Editorials

Recommendations from 'Improving health outcomes of people with diabetes: Target setting for the WHO Global Diabetes Compact' for the Indian context: Laudable but are they achievable?

The Global Diabetes Compact (GDC) was announced by WHO in 2021 as part of its aim to tackle the global epidemic of diabetes.[1] Gregg *et al.* published in the *Lancet* with a key set of health metrics and treatment targets to complement the GDC, which led to the following metrics and targets for UN member countries, namely:[2] *'(1) of all people with diabetes, at least 80% have been clinically diagnosed; and, for people with diagnosed diabetes; (2) 80% have HbA1c concentrations below 8.0% (63.9 mmol/mol); (3) 80% have blood pressure lower than 140/90 mmHg; (4) at least 60% of people 40 years or older are receiving therapy with statins; and (5) each person with type 1 diabetes has continuous access to insulin, blood glucose meters, and test strips.'*

Gregg *et al.* considered the spread across the globe in their choice of health metrics and target setting.[2] We considered how these would apply to the prevalence of diabetes and distribution of diabetes care within the Indian health system, and the potential challenges.

For those with an established diagnosis of diabetes, among the key challenges within the Indian healthcare system is the variation in the availability and access to monitoring equipment and blood tests. Anjana *et al*. reported considerable differences in self-monitoring of blood glucose between rural and urban settings in India (on a background of low levels of self-monitoring of blood glucose overall).[3]

Another challenge is the cost and affordability of medications for diabetes, which could adversely impact access to the same. Chow *et al*. previously found that there was poor availability and affordability of core diabetes medications in middle-income and low-income countries. However, they found that while the availability of diabetes medications was better in India compared to other middle-income countries (attributed to India's pharmaceutical industry), affordability of medications remained low.[4]

The role of self-management practices in achieving effective glycaemic control is well-established.[5,6] In the context of diabetes, self-management practices include diet and lifestyle measures, self-monitoring of blood glucose and medication adherence.[7] Sridharan *et al.* previously highlighted a number factors in the sociocultural context of India which need to be improved to promote effective self-management, including health literacy and knowledge, health beliefs, social support networks, and the doctor–patient relationship.[8] These factors could also be considered to pose potential barriers to those identified at *high risk* of diabetes, as diet and lifestyle measures, which form part of self-management practices, also form the mainstay of effective risk management for diabetes prevention for those identified to be at high risk of developing diabetes.[9,10] At a population level, variations in health beliefs across sociocultural contexts, lack of health literacy and social support networks could also pose barriers to engagement and uptake with health promotion campaigns for healthy diet and lifestyle maintenance and diabetes prevention measures.

Finally, the lack of electronic health records or a health database in India poses major challenges at multiple levels. These include accurate measurement of the true prevalence of undiagnosed diabetes in India, measuring effectiveness of interventions at a larger

scale and population-level monitoring of the aforementioned recommendations for targets laid out by Gregg *et al*.[2]

In conclusion, we emphasize that these recommendations do not represent a privilege, but a right of all individuals living with diabetes or at risk of diabetes. The aspiration for these targets to be addressed within the Indian health system is laudable. However, there is a lot more that needs to be done in the steps leading up to effective glycaemic and cardiovascular risk control highlighted in the aforementioned targets. These include addressing barriers to self-management, effective health promotion campaigns that take sociocultural factors into account, improving affordability of medications to promote access across all socioeconomic groups within India and systems for target monitoring on a large scale. We recommend that measures to address all of these factors are considered by health policy-makers and clinicians in India to facilitate progress in addressing the burden of the diabetes epidemic in India.

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