

## Cuba Needs a Prediabetes Registry Now

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Chronic non-communicable diseases constitute a global health problem receiving ever greater attention from health authorities, including WHO. Among chronic diseases, diabetes mellitus is one of the main causes of morbidity and mortality, with attendant suffering, medical care and financial costs to health systems and families. Diabetes has reached crisis proportions requiring a multilevel approach (individual, social and institutional), with special emphasis on preventive strategies.

In spite of standardized prevention protocols in place throughout the country, Cuba has excessive diabetes mortality in women. According to the most recent Health Statistics Yearbook, diabetes is the 7th cause of death in the female population with a rate of 23.2 per 100,000 population, and the 10th cause in the male population, with a rate of 16.7.[1] Diabetes prevalence in 2016 was 58.3 per 1000 population, 68.5 in women and 48 in men.

The first step toward reducing these rates is earlier detection of prediabetes to enable implementation of more effective prevention strategies to halt progression to diabetes. Such strategies should be based on continuing education—emphasizing prevention, healthy habits and lifestyle changes—complemented by medication when indicated. Prevention, early detection of prediabetes and patient followup are fundamental for lowering diabetes prevalence. To achieve this, Cuba's health system needs to identify and register every case of prediabetes and design appropriate and timely interventions.

Prediabetes is a metabolic condition marked by elevated blood glucose and is considered a major risk factor and predictor for diabetes and cardiovascular complications, though it is often asymptomatic and therefore underdiagnosed. This condition, also known as intermediate hyperglycemia, can also include glucose intolerance. Its diagnosis can be determined via low-cost, accurate testing. Although prediabetic patients do not fit the clinical profile for diabetes, 25% of them develop diabetes within 3–5 years, while 25% return to normal glucose levels and 50% remain prediabetic.[2]


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In Cuba, we currently cannot determine prediabetes prevalence for lack of a registry of patients with intermediate hyperglycemia or other prediabetic markers. Furthermore, the few articles related to prediabetes prevalence in Cuba are based on patient interviews or are literature reviews such as the First Cuban Consensus on Prediabetes, published in 2011.[3] They are not the result of comprehensive nationwide screening or statistical analysis of prevalence based on original research.

Cuba has a free, highly accessible and universal health system, with 150 hospitals, 451 multispecialty community polyclinics and 10,782 neighborhood family doctor-and-nurse offices. The

doctor–patient ratio is 1:125, and 82% of all outpatient primary care consults are carried out by family doctors.[1] This comprehensive coverage favors effective prevention measures, early detection of patients at risk of developing diabetes, and timely intervention.

We have the opportunity to create an accurate and reliable prediabetes registry. To do this, we need to include prediabetes in the National Chronic Non-Communicable Disease Program's active screening in primary and secondary care across Cuba. Towards this end, specialized services should be created, as well as local, municipal and national research groups, in order to provide standardized followup with prediabetic patients.

In Cuba, we have the programs and health professionals to address what global authorities refer to as the 'silent epidemic' of prediabetes. But we need to define the disease burden we are facing and identify at-risk patients. The primary care system has a critical role to play in prevention and detection, but also in data collection concerning prediabetic patients. In my opinion, we cannot put off development of a national prediabetes registry any longer, if we aim to lower Cuba's rates of diabetes, its complications and mortality. 

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Submitted: September 18, 2017

Approved for publication: September 29, 2017

Disclosures: None

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