NOTES AND INFORMATION / *NOTAS E INFORMAÇÕES*

Prevalence of diabetes in adults and the elderly, medication use and sources of acquisition: a comparative analysis of 2012 and 2016

Prevalência de diabetes em adultos e idosos, uso de medicamentos e fontes de obtenção: uma análise comparativa de 2012 e 2016

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Among chronic noncommunicable diseases (NCDs), diabetes mellitus (DM) is distinguished in a heterogeneous group of metabolic disorders characterized by hyperglycemia due to defects in insulin action and/or secretion[1]. The persistent increase in blood glucose is related to acute or chronic complications in the cardiovascular, renal and neurological system, with high rates of hospitalization and mortality[1,2].

Estimates show that between 2010 and 2030 there will be a 69% increase in the number of adults with DM in developing countries and 20% in developed countries[3]. In Brazil, data from the National Health Survey (PNS) estimate that about 9.2 million Brazilians are diagnosed with DM, with prevalence increasing with increasing age[4].

The importance of the disease is highlighted as the main cause of mortality and premature disability in affected individuals in most developing countries, including Brazil[5]. Its prolonged course is reflected in the increased demand for services[6], the high use of medicines, especially in the elderly[6,7], its restriction of daily activities[6] and significant social impact. Several factors are associated with the disease[4,7] and health promotion measures have been implemented in the country in recent years to contain the progression of this NCD as well as others[8].

In Brazil, medication for the treatment of DM are freely available in the National Public Health System(SUS), including primary care and, as a complementary strategy,

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through the Brazilian Popular Pharmacy Program (PFPB). The purpose of this brief communication was to estimate the prevalence of DM in adult and elderly individuals living in the capitals of the Brazilian states and the Federal District, to verify the percentage of diabetics on medication (oral and insulin), to describe the distribution of users according to sources of acquisition and to evaluate the percentages obtained in SUS between 2012 and 2016, from a comparative perspective.

We used data from individuals aged ≥ 18 years from the risk factor surveillance system for chronic noncommunicable diseases via telephone survey(Vigitel), conducted annually by the Ministry of Health since 2006, for the years 2012 (n = 45,448) and 2016 (n = 53,210)[9,10]. Vigitel has been approved by the National Commission of Ethics in Research on Human Beings (processes n° 13081/2008 and 355.590 / 2013). All individuals were consulted and informed and agreed to participate in the research.

Prevalence of diabetes was estimated for all respondents (age ≥ 18 years), for adults (between 18 and 59 years) and elderly (age ≥ 60 years), as well as the percentage of medication use (oral or insulin). among diabetics. For those who reported tablet or insulin use, the percentages and respective confidence intervals of 95% (95%CI) were also estimated, according to sources. Comparisons were performed using Pearson's c2 test (Rao-Scott) with a significance level of 5%. All analyzes took into account the weights of the inquiry's complex sample design. The medicines were obtaining for free in SUS / PFPB pharmacies.

The prevalences of DM were 7.4% (95%CI 6.9 – 7.8) and 8.9% (95%CI 8.5 – 9.4) in 2012 and 2016, consecutively. In men the prevalence was 6.5% (95%CI 5.8 – 7.2) and 7.8% (95%CI 7.2 –8.6) and in women, 8.1% (95%CI 7.5 – 8.9) and 9.9% (95%CI 9.2 – 10.5) in those years. In adults and the elderly, a significant increase was observed, from 4.6 to 5.4% (p = 0.014), and from 22.2 to 25.9% (p = 0.001), respectively, during the study period.

For the group of diabetics aged ≥ 18 years, regarding the exclusive use of oral medication, the percentages observed were 76.8 and 76.4% and, for insulin, 17.6 and 19.7% in 2012 and 2016, relatively, without statistically significant differences for the subgroups analyzed (p> 0.05).

Regarding the sources considered, there was an increase in oral medication among adults and insulin in the elderly in PFPB. Among all diabetics, there was a reduction in obtaining oral medications in SUS pharmacies and an increase in obtaining them in PFPB. An increased in obtaining insulin in PFPB insulin also observed (Figure 1).

It is important to mention that 69.7 and 70.3% of diabetics obtained free oral medications (SUS/PFPB pharmacies) in 2012 and 2016, respectively. The percentages for obtaining insulin free of charge were 88.9 and 90.0% in the years considered.

The results revealed an increased prevalence of DM in the period studied, especially among the elderly. They also showed, for the group of diabetic adults, a reduction in obtaining oral medicine in public pharmacies of primary care and an increase in obtaining both (oral and insulin) through the PFPB, without changes in obtaining them via private pharmacies in the analyzed period.

In secondary prevention, strict metabolic control plays an important role in combating the onset or progression of chronic complications arising from type 1[11] and type 2[1] DM. Although SUS remains a priority source for obtaining drugs to treat DM in the country, it is important to highlight the importance of the three managing bodies in providing treatment to patients with DM, including access to medicines and necessary supplies with guidance directed to rational use, reinforcing the role of primary care as coordinator of care of the Health Care Network.
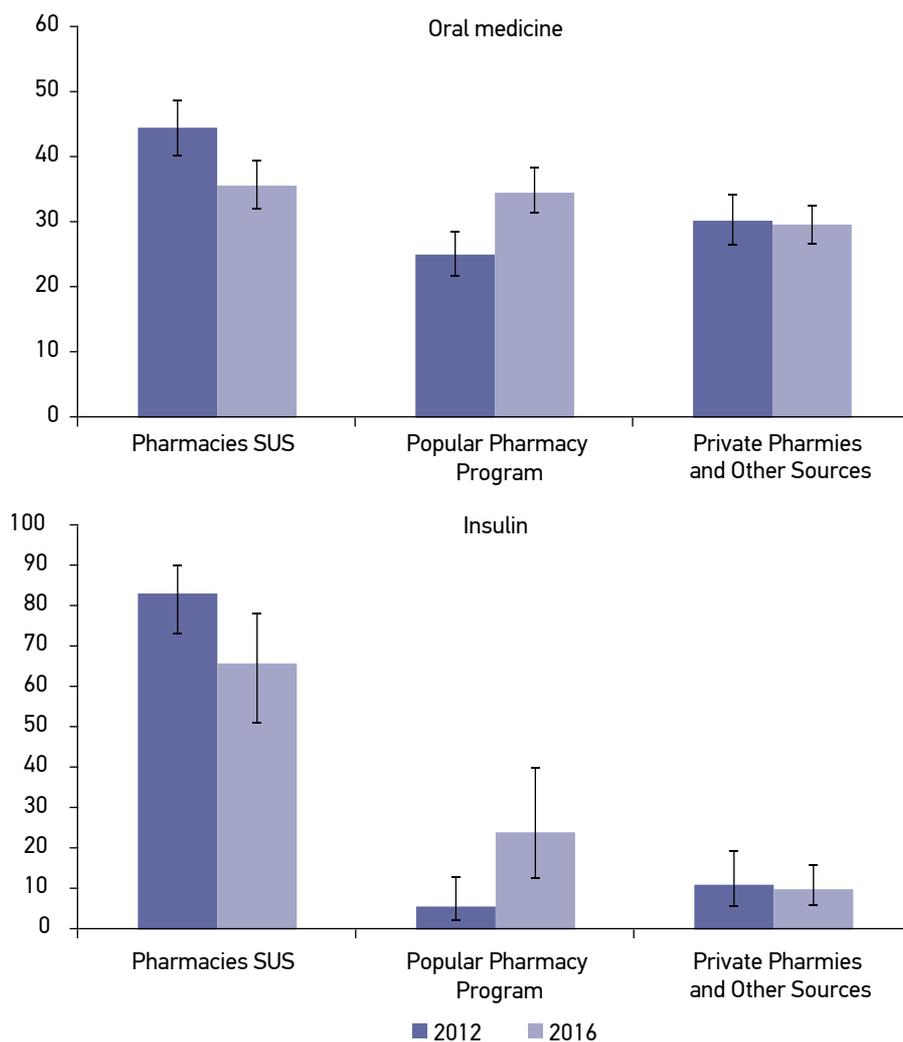
Figure 1. Point estimates and 95% confidence interval of the percentage of diabetics undergoing treatment, according to sources. Vigitel, 2012 and 2016.

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