SCREENING FOR DIABETES MELLITUS IN COMMUNITY PHARMACIES IN BRAZIL: RESULTS OF A NATIONWIDE CAMPAIGN

Cassyano Januário Correr[1], Wendel Coura-Vital[2], Josélia Cintya Quintao Pena Frade*[3], Adriano Silva dos Santos[3], Eliete Bachrany Pinheiro[3], Mônica Soares Amaral Lenzi[3], José Vanilton de Almeida[3], Wesley Magno Ferreira[3], Hermelinda Cordeiro Pedrosa[4], Janice Sepulveda Reis[4], Karla Melo[4], Roberto Pantarolo[4], Walter da Silva Jorge João[3]
[1]Federal University of Parana, [2]Federal University of Ouro Preto, [3]Brazilian Federal Council of Pharmacy, [4]Brazilian Society of Diabetes, Brazil

Background

Brazil has a high diabetes prevalence, reaching 8.7% of the population. It's estimated that 6.6 million people in the country have not been diagnosed yet.

Purpose

Populational studies assessing the prevalence of high blood glucose levels in people with no previous diagnosis of diabetes are scarce. Thus, a cross-sectional study was conducted in November 2018 involving pharmacies from all over the country to estimate the prevalence of high glycemia or high risk for the disease.

Method

A total of **977** community pharmacists from **345** cities evaluated people between the ages of 20 and 79, without prior diagnosis of diabetes (Figure 1).
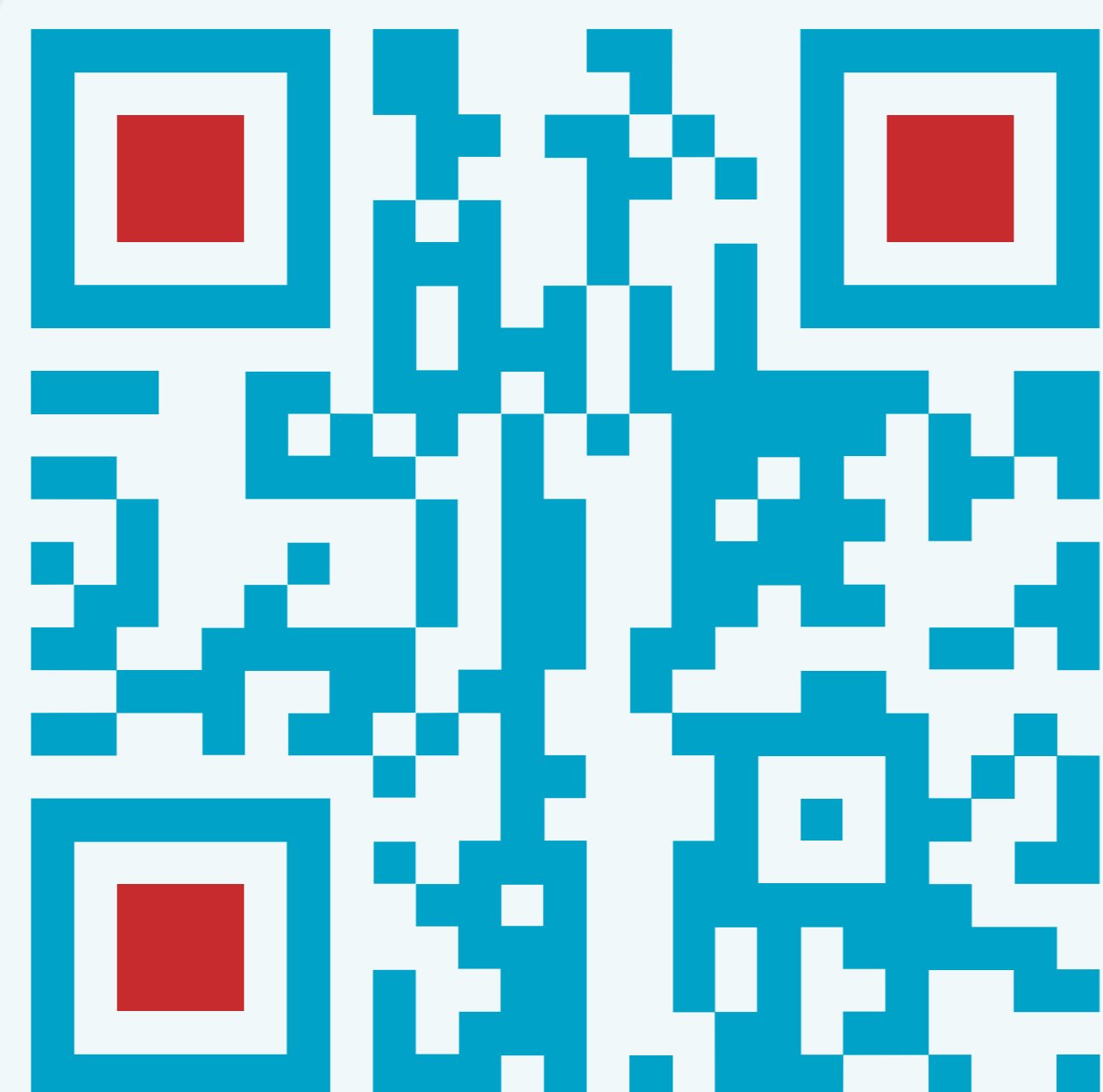

Figure 1: Pictures of the services provided.

A visual identity for the campaign and a website were developed, in order to make all the material needed to the patients' assistance available (Figure 2)

Figure 2: Material developed for the campaign.

Results

17,580 people had their capillary glucose levels assessed and the validated Findrisc questionnaire was applied to them. Fasting glycemia was considered high for >= 100mg/dL or casual glycemia for >= 140mg/dL.

The majority of visits (87.8%) occurred in consulting rooms within retail pharmacies. The population consisted mainly of women (59.5%) and people aged <45 years (47.9%). The Brazilian prevalence of patients with high glycemia was **18.4%** (95% CI: 17.9 - 19.0). The Brazilian region with the highest prevalence was the Midwest (Figure 3), with 24.6%, and the lowest prevalence was in the Southeast (15.6%).

North
Northeast
Midwest
Southeast
South

22.5% (CI95%: 20.4 - 24.8)
19.8% (CI95%: 18.8 - 20.8)
24.6% (CI95%: 22.4 - 27.0)
15.6% (CI95%: 14.7 - 16.5)
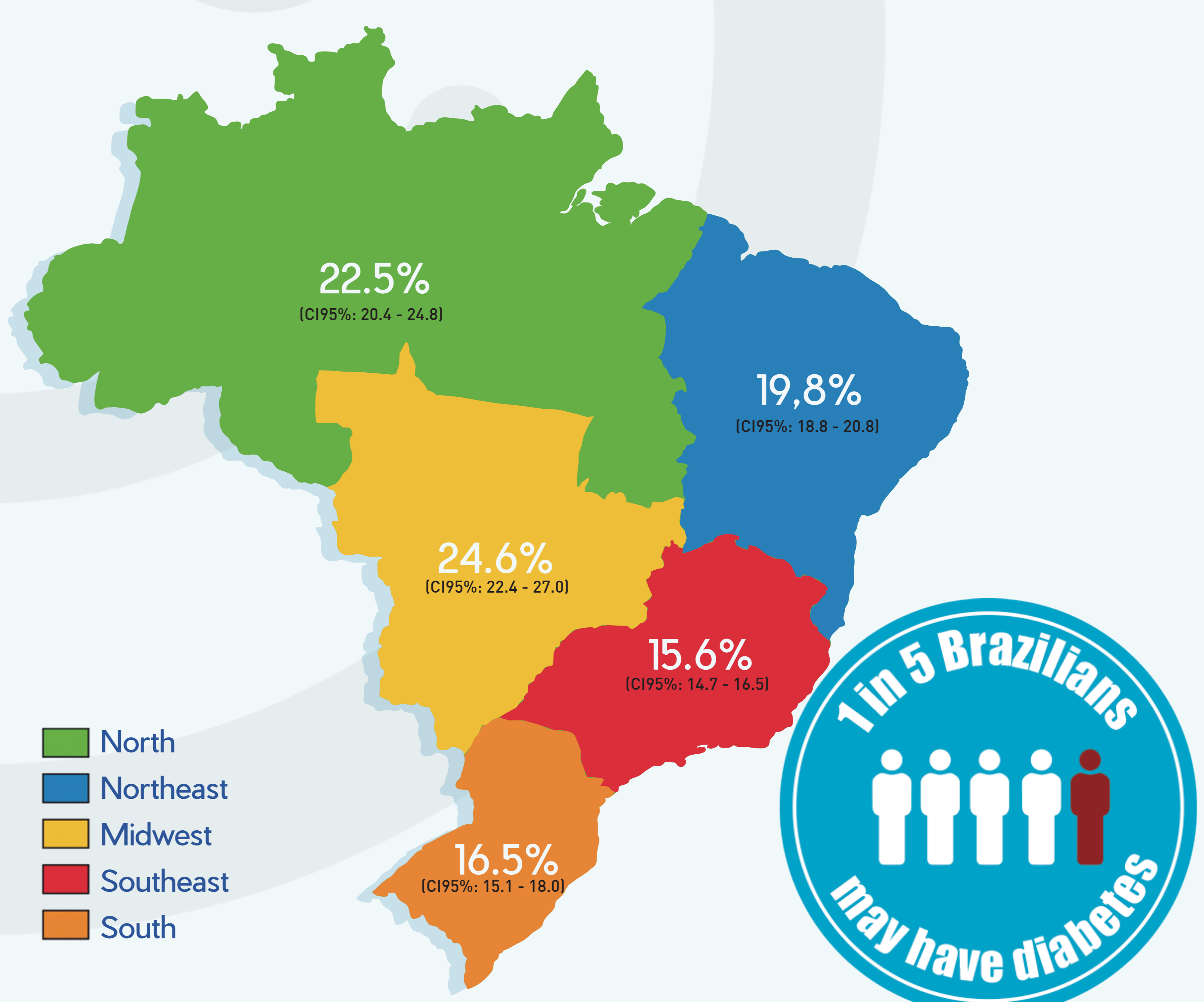16.5% (CI95%: 15.1 - 18.0)

1 in 5 Brazilians may have diabetes

Figure 3: Distribution of prevalence rates per region.

Considering Findrisc score, 22.6% presented a high risk (1 out of 3 may develop the disease) or very high risk (1 out of 2 may develop the disease) to develop diabetes mellitus in the next 10 years. The most prevalent risk factors were sedentary lifestyle (68%), not eating vegetables and/or fruits every day (43%) and history of the disease in parents, siblings or children (37%).

Conclusion

This is the largest screening study of diabetes ever conducted in Brazil and its results are of great importance, since they can direct public health actions at this undiagnosed population.

UFPR UNIVERSIDADE FEDERAL DO PARANÁ

UFOP Universidade Federal de Ouro Preto

DIABETES NÃO TEM CARA. FAÇA O TESTE.

Sociedade Brasileira de Diabetes

Conselho Federal de Farmácia