

One in four people with diabetes worldwide live in China, but a new approach could help transform their care

September 11 2014

Diabetes has become a major public health crisis in China, with an annual projected cost of 360 billion RMB (nearly 35 billion British pounds) by 2030, but a new collaborative approach to care that uses registries and community support could help improve diabetes care, according to a new three-part Series about diabetes in China published in *The Lancet Diabetes & Endocrinology*.

China has the largest number of people with [diabetes](#) of any country in the world, and the disease has reached epidemic proportions in the adult population [Paper 1]. In 1980, less than 1% of Chinese adults had diabetes, but this increased to almost 12% (113.9 million adults) by 2010 (see table page 4). Latest estimates indicate that around half of Chinese adults have prediabetes, putting them at high risk of diabetes and multiple related illnesses.

"Especially alarming is that most adults with diabetes are undiagnosed (70% of all cases), only a quarter of people with diabetes have received treatment and that the disease is controlled in just 40% of those treated", says Professor Guang Ning, one of the Series authors, and immediate past president of the Chinese Endocrine Society, who led the Chinese national survey of diabetes in 2010.

Worryingly, say the authors, these figures herald a major epidemic of diabetes-related complications such as cardiovascular disease, chronic

kidney disease, and cancer in the near future unless there is effective national intervention.

The epidemic is the result of rapid economic development and urbanisation that has culminated in an "obesogenic environment" characterised by food abundance, physical inactivity, and psychosocial stress [Paper 1]. What is more, Chinese people are particularly susceptible to [type 2 diabetes](#) compared with white people, and they tend to develop the disease at a much lower body mass index (BMI). The average BMI of Chinese patients with diabetes is 25 kg/m², compared with 30 kg/m² in non-Asians [Paper 2].

Over the past 30 years, China's standard of living and life expectancy have improved for many, but the ageing population, dietary changes, reduced physical activity, and exceptionally high rates of smoking have contributed to the diabetes epidemic. The health consequences of this epidemic threaten to overwhelm health-care systems and urgent action is needed, warn the authors.

In future decades, the double burden of an ageing population and rising rates of young-onset diabetes will have an enormous toll on productivity and health-care systems [Paper 1]. Series co-leader Professor Ronald Ma, from the Chinese University of Hong Kong, explains: "Given the increased long-term risk of complications in people with young-onset diabetes, the potential economic and health burden associated with this epidemic is very alarming. In 1993, the cost of diabetes treatment in China was 2.2 billion RMB, but the projected cost for 2030 is 360 billion RMB, which highlights the critical importance of prevention."

There is much to be done, says Professor Juliana Chan from the Chinese University of Hong Kong, who co-led the Series: "While we await the results of long-term strategies from the China National Plan for Non-Communicable Disease Prevention and Treatment (2012-15) including

tobacco control and universal screening for gestational diabetes, we advocate the use of a targeted proactive approach to identify people at high risk of diabetes for prevention, and of private-public community partnerships that make care more accessible, sustainable, and affordable focusing on registry, empowerment, and community support."

For example, community-based coordinating centres and targeted screening programs in schools and workplaces, run by trained community health workers and graduate students under medical supervision, could identify high-risk individuals and provide education about the benefits of early intervention, treatment and continuing support [panel, Paper 1, page 8]. Additionally, more research is needed to identify the best drug treatments for Chinese people with type 2 diabetes, who have several unique clinical characteristics [Paper 3].

According to Professor Chan, "As this epidemic continues to unfold, every individual must join in the grand challenge of creating a multidimensional solution to minimise its effects on societal, family, and personal health."

More information: www.thelancet.com/series/tuberculosis-and-diabetes

Provided by Lancet

Citation: One in four people with diabetes worldwide live in China, but a new approach could help transform their care (2014, September 11) retrieved 27 April 2024 from <https://medicalxpress.com/news/2014-09-people-diabetes-worldwide-china-approach.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.