



## METHODS TO PREVENT SIDE EFFECTS OF DIABETES MELLITUS IN SICK PATIENTS WITH TYPE 2 DIABETES

Ergasheva Gulshan Tokhirovna

Assistant of the Clinical sciences department  
Asia International University, Bukhara, Uzbekistan

E-mail: [ergashevagulshantoxirovna@oxu.uz](mailto:ergashevagulshantoxirovna@oxu.uz)

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**Annotation:** This study presents the findings of an assessment aimed at gauging the awareness level of socially important effects of diabetes among patients with type 2 diabetes mellitus. The research also includes an investigation into the accessibility of food products specifically designed for diabetic patients in both pharmacies and grocery stores. By examining these critical aspects, the research sheds light on the degree to which individuals with type 2 diabetes are informed about the societal impact of their condition and the availability of essential dietary resources tailored to their needs. The results of this assessment contribute valuable insights for improving the support and resources available to individuals living with diabetes.

**Key words:** diabetes, social population, effects of diabetes, rehabilitation

**Relevance:** The concept of socially significant diseases includes a number of illnesses that create the greatest threat to the well-being of the country's population. Socially significant diseases cause great damage to society, which requires large costs for temporary and permanent disability, treatment and rehabilitation of such patients.

The social significance of these diseases requires an effective prevention. According to the No. 715 of December 1, 2004 by the law decision of the Government, Republic of Uzbekistan included diabetes to the list of socially significant diseases. The number of patients with diabetes in the world has exceeded 366 million. The number of patients every year is increasing to 5-7% and doubling every 10 years. If the occurrence of diabetes continues to increase in this way, it is estimated that by 2030, 552 million people will have diabetes. People with diabetes mostly develop different early and late symptoms. In order to avoid these symptoms, various rehabilitation measures are being organized. It is important to minimize the impact on the development of the disease by informing the population about the risk factors and side effects in the prevention of diabetes.

**The purpose of the study:** to obtain information about diabetes in the elderly.

**Materials and methods.** To achieve this goal, we developed a questionnaire containing various questions about the causes, symptoms, side effects and consequences of this disease. 104 people aged 45 to 83 took part in the survey. When evaluating the results, survey participants were divided into two age subgroups: the first group was participants aged 45-65 years, the second - 65 years and older.

**Results.** According to the results of the survey, it was found that most of the representatives of both groups do not clearly know the concept of "socially significant diseases". The majority of subgroups I and II, who participated in survey, consider that tuberculosis (70.25% and 53.7%, respectively) and diabetes (52.5% and 80.3%) are socially significant diseases. Almost the same number of participants showed hepatitis B and C (35.2%

and 33.75%) and infectious diseases (22.5% and 20.2%). I-minor, who participated in the survey, 25% of group participants chose socially significant diseases wrongly, only 7% of the participants of subgroup II select the correct option. The results also differed in the choice of "myocardial infarction" disease: 50.5% of participants in group I and 33.7% in group II. Such results are quite understandable: the majority of those questioned by us are about occurrence and spread of the socially significant diseases, depended on socio-economic conditions diseases, additionally, they can understand various diseases such as tuberculosis, infectious disease, myocardial infarction, which are common or especially dangerous.

All survey participants are familiar with diabetes. Half of the participants (47.5% and 60.3%) were never told that they were prone to this disease.

When answering the question about the possible causes of diabetes in people, most of the participants of subgroup I (62.5%) had difficulty in answering and naming them, while 67.5% of participants of subgroup II indicated the most important causes. Among them, there were obesity, stress, excess sugar in food, bad ecology and others.

Most of the participants (80.25% and 90.7% in the first and second groups, respectively) were able to name the symptoms of diabetes. Among them, the most common responses were dry mouth, thirst and increased blood glucose levels.

It was found that some of the participants (about 50% of subgroup 2 and about 8% of subgroup 1) confuse the concept of the cause, symptoms and side effects of the disease. We can connect that we attribute it to the fact that there were no explanatory conversations that would help to differentiate before filling out the questionnaires. In addition, it mainly indicated that the participants of subgroup II who do not have a clear understanding of the disease and its consequences and it makes necessary to have conversations with the elderly in the form of educational in order to prevent the side effects of diabetes.

According to the results of the study, most of the participants stated that they try to eat sweets as little as possible: I-small 42.5% in group and 67.5% in subgroup II. The rest did not limit themselves to sweets or struggled to give a clear answer.

More than 2/3 of the participants in subgroup I and 53.7% of subgroup II are aware of the existence of preventive diets. At the same time, half of the participants do not limit themselves with food in any way, and the other half try not to eat fatty, sweet foods or eats everything, but slowly. 60% of all survey participants are aware of the availability of special diets for people with diabetes. More than 80% do not use a sugar substitute in their diet.

The majority of subgroup I (70.3%) and subgroup II (60.8%) do not include products containing fructose instead of sucrose and 30% of the participants of both subgroups with the disease could not answer accurately.

When answering the question about the possible consequences and side effects of diabetes, 62.5% of participants in subgroup 1 and 53.2% of subgroup 2 illustrated decrease in the problems associated with visual acuity, heart attack, stroke, leg diseases, memory and attention, and leg diseases were in the first place.

Along with the survey, we monitored the availability of food products intended for patients with diabetes in pharmacies and grocery stores.

This part of the study was supposed to show how convenient this group of products is for the population. As a result of the conducted monitoring, it was found that the assortment of products intended for people with diabetes is presented more in the chain of pharmacies, but not all pharmacies are engaged in the purchase and sale of these products.

In grocery stores, this group of food products, with rare exceptions, is almost not presented. Residents can buy them only in large shopping centers. The most common were products such as various flavored fructoses, sugar-free cookies, fructose chocolate, fructose sweets, various syrups, sugar substitutes, and halwa. The price of these products is not much higher than the price of sugar-containing analogues.

**Summary.** Thus, according to the results of the study, we can conclude that almost half of the population of the age "at risk" for the development of side effects of diabetes is not familiar with the risk factors for the development of side effects of this disease and, as a result, preventive measures. Due to the high social importance of the disease, it is necessary to increase the awareness of the population about the causes and initial symptoms of the development of diabetes and to explain about rehabilitation measures before the early side effects of the disease occur, which in turn reduces the risk of late side effects.

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