Early detection of Diabetes Mellitus in transition countries – Kosovo

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ABSTRAKT

Type 2 diabetes has an insidious onset with a long latent period of dysglycemia. The incidence of diabetes mellitus today is epidemic. 90-95% of patients are patients with type 2 diabetes. The disease develops slowly, and has a long asymptomatic phase. Clinics are opened for 5-10 years. A patient with diabetes, due to complications of the disease, dies prematurely from his peers without diabetes. Evidence suggests that early detection of diabetes with appropriate screening methods, especially for people at high risk for diabetes, will help prevent or delay vascular complications and thereby reduce the clinical, social, and economic burden of the disease. Ideal screening models have not yet been found for early detection of the disease, for the detection of the stage of increased fasting glucose and the phase of impaired glucose tolerance. The final answers to the question have not yet been obtained: who will perform the screening, where will it be performed and how? How to identify risk groups? How to conduct screening in transitional family medicine? There is also evidence to suggest that intervention in the prediabetic phase is superior to the diagnosis of diabetes.

The family doctors played a key role in the early detection of the disease.

Key words: diabetes mellitus, prediabetic, family doctors, screening, diagnosis, etc.

Epidemiology and significance of chronic diabetes mellitus

Diabetes is a chronic condition that occurs when the islets of Langerhans in the pancreas do not produce enough insulin or when the body cannot use the insulin it produces efficiently.

Diabetes mellitus is a very severe, chronic, lifelong disease. Today it is the fourth or fifth leading cause of death in developed countries. It is estimated that 194 million people around the world suffer from diabetes. The incidence of diabetes is an epidemic.1 People with diabetes die significantly earlier from cardiovascular disease than those without diabetes. A patient with diabetes dies 5 to 10 years earlier than his peers without diabetes.2 The disease develops slowly, has a long asymptomatic phase. 90-95% of patients are patients with type 2 diabetes. At the time of clinical detection, the disease had already lasted 5-10 years, and complications were already developed.2.3 Therefore, it is necessary to detect the disease in an asymptomatic phase. Scientific and professional considerations today play a major role in the early detection of diseases.

Early detection of the disease

The role of the primary care physician (pediatrician, GP, gynecologist) is crucial today in the early detection of the disease. Early detection of the disease belongs to one of the four levels of care of the mother in the care of the disease: prevention and early detection, treatment of the disease, the process of protection and analysis of the results of protection.4,5 Diabetes screening guidelines and Diagnosis of diabetes according to the American Diabetes Association (ADA) In 1997 it was as follows: gradual determination of glucose for all over 40 years and those under 40 years, if in risk groups, etc. universal screening.6 However, this method of screening was not only expensive, but also required complicated logistics for a long-term continuous process. Therefore, in several studies, another strategic approach has been proposed that focuses on high-risk mead screening or real-time screening - opportunistic, targeted screening.7

Consecutive targeted screening studies have been more focused on ‹economic› analyzes in favor of targeted screening. According to Hugger's study, general screening of the entire population is more expensive and there would be less detection of diabetes according to the screening for age-dependent hypertension in the study.7 However, this study also brings something new. Using Mark›s model to predict tax performance from screening studios8 and UKPDS, 9 makes assumptions about the benefits of early detection of asymptomatic diabetes.

The benefits of early detection according to the study are: - screening for type 2 diabetes can reduce the duration of asymptomatic diabetes from 10 to 5 years - the risk of intervention in cardiovascular diseases in diabetics is reduced by 19% - 25% in the 44-year-old group, 47% in the 45-64 age group and 65% in the 65-year-old group. 7 Spijkerman›s study, conducted in a population of 50 to 75 years of age, tested a screening model. According to the questionnaire, the people above the grade 6 were invited to confirm glucose for fasting. This way of sending the pollinator is not suitable for permanent screening, here for one-time screening, and at a certain time. In addition, according to the pollinator, such patients already have known cardiovascular risk factors and have less benefit from screening, and those who are not aware of their disease, according to the risks of pollinator, are not involved in the screening process.10

Many studies around the world have not given answers: at what time to be screened, how often, in which places and to whom to do the screening? How to identify high-risk puddles? The Vincent Declaration Diabetes for Primary Care (PCDG) provides screening guidelines for family medicine: 11

1. Determine glucose for all persons with symptoms: fatigue, weight loss, polyuria, genital itching - clinical determination of the disease.
2. At intervals of 3 years, during a visit to the office, confirm the glucose of all persons over 45 years of age:
   - if the parents of the siblings have type 2 diabetes
   - if they have hypertension and other cardiovascular diseases
   - if they have impaired lipid metabolism and / or BMI> 27
   -if there was diabetes in the pregnancy and women, if they gave birth to children> 4000 grams
   - certain ethnic groups.

Thus, PCDG recommendations do not apply to mass time campaigns, but a continuous early detection process is recommended here according to the guidelines for creating risk groups. The contract suggests an interval of 3 years, because it is assumed that since the previous determination of blood glucose (GUK), complications have not developed, as long as diabetes has developed within 3 years.

Profession and science agree on one thing - this type of screening procedure - regular contact with the health service. Each patient has a selected GP. In most countries, 80-90% of patients visit their GP at least once every 3 years. In addition to regular contact with the patient, the GP has a record of known chronic diseases and risk factors.12 Additional additional dynamics and challenges in screening are provided by studies that indicate new categories of diseases: «increased fasting glucose» and «increased fasting glucose» glucose "WHO 1999. year, 13.14 ADA

2003. 15. People with a combined risk of obesity and smoking have an increased risk of developing cardiovascular disease. Therefore, these conditions should be diagnosed early.11.15

Diagnostic disorders

In most European countries, the reference values of the lower limit of GUK for increased glucose per cent are 6.1 mmol / l according to the WHO (ADA offers a lower limit of 5.6 mmol / l). The recommended WHO classifications according to the GUK 2 x approval are:

1. Percent GUK 6.0 mmol / L = normal back
2. Percentage GUK 6.1 - 6.9 mmol / L = increased glucose per percentage → do OGTT: - Regular detection (control 3 years) - 7.8 - 11.1 mmol / L (venous plasma) = glucose tolerance
3. Post GUK 7.0 mmol / L = diabetic mellitus

The categories «increased fasting glucose» and «impaired glucose tolerance» require intensive supervision by a family doctor. The diabetes mellitus category is an effective treatment. It should be potentiated that for the diagnosis of diabetes it is necessary to start with at least 2 mornings that were not done on the same day.

If both are unambiguous, we have a diagnosis and if they argue, an OGGTT is done. If the test shows impaired glucose tolerance, monitoring is required - repeat OGTT for one year. Intervention should be provided - advice on diet and exercise, which has proven to be an effective method of preventing the development of manifested diabetes.5,6 Thus, the necessary role of primary care physicians, especially mothers in the early detection of asymptomatic asymptomatic of increased starvation glucose and impaired glucose tolerance.

Early detection of diabetes mellitus in transition countries

An additional problem is the early detection of the disease in the lands of the transitional health care system such as the Republic of Kosovo.

At the end of 2019, the National Institute of Public Health (NIPH) stated that: "In Kosovo, it is estimated that somewhere around 5-7 percent of the population has a prevalence of the disease, where 20-30 percent of the levels are insulin dependent and it is provided by the Ministry of Health free of charge. The MS-dependent

insulin patient registry has approximately 13,000 patients. There are 40 beds within the UCC where 800 patients are hospitalized every year. «

Second, screening for at-risk groups is problematic, as there is no quality record in family medicine. and as long as it exists, it is not used happily. Doctors and patients occasionally leave the health care system in the treatment of diseases (private unrelated clinics) for which there is no record. Primary protection has not yet come to life

gatekeeper to enter the health system and to be placed as a health guard. Reforms in the field of primary health care are brought administratively without participation in primary health care.17,18. I think that the optimal procedure for conducting screening depends on the health system in which it is conducted, and the Republic of Kosovo so far does not have enough institutional screening tests, especially of the young population.

The transition from asymptomatic to symptomatic diabetes is individual, from rapid to delayed, lifelong. The transition from the phase of increased fasting glucose and impaired glucose tolerance to diabetes is also individual. The progression of the development of complications is also individual and depends on the health and socio-cultural standard of the population. Thus, the process of screening for early detection of diabetes is imperative for a new approach of the parent doctor in the management of chronic diseases. At the national level of a particular health system, a contract for continuous screening must be reached. Professional associations in Kosovo need to develop an early detection program according to ADA, WHO, PCDG, studies conducted and the expected frequency of lands in transition.

References

1. 2. Markku L, Kubaszek A. Coronary artery disease in type 2 diabetes. Int Diabetes Monitor. 2003; International Diabetes Federation Diabetes Atlas, second ed., International Diabetes Federation, Brussels, 2003. 15:1-8.
3. Wareham NJ, Griffin SJ. Should we screen for type 2 diabetes? Evaluation against National Screening Committee criteria. BMJ. 2001;322:986-9.
4. Primary Care Diabetes Europe. St Vincent Declaration in practice. Establishing Guidelines for Evidence – based Diabetes Care Through Europe: http:/www.pcdeurope.org.
5. Expert Committee on the Diagnosis and Classification of Diabetes Mellitus. Report of the Expert Committee on the Diagnosis and Classification of Diabetes Mellitus. Diabetes Care 1997;20:1183-97.
6. Genuth S, Alberti KG, Bennett P et al. Follow- up report on the diagnosis of diabetes mellitus. The Expert Committee on the Diagnosis and Classification of Diabetes Mellitus. Diabetes Care. 2003;26:3160-7.
7. Hoerger TJ, Harris R, Hicks KA, Donahue K, Sorensen S, Engelgau M. Cost-effectiveness of screening for type 2 diabetes. Ann Intern Med 2004;140:689-99.

8. Kuo HS, Chang HJ, Chou P, Teng L, Chen Tony HH. A Markov chain model to assess the efficacy of screening for non-insulin dependent diabetes mellitus (NIDDM). Int J Epidem. 1999;28:233-240
9. UK Prospective Diabetes Study Group. Intensive blood-glucose control with sulfonylureas or insulin compared with conventional treatment and risk of complications in patients with type 2 diabetes (UKPDS 33). Lancet 1998;352:837-53.
10. Spijkerman AMW, Adriaanse MC, Dekker JM et al. Diabetes Care. 2002;25:1784-9.
11. St. Vincent Declaration Primary Care Diabetes Group. Diagnostic guidelines. Dostupno na adresi: http:/www.diabetesinprimarycare.com/DiagnosticGuidelines.asp.
12. Drivsholm T, Olivarius NF. General practitioners may diagnose type 2 diabetes mellitus at an early disease stage in patients they know well. Family Practice. 2006;23:192-197.
13. Alberti KG, Zimmet PZ. Definition, diagnosis and classification of diabetes mellitus and its complications. Part 1: diagnosis and classification of diabetes mellitus provisional report of a WHO consultation. Diabetic Med. 1998;15(7):539-53.
14. Borch-Johnsen K, Colagiuri S, Balkau B, Glumer C, Carstensen B, Ramachandran A, et al. Creating a pandemic of prediabetes : the proposed new diagnostic criteria for impaired fasting glycaemia. Diabetologia. 2004;47:1396-402.
15. Janssen PGH, Gorter KJ, Stolk RP, Rutten GEHM. Screen detected subjects with type 2 diabetes and impaired glucose tolerance have more adverse cardiovascular risk than subjects with impaired fasting glucose especially when they are obese: The ADDITION Netherlands study. Primary Care Diabetes. 2007;1:69-74.
16. Metelko Ž, Pavlić Renar I, Poljičanin T, Szirovitza L, Turek S. The first national prevalence survey in Croatia: unexpectedly high prevalence. Diabetes. 2004;53 (Supp 2):A1021
17. Fister K, Mckee M. Health and health care in transitional Europe. BMJ. 2005;331:169-170.
18. Kern J, Strnad M, Coric T, Vuletić S. Cardiovascular risk factor in Croatia: struggling to provide the evidence for developing policy recommendations. BMJ. 2005;331:208-10.