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*Primary and specialist diabetes care three years after introduction  
of health care system reform in Poland*

The sudden increase in the number of diabetic patients all over the world, including Poland is a difficult challenge to many communities, especially to the medical community. 30–40 years ago, it was estimated that in Poland around 2% of town dwellers and 1% of villagers had diabetes (2). The research carried out by our team in the years 1988–1989 among the adult population (18 years and more) of the Lublin area revealed that 2.5 – 6% of the subjects in various communes and 2.6% on average had diabetes (6). A research in type 2 diabetes morbidity that we carried recently among the population of the Lublin area aged over 35 years proved that around 15.6% of the examined had diabetes according to WHO criteria of 1985 (12) and almost half of them (56% – in urban and 75% – in rural areas) was newly diagnosed (7). Initial data from the centres of Cracow and Łódź, which carry the research according to the same criteria, show that the diabetes morbidity in these urban areas (rural ones were not included in the research) is at a similar level.

The forecasts of the World Health Organisation for the whole world are also alarming. It is estimated that in 2010, around 250 million inhabitants of our planet – some 3% of its entire population – will have diabetes (1, 3, 5, 10). Taking into consideration the fact that diabetes is a chronic disease which frequently – especially when not managed properly – leads to disability or premature death and that the treatment of this illness and of its complications is very expensive, we can say that it is one of the greatest medical and economic problems of the modern world (regardless of the moral damage it causes).

Attempts to spread diabetological care over all the ill that were made in the period of specialist medicine domination were doomed to failure (in Poland, for example, at least 1,500 – 4,000 doctors should become specialists in diabetology, which was – and still is – impossible). In practice, diabetics can be managed not only by a diabetologist but also by an internist or a paediatrician experienced in managing them. Most of the people with

diabetes are taken care of by first contact doctors: a couple of years ago it was estimated that the percentage was around 70% in Poland and 90% in the USA (8). We assess that presently, after the "healthcare system reform" made the access to specialist healthcare more difficult, Poland has also reached the level of 90%.

But the reform is not the only one to be blamed for the fact that most of diabetics are managed by primary health care. For some of them it is a necessity (the disabled, for instance). But for an overwhelming majority it seems to be a conscious choice (poor, elderly patients: "because the treatment in the neighbourhood of the place one lives in is comfortable and inexpensive"). Therefore the responsibility of the primary healthcare (doctors, nurses, social workers) for the quality of treatment of such patients is even greater.

In the present situation, the necessity of active support for primary healthcare not only by handing over a significant portion of diabetology tasks but also by modernising and improving the quality of this care we have been postulating for years, should be finally noticed.

Primary healthcare and diabetological centres employers understanding that they all can do something for a diabetic better than other members of this group and that his "colleague" can do something better than he does is the foundation of this modern integrated diabetology system. This should be a starting point for the clear-cut division of tasks and duties (not competence!) within diabetology.

Primary healthcare doctors and nurses have the only opportunity of its kind to prevent diabetes in relatively simple ways, for example: a) by promoting a longer breastfeeding period (favourably postponing the exposure to diabetogenic effect of cow milk albumin, reducing susceptibility to obesity and thus to type 2 diabetes in children nourished in this way); b) education and promotion of rational nutrition and greater physical activity among school children as well as adults. In practice, it can be a promotion of healthy food and rational nutrition (school and company shops, canteens), pressure on local authorities to build bicycle paths, swimming pools and recreational areas.

Considering the fact that about 50% or more of all cases of diabetes are undiagnosed, early diagnosis of this disease is a special challenge for the primary health care. Diabetes which is undiagnosed for many years increases the risk of dangerous complications and may manifest itself only with the occurrence of blindness, diabetic foot, or coronary attack.

Diabetes can be diagnosed before its typical clinical symptoms appear due to an active search: a) among patients who come to out-patient clinics for various reasons and who are proved to have diabetes type 2 risk factors, for instance: aged over 40, obesity, diabetes family history, bearing a child weighing over 4.000 grams; b) by inviting to undergo an examination aiming to find diabetes in subjects with increased type 2 diabetes risk factors mentioned above; c) by considering a search for diabetes in all patients of a given practice during systematic periodical examinations.

The overwhelming majority of patients with type 2 diabetes is treated in primary health care out-patient clinics. The knowledge of the methods of treatment and its constant improvement (maintaining international standards) is the most crucial task of doctors and nurses (3, 8).

Early diagnosis of complications risk or diabetes complications incidence (diabetic foot, nephropathy, retinopathy, cardiovascular complications) is a very difficult and experience-demanding task. Usually primary health care doctors notice the risk factors and direct patients to a specialist consultant who gives a final diagnosis. We believe it is very important that every patient with diabetes is directed to a specialised diabetic centre (with full diagnostic capabilities) when the illness is diagnosed and then regularly (e.g. once a year) for precise assessment. These are also the suggestions of International Diabetes Federation. It should be noted that prevention and early diagnosis of diabetes are almost solely the domain of primary health care because specialists as a rule do not diagnose but rather manage already diagnosed diabetics. First contact doctors find diabetes complications risk in a given patient earlier than specialists (4, 8, 11).

In our opinion diabetic centres' tasks should include (apart from carrying their own research activity): a) tracking the latest developments in diabetology and introducing them into daily practice as well as passing them onto primary health care; b) widely understood and intensive education of doctors and nurses as well as education of patients; c) consulting and sometimes treatment of difficult cases: diabetics with insufficient metabolic control, special risk groups patients (for example diabetic pregnancies), patients with diabetic complications, often managing them in co-operation with other specialist centres, for instance nephrologic or ophthalmologic ones.

The clear-cut division of tasks and their realisation is unfortunately not presently implemented in Poland due to the lack of funds and the "organisational mess" connected with the introduction of the health care system reform. In practice, there is no type 2 diabetes prophylaxis, active search and early complications diagnosis programmes. Paradoxically, the access to the latest diabetic medications and diagnostic tests is comparatively very good as most of them are refunded by the state.

According to the authors, it is very important to educate general practitioners in practical diabetology, so that they manage their patients properly and to make them aware that at least once a year their patients should be directed to a diabetologic centre for a thorough consultation.

Modern systems of health protection based on the primary health care systems practically function in many western countries. We can presently observe an attempt to "force" such system into life in Poland. With all the support to the idea of founding the health care on strong and well-functioning family medicine, we should realise that these are not medical and humanistic aspects that have decided about the introduction of the health protection reform. It was not introduced by doctors, but by politicians and economists – just because of the economic reasons, and almost without consultation with doctors at all.

Table 1. Suggested division of primary diabetologic care tasks between primary health care doctors and diabetologist

<b>Task</b>	<b>Primary health care doctor</b>	<b>Diabetologist</b>
<b>Prevention of disease</b>	+	
<b>Early diagnosis</b>	+	
<b>Early complications diagnosis</b>	+	+
<b>Consultation</b>		+
<b>Treatment</b>	mostly type 2 diabetes	1. mostly type 1 diabetes 2. patients with complications 3. special risk groups
<b>Education: doctors</b>		+
<b>nurses</b>	+	+
<b>patients</b>	+	+

Unfavourable aspects of specialist care which were not previously foreseen caused that once again there appeared tendencies to treat the patient as one entity of body and mind and not the patients whose particular organs are ill. In fact we can now observe an attempt to come back to the roots of European medicine, to the medicine of Hippocrates, which is both an antidote for excessive concentration and trust in medical technology and a stimulus to make the achievements of technology more humanistic (9). In Poland we are just at the beginning of this road.

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## SUMMARY

The authors discuss epidemics of diabetes in the world and in Poland. In the Lublin region (eastern Poland), for instance, they found type 2 diabetes (DM 2) in 15.6% of the examined aged over 35 (according to the WHO criteria of 1985). The health care system reform in Poland has made more difficult the access of the diabetic to a specialist that treats this disease. Therefore doctors and nurses of primary health care have become more responsible for diabetcare than before. The authors believe that the systematic education of primary health care doctors by specialists so that they can treat patients according to the modern standards of practical diabetology as well as sharing of tasks and responsibilities between primary and specialist diabetologic care, are very important. Primary health care would be in charge of prevention and early diagnosis of DM 2 as well as prevention and early diagnosis of concomitant complications of the disease. Specialists would have consultation on the patients at the moment of diagnosis and then at least once a year. They would also take care of search for and diagnosis of remote diabetes complications. Primary health care doctors would still treat most of diabetics with DM 2;

specialist centres doctors would treat most of diabetics with DM type 1, patients with complications and from special risk groups (e.g. women with gestational diabetes).

#### Podstawowa i specjalistyczna opieka diabetologiczna po trzech latach od wprowadzenia reformy ochrony zdrowia w Polsce

Autorzy omawiają epidemię cukrzycy na świecie i w Polsce. Na Lubelszczyźnie wykryli cukrzycę typu 2 (DM 2) u 15,6% badanych powyżej 35 roku życia (według kryteriów WHO z roku 1985). Reforma ochrony zdrowia w Polsce utrudniła dostęp chorego do specjalisty zajmującego się leczeniem cukrzycy, dlatego lekarze i pielęgniarki podstawowej opieki zdrowotnej (POZ) stali się bardziej niż dotychczas odpowiedzialni za opiekę diabetologiczną. Za sprawę bardzo ważną autorzy uważają systematyczne kształcenie lekarzy POZ przez specjalistów, tak aby mogli leczyć według nowoczesnych standardów diabetologii praktycznej, jak również podział zadań i obowiązków pomiędzy podstawową i specjalistyczną opieką diabetologiczną. Do POZ należałoby zapobieganie i wczesne rozpoznawanie DM 2, a także zapobieganie i wczesne wykrywanie odległych powikłań tej choroby. Do specjalistów należałoby konsultowanie chorych w chwili diagnozy i potem przynajmniej raz w roku, również wczesne poszukiwanie i rozpoznawanie odległych powikłań cukrzycy. W POZ leczono by nadal większość chorych z DM 2, zaś w ośrodkach specjalistycznych większość chorych z cukrzycą typu 1, pacjentów z komplikacjami i chorych z grup specjalnego ryzyka (np. chore z cukrzycą ciążową).