

Dynamics in prevalence of diabetes, diabetic complications and quality of diabetes care in Russian Federation in 2014-15 by data of national diabetes register**M.V. Shestakova**, O.K. Vikulova, I.I. Dedov;

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Background and aims: Due to worldwide increase in prevalence of diabetes mellitus (DM) the data of registers are important tool for evaluation the trends in DM epidemiology and efficiency of healthcare system in certain population. The aim of the study was to analyze the prevalence of DM, complications and HbA1c level in Russian Federation (RF) in 2014-15 years.

Materials and methods: The study summarized the data of the National diabetes register, included databases of 63 regions of RF with more than 3750 clinics of primary care. The data exported from online register, powered by Microsoft Dynamics CRM platform. Statistics performed by SPSS, 19.

Results: At the end of 2015 yr the register included 3310517 DM patients: 99.3% adults (≥ 18 yr), 0.5% children (0-14yr), 0.2% adolescents (15-17yr). Distribution by DM type in age groups: adults 93.1% type 2 (T2)/ 5.2% type 1 (T1)/ 1.6% other DM types, children 89.1/9.7/1.2%, adolescents 93.9/4.6/1.5%, respectively; distribution by gender (M/F) in T1 52.7/47.3%, T2 28.3/71.7%, other types 22.7/77.3%. The average T1 prevalence was 1.66 cases/per 1000 population, T2 26.62 cases/per 1000 population with the wide range of variability among regions from 0.28 to 41.2 and 4.33 to 37.71/1000 population, respectively; the dynamics in prevalence +1% for T1, +2.9% for T2. The most frequent complications in T1/T2 were diabetic neuropathy 40.0/20.6%, retinopathy 33.6%/15.1%, hypertension 17.4/39.2%, nephropathy 19.2/5.2%, macrovascular disease 16.1/13.4%; without significant dynamics compared 2014 yr. In 2015 registered 66093 DM-related deaths (+1% compared 2014); the leading cause was MVD: cumulatively heart failure, stroke and myocardial infarction - 46.2% of deaths in T2 and 30.3% in T1, the third leading cause in T1 - kidney failure (7.1%), in T2 - oncology (8.4%). Distribution by HbA1c level of T1 patients: less 7% - 30.9% of patients; 7-7.9% - 29.1%; 8-9% - 19.2%; > 9% - 20.8%; T2 patients: 45.4%; 31.9%; 13.5%; 9.2%, respectively; dynamics in the patients proportion by HbA1c range compared with 2014 yr: +6.0/-0.4/-2.8/-2.8% and +7.9/-3.1/-2.9/-2.0 for T1 and T2, respectively.

Conclusion: The data of National diabetes register have shown increased DM prevalence in RF over 2014-15 years, predominantly with T2 DM, that is in concordance with the global world trends; stable frequency of the registered diabetic complications and MVD as the main cause of DM-related death both in T1 and T2. Based on HbA1c dynamics with increasing proportion of patients within target in about 45% of T2 and 30% of T1 patients let to consider the better quality of diabetes care during the last year.

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