

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ABSTRACT

Objectives: People with mental illnesses are more likely to experience diabetes-related complications that can reduce life expectancy by 10 to 15 years. Diabetes management and outcomes can be improved when lifestyle interventions addressing healthful eating habits and physical activity use content tailored to the learning needs of individuals or groups. Understanding the challenges that prevent adherence to diabetes recommendations can start to inform the design of tailored diabetes education care. The purpose of this pilot study was to explore the perspectives of clients with mental illnesses and type 2 diabetes with regard to challenges faced when engaging in diabetes self-care behaviours.
Methods: Focus groups were held with 17 people who had type 2 diabetes and mental illnesses, including depressive disorder, bipolar disorder, anxiety disorder, schizophrenia and schizoaffective disorder. In the groups, participants were asked to share their experiences with diabetes self-care and access to diabetes-education services. Data were transcribed verbatim, assessed for quality and saturation and coded to identify relationships and meanings among identified themes.
Results: Participants identified many challenges and unmet needs that created multidimensional and interrelated barriers to care, ultimately resulting in poor diabetes self-care behaviours. Some challenges were psychological in nature and related to emotional states, lifestyles and food habits, perceptions of affordability, health literacy and value of health information. Other challenges included the physical states of health and social environments.
Conclusions: Multidimensional diabetes education programs that consider psychological, physical and social challenges are needed to address the needs of people with mental illnesses.

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RÉSUMÉ

Objectifs : Les personnes atteintes de maladies mentales sont plus exposées aux complications du diabète susceptibles de réduire l'espérance de vie de 10 à 15 ans. Il est possible d'améliorer la prise en charge du diabète et les résultats cliniques lorsque les interventions sur le mode de vie portent sur des habitudes alimentaires saines et que l'activité physique utilise un contenu adapté aux besoins d'apprentissage des individus ou des groupes. La compréhension des enjeux qui freinent l'adhésion aux recommandations en matière de diabète peut mener à la création de soins adaptés à l'éducation sur le diabète. L'objectif de la présente étude pilote était d'examiner le point de vue des clients atteints de maladies mentales et de diabète de type 2 au sujet des enjeux auxquels ils sont confrontés lorsqu'ils adoptent des comportements d'autosoins liés au diabète.

Méthodes : On a tenu des groupes de discussion auprès de 17 personnes qui avaient le diabète de type 2 et des maladies mentales, dont les troubles dépressifs, le trouble bipolaire, le trouble anxieux, la schizophrénie et le trouble schizo-affectif. Dans les groupes, les participants ont été invités à partager leurs expériences en matière d'autosoins liés au diabète et à recourir aux services d'éducation sur le diabète. Les données ont été transcrites textuellement, ont fait l'objet d'une évaluation de la qualité et de la saturation, et ont été codées pour déterminer le lien et la signification des thèmes relevés.

Résultats : Les participants ont relevé plusieurs enjeux et besoins non satisfaits qui créaient des obstacles multidimensionnels et interreliés aux soins, ce qui entraînait finalement de mauvais comportements d'autosoins liés au diabète. Certains enjeux étaient d'ordre psychologique et liés à l'état émotionnel, au mode de vie et aux habitudes alimentaires, à la perception sur l'accessibilité, aux connaissances sur la santé et à la valeur des renseignements sur la santé. Parmi les autres enjeux, on notait l'état de santé physique et l'environnement social.

Conclusions : Des programmes multidimensionnels d'éducation sur le diabète qui tiennent compte des enjeux psychologiques, physiques et sociaux sont nécessaires pour répondre aux besoins des personnes ayant des maladies mentales.

Introduction

People with mental illnesses, such as schizophrenia and major mood disorders, are 2 to 3 times more likely to be diagnosed with type 2 diabetes than the general population (1–8). This higher prevalence is reported globally; 10% to 25% of people with these mental illnesses have type 2 diabetes compared with 3% to 9% of the respective general population (9). Once diagnosed, people with mental illnesses tend to have chronically high blood sugar levels, which cause poorer disease courses that include increased experiences of diabetes-related complications and subsequent early mortality (7,10,11). Early mortality resulting from diabetes complications is associated with an expected loss of up to 10 to 15 life-years for people with type 2 diabetes compared to the general population (12).

Higher prevalence of type 2 diabetes in those with mental illnesses can be attributed to a combination of metabolic risk factors, including genetic predisposition and side effects of mental-health medications (7,13,14). Additionally, chronic mental health symptoms have been associated with lifestyle behaviours that are independent and modifiable risk factors for the development of type 2 diabetes. These include lower levels of physical activity (15–18) and less healthful diets than those found in the general population (19).

The continuation of unhealthful dietary intakes and lifestyle habits after diagnoses of type 2 diabetes are part of the poorer diabetes self-care practices observed in people with mental illnesses, and they contribute to having chronically high blood sugar levels (18,20,21). Improved dietary choices and engagement in physical activity may prevent the onset of type 2 diabetes and help to control blood sugars in those with the disease (22,23). Lifestyle interventions addressing healthful eating habits and physical activity for people with mental illnesses and type 2 diabetes have been shown to improve diabetes-education levels, weight management and blood sugar values (24). Effective interventions for this population require content tailored to the learning needs of individuals or groups (24). To the authors' knowledge, no research has explored the perceptions of people with mental illnesses and type 2 diabetes when designing tailored programs. Therefore, the objective of this pilot project was to begin to close this gap in the current literature. The focus of this study was to explore the experiences of people who have major mood disorders, including major depression and bipolar disorder or psychotic disorders, including schizophrenia and schizoaffective disorder, and either prediabetes, or diabetes. The results of this study can help diabetes-education providers create tailored programs and strategies to improve the diabetes-related outcomes of people with these types of mental illnesses and type 2 diabetes.

Methods

Methodology and study design rationale

This research study was reviewed and approved by the Centre for Addiction and Mental Health Research Ethics Board.

Focus groups were used to collect data because of the ability of group discussions to enhance experiential reflections when a group dynamic is created by participants who all contribute to a shared, lived experience. As such, responses more accurately reflect the social realities of participants. Additionally, compared to one-on-one interactions, focus groups can create a safer environment because experiences are shared among people with similar backgrounds. This can be helpful when discussing the lived experiences of those with mental health issues and diabetes, both of which may be perceived as diagnoses that are challenging, unpleasant or stigmatizing.

To achieve reflexivity, the facilitator and note taker were asked to keep journals of reflections on their perceptions of factors that could impact the focus group data collection, analyses and findings reported. These journals and memos were revisited to avoid personal bias from impacting the data collection and analysis process (25,26). Prior to participant recruitment and data collection, the researchers consulted with three medical social workers, two mental health nurses and one client services director. Each consultant had experience in working with people who have diabetes and mental illnesses at community health agencies within the locality. Key insights were discussed with regard to 1) the relevance of focus group questions and 2) input/suggestions/concerns regarding the