

**From control to remission: Empowering change in type 2 diabetes care**

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Madam, Pakistan currently ranks third globally in terms of its diabetic population, with approximately 33 million diagnosed cases of Type 2 Diabetes Mellitus (T2DM). Additionally, there are 11 million individuals living with impaired glucose tolerance and 8.9 million people in Pakistan are unaware that they have diabetes<sup>1</sup>. Poor dietary habits and sedentary lifestyles are the major factors contributing to Pakistan's high prevalence of diabetes<sup>2</sup>. Metformin is commonly prescribed as the leading therapeutic choice for type 2 diabetes, either as a standalone treatment or combined with insulin or other glucose-lowering therapies<sup>3</sup>. However, despite adherence to guidelines-based practices, a significant number of individuals fail to achieve remission in T2DM which has led to the exploration of alternative approaches.

The DiRECT trial, which primarily involved ethnically white participants, aimed to reverse the diagnosis of T2DM and restore normal metabolic features through a weight-loss protocol. Within 12 months, nearly 50% of the participants achieved remission to a non-diabetic state and discontinued antidiabetic medications. The trial also highlighted the significant role of visceral fat in the development and remission of T2DM<sup>4</sup>. However, the trial's lack of South Asian participants and the well-documented variations in disease severity and average body fat levels between South Asians and other populations raised concerns about its relevance to this particular group. To address this, the STANDby trial was conducted which showed that the remission rates observed in UK-based South Asians were similar to those in white cohorts<sup>5</sup>.

These trials have demonstrated the possibility of achieving T2DM remission, particularly within the first six

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years following diagnosis. Given these findings, we propose that implementing this weight management programme in Pakistan could be a suitable alternative to the current guidelines. This programme effectively targets the key factors contributing to the high prevalence of diabetes in the country and emphasizes the importance of facilitating the remission of T2DM rather than just disease control. By addressing dietary habits, promoting physical activity, and targeting visceral fat reduction, this protocol can potentially bring about significant improvements in T2DM outcomes in Pakistan.

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