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Trends in Treatment Among Unselected Geographically Defined Diabetic Population

It is with great interest that we read the article by Kennedy et al. (1) describing trends in the use of oral hypoglycemic agents (OHAs) in the United States. Furthermore, data of the treatment pattern obtained from a

cross-sectional survey performed in France in 1985–1986 were published in this journal (2). Therefore, we would like to add the data of the treatment pattern of an unselected diabetic population of the geographically defined area of Berlin, German Democratic Republic.

OHAs have been used in the treatment of non-insulin-dependent diabetes mellitus (NIDDM) since tolbutamide was approved by the Food and Drug Administration. Therefore, the treatment pattern is comparable in the U.S. and the GDR. In the GDR, a nationwide diabetes register has existed for over a quarter of a century that permits a precise assessment of the epidemiological situation with regard to the total population of the country (3,4). The data of all diabetic patients of the area of Berlin, newly diagnosed and deceased, are registered in a central computer of the department of data processing of the Centre of Diabetes and Metabolic Disorders (5). The age, age at onset of diabetes, sex, treatment, and change of treatment are constantly registered.

As of 31 December 1970, there were 27,431 people known to have overt diabetes in Berlin or 2525/100,000 people. Within the 18-yr follow-up period 1970–1988, the prevalence rose from 2.53 to 3.78% of the total population of Berlin. As of 31 December 1988, there were 3784/100,000 people with overt diabetes according to the World Health Organization criteria. There was a parallel increase in the number of diabetic patients treated by diet alone or combined with OHAs until 1978. In 1980, structured dietary teaching programs were introduced in the management of all newly diagnosed NIDDM patients (6). Since then, the absolute number of diabetic patients who were kept on diet alone has grown, whereas there has been a slight decrease in the number of patients on OHAs. Simultaneously, there has been an increase in the number of insulin-treated patients (503/100,000 people in 1970 and 743/100,000 people in 1988). The prevalence rates of insulin-treated patients were 0.5% in 1970 and 0.74% in 1988. This has come as a result of the emphasis being shifted toward near-normoglycemic control of blood glucose and an increase in the number of NIDDM patients treated with insulin.

In 1970, 39% of all diabetic patients were treated with diet alone and 42% with OHAs (27,431 total diabetic patients). In 1988, the relative proportion of patients on diet increased to 44% and of patients on OHAs decreased to 36%, respectively (48,104 total patients). This is quite different from the data of the survey in France, which showed that 73.5% of all diabetic patients are treated by OHAs (2). However, the bias of the study was discussed by the authors, i.e., that all the health-care expenses were reimbursed only in cases where the diabetic patient was prescribed an antidiabetic drug and not for those who were treated with diet alone (2). We fully agree with the opinion of Kennedy et al. (1) that data on the national use of OHAs, which have previously been lacking in the literature, are very useful.

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