

ASSESSMENT OF CARDIOVASCULAR DISEASES AWARENESS AND KNOWLEDGE AMONG PEOPLE LIVING WITH TYPE 2 DIABETES MELLITUS.

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Actuality: Diabetes is one of the largest global health emergencies of the 21st century. Each year more and more people live with this condition, which can result in life-changing complications. In addition to the more than 530 million adults who are estimated to currently have diabetes, there are over 500 million adults with impaired glucose tolerance, which puts them at high risk of developing the disease in the future (International Diabetes Federation, 2025).

The prevalence of patients with type 2 diabetes registered at Regional Endocrinology Dispensaries in the Republic of Uzbekistan was 155,876 in 2014, whereas by 2023 this number increased to 377,115.

This is an increase of almost 2.5 times compared to 2014. Diabetes and its complications are major causes of early death in most countries. Approximately 6.7 million people aged between 20 and 79 years died from diabetes in 2021, equivalent to one death every five seconds. Diabetes accounts for a substantial proportion of global all-cause mortality among people in this age group (IDF Diabetes Atlas, 2025).

Cardiovascular disease is one of the leading causes of death among people with diabetes, accounting for 50–60% or more of deaths in some populations — particularly due to coronary artery disease (CAD). This is consistent with findings from prospective observational studies such as FinnDiane and the Verona Diabetes Study, in which increased variability in HbA1c and glycemia was independently associated with the development of cardiovascular complications.

The aim of the study: Assessment CVD awareness and knowledge among people living with diabetes and understanding people living with this disease.

Materials and methods: We have surveyed 45 adults with diabetes. 24 of them were male compared to 21 female aging from 40 to above 70 years old. Questionary had following 6 sections with 17 questions. Some of the questions had sub questions as well.

Results: From our research we found out that patients estimate their level of risk for cardiovascular disease as following: 20% - Low, 33.3% - Below average, 6.7% - Average, 26.7% - Above average, 13.3% - High. Moreover, we have found out that most of the patients learnt the risk for CVD several years after they have been diagnosed with diabetes. Where other options of replies were significantly lower such as: Before type 2 diabetes diagnosis – 20%, At the time of type 2 diabetes diagnosis – 6.7%, Soon after type 2 diabetes diagnosis – 20%, After several years of type 2 diabetes diagnosis – 40%, When I was diagnosed with CVD – 6.7%.

Conclusion: 1 in 3 respondents living with diabetes consider their risk of CVD to be low. Nevertheless, diabetes in anamnesis is already a high risk of the CVD development. 40% of respondents had received information on CVD several years following their diabetes diagnosis.

All of the respondents had discussed their type 2 diabetes and CVD risk with a healthcare professional. However, all of the patients already had CVD with diabetes at the time of the survey.

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Abstract

Diabetes mellitus is one of the most significant global health challenges of the 21st century, with a steadily increasing prevalence and high burden of complications. Cardiovascular disease (CVD) remains the leading cause of mortality among patients with diabetes, particularly due to coronary artery disease. This study aimed to assess the level of awareness and knowledge regarding cardiovascular disease risk among people living with diabetes mellitus. A cross-sectional survey was conducted among 45 adult patients with diabetes mellitus, including 24 men and 21 women aged from 40 to over 70 years. The questionnaire consisted of 6 sections containing 17 questions, including several subquestions related to cardiovascular risk perception and patient education. The results demonstrated that 20% of respondents considered their cardiovascular risk low, 33.3% below average, 6.7% average, 26.7% above average, and 13.3% high. Most participants (40%) reported receiving information about cardiovascular disease risk several years after being diagnosed with diabetes, while only 6.7% received such information at the time of diagnosis. Despite all respondents having discussed diabetes and cardiovascular risk with healthcare professionals, all surveyed patients already had cardiovascular disease at the time of the study. The findings indicate insufficient early awareness regarding cardiovascular complications among patients with diabetes mellitus and emphasize the necessity for earlier education, preventive counseling, and cardiovascular risk assessment immediately after diabetes diagnosis.

Keywords

diabetes mellitus; cardiovascular disease; cardiovascular risk; patient awareness; type 2 diabetes mellitus; coronary artery disease; diabetes complications; patient education; risk assessment; endocrine disorders

