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*Evaluation of acquaintance with prevention rules in patients
with diabetes*

Diabetes is a set of disorders of diverse aetiology, whose common feature is an absolute or relative insulin deficiency appearing at some stage of the disease. Its symptoms are hyperglycaemia, glycosuria and a cascade of accompanying metabolic and morphological disorders (8). The complexity of pathological processes in diabetes causes a need to divide it into diabetes type I, associated with immunological disorders, diabetes type II, associated with relative insulin deficiency as well as insulin immunity, gestational diabetes and other specific types of diabetes (insulin receptor defects, endocrinopathies, post-drug diabetes and others). An essential problem in the course of diabetes which can determine the patient's life length are acute complications (hyperosmolar hyperglycaemic state, diabetic ketoacidosis) and chronic ones (micro- and macroangiopathies, neuropathy, skin changes, changes in the mouth and teeth area).

Diabetes occurrence in human population is frequent enough to rate it among social and civilizational diseases. Diabetes occurrence in Poland is estimated at the level of 4–7% in urban populations and 2–4% in rural populations, 80–90% of which are cases of diabetes type II (7). The following diabetes type II risk factors other than genetic predispositions are distinguished: obesity, especially of a drooidal type, lipidic disorders, hypertension, age over 40 and absence of physical activity (7, 8).

The aim of this work was to assess the acquaintance with prophylactic and therapeutic recommendations and their completion among patients with diabetes.

MATERIAL AND METHODS

Research was performed on 100 people (61 female, and 31 male) with diagnosed diabetes hospitalized in Internal Diseases Ward of the County Hospital in Ostrowiec Świętokrzyski. More than a half of the researched patients (56%) lived in the cities, whereas the other 44% lived in the country. The age structure of the researched group was the following: 32% were between 71–80 years of age, 19% were 61–70 and another 19% were 51–60, 13% were 41–50, 7%–31–40 and 3% were 20–31 years old. In the course of research a questionnaire form was made use of that included closed, half open and open questions. Participation was voluntary and anonymous. The research was performed in 2002.

RESULTS AND DISCUSSION

In the year 2002-2007 people were hospitalized in the ward, 401 of whom were treated for diabetes (21%). Diabetes was diagnosed to be type II in 91.6% cases, 4% being type I diabetes cases and 4.4% – other types of diabetes. That confirms the results of research performed in Poland and other West European in which 80–90% of all cases of diabetes were diagnosed as diabetes type II (7,8). This must be in close relation to the inappropriate lifestyle and ageing in well-developed societies (8,10). According to the analysis of the causes of hospitalization performed among the ward patients it was determined that the number of people treated for diabetes rises annually with a constant type II diabetes ratio observed at the level of 91.6%–94.4% out of all cases of diabetes. This reflects a widely observed tendency. According to a WHO report, the number of people with diabetes increases worldwide. A term ‘pandemy’ of diabetes has been coined to denote the disturbing phenomenon. It is estimated that the total number of diabetics will have reached 300 million by 2025, whereas in 1995 the figure was 135 million. (7) These data concern only patients with diagnosed diabetes and it should be remembered that a considerable number of diabetes cases remain undiagnosed and never treated until the symptoms of the disease get intensified or it is discovered accidentally as a result of other types of medical examination. (10,11). The number of cases of undiagnosed diabetes is reckoned at the same level as the identified ones (8). It is further confirmed in the light of the present research, which reveals that 65% of the cases of diabetes were diagnosed by accident, while in 35% of cases the disease was identified on the basis of typical symptoms.

Diabetes risk factors were analyzed in the scrutinized group. A positive family interview towards the disease was established in 27.9% of women 30.8% of men. The reviewed people mentioned the following family members with diabetes: one of the parents (18%), siblings (12%), one of the grandparents (4.9%) and children (2.6%). The body mass of the researched patients was assessed with the help of the Body Mass Index (Fig. 1). Overweight occurred in a considerable proportion of the researched people. Overweight and obesity are extremely incriminating factors. It was found that the occurrence of diabetes type II was proportional to the average BMI characteristic of a given population – in the group with the BMI above 30 kg/m² the occurrence of diabetes was 7 times as high as in the group with the BMI under 25 kg/m² (7). Body mass irregularities are most frequently associated with incorrect dietary habits. This is validated by the data concerning dietary habits of the scrutinized people. 47.5% of the

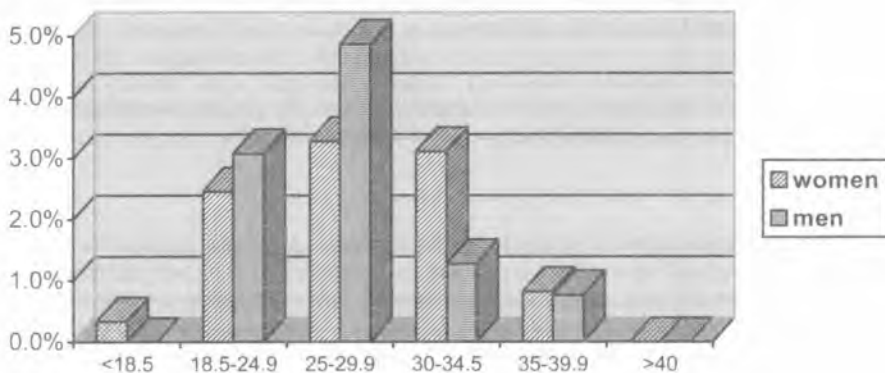


Fig. 1. Population structure according to the BMI

researched females and 43.6% of males claimed to consume vegetables and fruit on a daily basis, and at the same time meats and smoked meats were part of the daily menus of 39.3% of women and 38.5% of men, the diets of 52.5% of females and 54.3% of males contained animal fats and 21.3% of females and 18% of males. Fish were sparse in the researched people's diets – they were reported to be consumed once a week by 5.2% of females and 3.4% of males.

The physical activity declared by the researched people was also inadequate. The most frequent form of activity were just irregular walks (63.9%), 1.6% declared to swim, 4.9% – to do jogging and 14.8% did not admit any form of physical activity.

Both a serious issue and a challenge associated with diabetes appears to be education concerning the prophylactic of the disease, early diagnosing, treating methods, the development of the disease, complications and self-control skills. As many as 42.6% of the researched women and 30.8% of men had not received any information about the risk factors of the occurrence of the disease like diabetes. A vast majority of the reviewed people expressed a need for educating the society on this subject. Deficiency in the researched people's acquaintance with the development of their own illness after being diagnosed was also affirmed. A considerable proportion of the studied people were unable to determine what type of diabetes they had (Fig. 2). Only 40% of the reviewed people realized that an appropriate diet was a crucial and necessary element of the therapy.

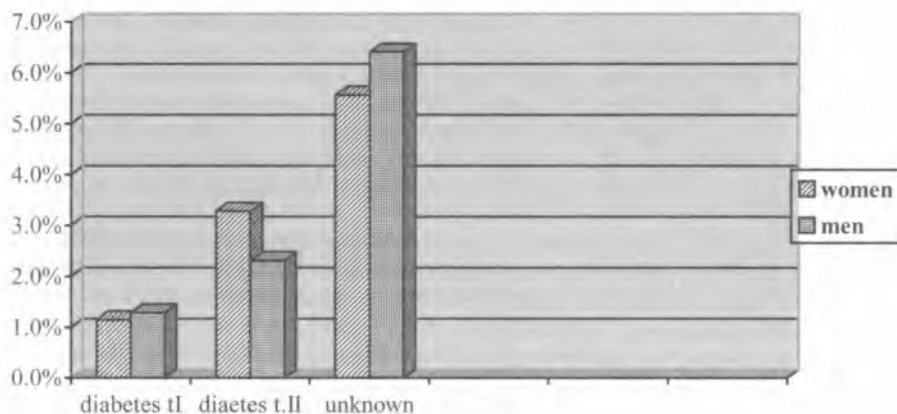


Fig.2. The structure of the studied population according to their acquaintance with the type of the diagnosed diabetes

These results are indeed a justified reason for concern, especially because the only way of controlling diabetes and successfully preventing its complications is by understanding its nature by the very person afflicted with it, their self-control skills and a strict co-operation with the doctor (7, 9). The performed research revealed a demand for a better education of the diabetics, their families as well as a need to carry out a widespread information and education campaign aimed at the society as a whole concerning pro-health routines being part of the prophylactic of diabetes and its early diagnosing.

CONCLUSIONS

1. Diabetes constitutes a serious medical and social issue.
2. There is a need to extend educational activity concerning designing proper dietary habits and the right lifestyle in the patients with diabetes.

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SUMMARY

Diabetes is one of the civilizational diseases. Its occurrence in Polish society is estimated at the level of 2–6%, of which 80–90% are cases of diabetes type II. Other than the patients' genetic predispositions such diabetes type II risk factors hindering the therapy are mentioned as obesity, lipidic disorders, hypertension and absence of physical activity. The aim of this work was to assess the acquaintance with the prophylactic and therapeutic recommendations and their realization in patients with diagnosed diabetes. The results revealed a necessity to extend educational activity in society concerning problems of the prophylactic of diabetes, its early diagnosing and the application of the therapeutic recommendations in people suffering from diabetes.

Ocena znajomości zasad profilaktyki u pacjentów z cukrzycą

Cukrzyca jest zespołem zaburzeń, charakteryzujących się względnym lub bezwzględnym niedoborem insuliny, objawiających się hiperglikemią, glukozurią i towarzyszącymi licznymi zaburzeniami metabolicznymi i morfologicznymi. Częstość występowania cukrzycy ocenia się w populacji polskiej na 2–6%, stanowi więc ona poważny problem medyczny i społeczny. Celem pracy była ocena znajomości i realizacji zaleceń profilaktycznych i terapeutycznych wśród pacjentów z cukrzycą. Badaniami objęto grupę 100 chorych z rozpoznaną cukrzycą (61 kobiet i 39 mężczyzn), hospitalizowanych w Oddziale Chorób Wewnętrznych Szpitala

Powiatowego w Ostrowcu Świętokrzyskim. Metodą badawczą był kwestionariusz ankiety. Analizowano także dokumentację szpitalną. Badania przeprowadzono w roku 2002. Udział w badaniu był dobrowolny i anonimowy. Wśród osób badanych u 91,6% rozpoznano cukrzycę typu II, u 4% – typu I, a u 4,4% – inne rodzaje cukrzycy. Dodatni wywiad rodzinny w kierunku cukrzycy stwierdzono u 27,9% badanych kobiet i 30,8% mężczyzn. Bardzo częstym zjawiskiem była nadwaga (32,8% kobiet, 48,7% mężczyzn) i otyłość (39,3% kobiet, 20,5% mężczyzn). Badania ujawniły wśród ankietowanych brak znajomości zasad prawidłowego odżywiania się. Aktywność fizyczna osób badanych była niewystarczająca – 14,8% nie wykazywało żadnej formy aktywności ruchowej. Przeprowadzone badania ujawniły także potrzebę edukacji społeczeństwa w zakresie profilaktyki cukrzycy, jej wczesnego wykrywania, a wśród osób chorych w zakresie istoty choroby, jej przebiegu, sposobów leczenia, powikłań i umiejętności skutecznej samokontroli. U 65% badanych cukrzyca została rozpoznana przypadkowo, 59% nie potrafiło określić typu cukrzycy, na jaki chorują. Jedynie 40% wiedziało, że odpowiednia dieta jest niezbędnym elementem skutecznego leczenia cukrzycy. Aż 42,6% badanych kobiet i 30,8% mężczyzn nie uzyskało przed ujawnieniem się choroby żadnych informacji na temat czynników ryzyka cukrzycy. Zdecydowana większość ankietowanych (85,2%) dostrzega konieczność edukacji społeczeństwa w tym kierunku.