

Insulin Resistance Care Effectiveness in Patients with Schizophrenia A Mixed-Methods Exploration

Nouf M Aloudah*

Clinical Pharmacy Department, King Saud University, Riyadh, Saudi Arabia

Abstract

The prevalence and incidence of Type 2 diabetes have increased dramatically over the last two decades. Saudi Arabia has an estimated two million adults with diabetes, ranking seventh in the world and second in the Middle East. The global prevalence of schizophrenia is percent, with 40 percent of cases remaining untreated [1-15]. In Saudi Arabia, the lifetime prevalence of psychological disorders is 34.2 percent. 4 Furthermore, the prevalence of schizophrenia is unknown.

There is a wealth of data indicating that patients with schizophrenia are at least twice as likely as the general population to develop Type 2 diabetes. 5,6 Furthermore, patients with schizophrenia have a higher risk of death, with a life expectancy 13-15 years lower than patients without schizophrenia.

While the exact causes of Type 2 diabetes in patients with schizophrenia are unknown, research suggests that it is a combination of genetics, atypical antipsychotic treatment, the long duration of schizophrenia, an unhealthy lifestyle, and high triglycerides. Several studies have looked into undiagnosed Type 2 diabetes in patients with severe mental illness.

Introduction

There is also concern about physicians' knowledge when it comes to managing patients with Type 2 diabetes and schizophrenia. According to one study, only 21% of psychiatrists scheduled metabolic risk factor screenings for their patients. 16 The authors discovered that physicians stereotyped their patients, trusted them less, and relied on information provided by someone other than the patient in a mixed-methods study that examined physicians' attitudes toward patients suffering from both schizophrenia and diabetes. Furthermore, physicians reported sharing practises that resulted in colleagues' attitudes toward patients with schizophrenia being alerted before they even met their patients.

There is a wealth of data indicating that patients with schizophrenia are at least twice as likely as the general population to develop Type 2 diabetes. Furthermore, patients with schizophrenia have a higher risk of death, with a life expectancy 13-15 years lower than patients without schizophrenia.

While the exact causes of Type 2 diabetes in patients with schizophrenia are unknown, research suggests that it is a combination of genetics, atypical antipsychotic treatment, the long duration of schizophrenia, an unhealthy lifestyle, and high triglycerides. Several studies have looked into undiagnosed Type 2 diabetes in patients with severe mental illness.

These patients have a low rate of metabolic syndrome screening. Furthermore, they receive poorer quality diabetes care, such as annual HbA1c, LDL-C, and/or microalbuminuria tests. 12 A recent Danish cohort study, which included 83,813 patients with diabetes and 669 with both diabetes and schizophrenia, compared the quality of diabetes care between patients with and without schizophrenia and discovered that patients with both diabetes and schizophrenia had a lower probability of receiving standard diabetes care. These patients have a low rate of metabolic syndrome screening. Furthermore, they receive poorer quality diabetes care, such as annual HbA1c, LDL-C, and/or microalbuminuria tests. A recent cohort study from the Danish population included 83,813 diabetes patients and 669 schizophrenia patients. 13 Another retrospective cohort study of over one million diabetic patients found 25,628 to have associated schizophrenia.

Patients with both schizophrenia and diabetes received lower-quality diabetes care and had higher hospitalisation rates than those without schizophrenia, according to the authors. Furthermore, a comprehensive review found that patients with diabetes and mental illness were less likely to receive evidence-based care.

Subjective Heading

There is also concern about physicians' knowledge when it comes to managing patients with Type 2 diabetes and schizophrenia. According to one study, only 21% of psychiatrists scheduled metabolic risk factor screenings for their patients. The authors discovered that physicians stereotyped their patients, trusted them less, and relied on information provided by someone other than the patient in a mixed-methods study that examined physicians' attitudes toward patients suffering from both schizophrenia and diabetes. Furthermore, physicians reported sharing practises that resulted in colleagues' attitudes toward patients with schizophrenia being alerted before they even met their patients.

The current state of diabetes management in patients with schizophrenia in Saudi Arabia is unknown. As a result, this study was conducted to assess the quality of Type 2 diabetes care provided to patients with schizophrenia. We used a mixed-methods approach to review the care given to a sample of schizophrenia patients in a tertiary mental health hospital in Saudi Arabia, followed by in-depth interviews

*Corresponding author: Nouf M Aloudah, Clinical Pharmacy Department, King Saud University, Riyadh, Saudi Arabia, E-mail: naloudah@k.edu.sa

Received: 04-Aug-2022, Manuscript No: ijaiti-22-71427, Editor assigned: 06-Aug-2022, PreQC No: ijaiti-22-71427 (PQ), Reviewed: 20-Aug-2022, QC No: ijaiti-22-71427, Revised: 22-Aug-2022, Manuscript No: ijaiti-22-71427 (R), Published: 29-Aug-2022, DOI: 10.4172/2277-1891.1000183

Citation: Aloudah NM (2022) Insulin Resistance Care Effectiveness in Patients with Schizophrenia A Mixed-Methods Exploration. Int J Adv Innovat Thoughts Ideas, 11: 183.

Copyright: © 2022 Aloudah NM. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

with health care providers (HCPs) who were directly involved with this population subset. The study's objectives were to determine the prevalence of Type 2 diabetes among patients with schizophrenia in Saudi Arabia, to evaluate the quality of Type 2 diabetes care provided, and to investigate HCPs' attitudes and perspectives on the quality of Type 2 diabetes care provided.

Discussion

The current state of diabetes management in patients with schizophrenia in Saudi Arabia is unknown. As a result, this study was conducted to assess the quality of Type 2 diabetes care provided to patients with schizophrenia. We used a mixed-methods approach to review the care given to a sample of schizophrenia patients in a tertiary mental health hospital in Saudi Arabia, followed by in-depth interviews with health care providers (HCPs) who were directly involved with this population subset. The study's objectives were to determine the prevalence of Type 2 diabetes among patients with schizophrenia in Saudi Arabia, to evaluate the quality of Type 2 diabetes care provided, and to investigate HCPs' attitudes and perspectives on the quality of Type 2 diabetes care provided. Despite the fact that the Eradah Mental Health Complex offers well-developed outpatient and inpatient services, Saudi Arabia lacks governmental community mental health care services for psychiatric patients, leaving patients with chronic mental health disorders facing numerous challenges. The absence of half-way houses and a lack of community services for patients with psychiatric illnesses places a burden on both patients and psychiatric hospitals. As an example, Patients must pick up their mental health medications from psychiatric hospitals, even if they live a long distance away. According to the Saudi National Mental Health Survey, hospitals account for 93 percent of outpatient visits. There are also staffing issues, such as a shortage of psychiatrists, psychologists, social workers, and nurses. Furthermore, staff with no advanced training or postgraduate education in psychiatry may be assigned to psychiatric institutions. From October 2017 to October 2018, we reviewed the medical records of patients diagnosed with schizophrenia and Type 2 diabetes. Although the medical records were on an electronic system, the hospital records were mostly scanned versions of physician handwritten notes, laboratory reports (from Eradah hospital), and pharmacy/medication records. One researcher read the physician handwritten notes to identify any tests performed for (or comments about) Type 2 diabetes in order to identify patients who had both Type 2 diabetes and schizophrenia. The researcher combed through the records to find patients who were over the age of 20, went to the outpatient clinic, and had been diagnosed with schizophrenia for at least a year. The sample size determined through the review of the records was 2803. As the screening required reading through hundreds of handwritten notes for each patient, we decided to screen every third patient in the file list. Patients who were identified as having Type 2 diabetes and schizophrenia were included. The same researcher reviewing the records considered a patient to have a diabetes diagnosis if they found a diabetes test result and/or diabetes medications. Other data collected included sociodemographic information and clinical characteristics. We also collected process measures for the quality of Type 2 diabetes care developed by the National Diabetes Quality Improvement Alliance as follows:

From October 2017 to October 2018, we reviewed the medical records of patients diagnosed with schizophrenia and Type 2 diabetes. Although the medical records were on an electronic system, the hospital records were mostly scanned versions of physician handwritten notes, laboratory reports (from Eradah hospital), and pharmacy/

medication records. One researcher read the physician handwritten notes to identify any tests performed for (or comments about) Type 2 diabetes in order to identify patients who had both Type 2 diabetes and schizophrenia. The researcher combed through the records to find patients who were over the age of 20, went to the outpatient clinic, and had been diagnosed with schizophrenia for at least a year. The sample size determined through the review of the records was 2803.

We interviewed HCPs to learn more about the factors that influence diabetes care for patients with schizophrenia. Open-ended questions were used to conduct in-depth, semi-structured interviews. Based on the Theoretical Domains Framework (TDF), an interview topic guide was created. Two of the authors (AA and NA) conducted interviews between December 2018 and January 2019. Meetings lasted between 15 and 50 minutes and were held at the participants' workplaces. With the participants' permission, all conversations were digitally recorded and transcribed. The Statistical Package for the Social Sciences (SPSS) version 21 was used for descriptive analyses (IBM Corp., Armonk, NY, USA). Atlas.ti 8 was used to thematically analyse interview transcripts (Scientific Software Development GmbH, Berlin, Germany). Two independent coders reviewed the transcripts (NA and KA). The TDF was used to capture behavioural change and implementation strategies required for better Type 2 diabetes and schizophrenia management. TDF is a comprehensive, theory-informed process for investigating HCP behaviour. The TDF is made up of 128 constructs drawn from 33 theories that are most relevant to the study of behaviour and behaviour change. The first author (NA) has experience applying the TDF to health behaviour and Saudi Arabia.

Conclusion

We screened 935 patients with schizophrenia and found 35 with Type 2 diabetes, resulting in a percent prevalence. Table 1 displays the sample's sociodemographic and clinical characteristics. The average age was 45.4 years, and 22 of the patients were men (62.9 percent). The frequency of Type 2 diabetes process measures is shown in Table 2. The annual testing rates for HgbA1c were 8.6 percent and 31.4 percent for low-density lipoprotein (LDL-C). There was no albuminuria screening or examination of the eyes or feet. 8.6 percent of the sample reported smoking status. Our study examined the quality of Type 2 diabetes care provided to patients with schizophrenia using a mixed-methods approach. This provided a broader understanding of the challenges of treating Type 2 diabetes in patients with schizophrenia and how to solve it. Our quantitative results are consistent with previous studies that have reported low to no Type 2 diabetes care being provided to this population.

Acknowledgement

I would like to thank my Professor for his support and encouragement.

Conflict of Interest

The authors declare that they are no conflict of interest.

References

1. Omer Akin (2002) Case-based instruction strategies in architecture. *Des Stud* 23 (4): 407-431.
2. Salam Ali (2014) reverse engineering for manufacturing approach. *Comp Aided Des Appl* 11 (6): 694-703.
3. Dhuha Al-kazzaz (2012) framework for adaptation in shape grammars. *Des Stud* 33 (4): 342-356.
4. Bernard Cache (1995) *Earth Moves the Furnishing of Territories*. The MIT Press Cambridge.

5. Duarte J (1995) Using Grammars to Customize Mass Housing the Case of Siza's Houses at Malagueira IAHS. World Congress on Housing Lisbon, Portuga.
6. Eilouti BH (2005) The representation of design sequence by three-dimensional finite state automata. *D Zinn The International Institute of Informatics and Systemics* 273-277.
7. Buthayna Eilouti A (2007) Spatial development of a string processing tool for encoding architectural design processing. *Art Des Commun High Educ* 6 (1):57-71.
8. Buthayna Eilouti D (2007) Models for the Management of Precedent-Based Information in Engineering Design. *WMSCI 2007 Orlando Florida USA* 321-326.
9. Buthayna H (2009) Eilouti Design knowledge recycling using precedent-based analysis and synthesis models. *Des Stud* 30 (4): 340-368.
10. Buthayna Eilouti (2009) Knowledge modeling and processing in architectural design. *Proceedings of the 3rd International Conference on Knowledge Generation. Des Stud* 30 (4): 340-368.
11. Buthayna Eilouti (2015) Architectural Design Process Automation Applications of Informatics and Cybernetics. *Science and Engineering*:370-375
12. Buthayna (2017) Comparative morphological analysis of two sacred precedent. *Front Archit Res* 6 (2): 231-247.
13. Buthayna (2018) Eilouti Concept evolution in architectural design an octonary framework. *Front Archit Res* 7 (2): 180-196.
14. Buthayna (2019) Eilouti Precedent-based design as a case-driven problem-solving technique in engineering design. *Proceedings of the 10th International Multi-Conference on Complexity Informatics and Cybernetics* 141-146.
15. Buthayna Eilouti (2017) Generative system for Mamluk Madrasa form making. *Nexus Netw J* 9 (1): 7-30.