

## Adherence to Medical Nutrition Therapy: From Barriers to Bridgers

Sanjay Kalra<sup>1,2</sup>, Nitin Kapoor<sup>3,4</sup>

Type 2 diabetes is a major clinical and public health disorder worldwide.<sup>1</sup> While multiple drugs are now available for its treatment, no management strategy can be successful without nutritional and dietary intervention. The nature of lifestyle-related interventions including diet, is such that they intrude into one's preferred way of life. Such therapies, therefore, are associated with lower adherence and persistence.<sup>2</sup>

In medicine, we are trained to take a history and evaluate possible causes of a condition before planning our treatment. Similarly, in diabetes care, we must find the causative and contributory factors that influence a particular lifestyle choice. This step is essential to build a sustainable and sufficient diabetes care ecosystem.

Sukaina Shabbir et al, from the National Institute of Diabetes & Endocrinology (NIDE), Dow University of Health Sciences, Karachi have shared their findings in this regard. In a well-conducted cross-sectional study, they included 312 adults living with type 2 diabetes. They used a validated questionnaire to assess the barriers that led to non-adherence to dietary therapy.<sup>3</sup>

Based upon their analysis, the authors identified five major reasons for non-adherence. These include lack of knowledge, situational barriers, lack of family support, stress-related eating, and a boring, monotonous diet.<sup>3</sup> We rephrase these as the 5 S's or 5 Shortcomings of medical nutritional therapy (MNT): Scientific illiteracy, Situational challenges, Suboptimal Support from family, Stress and eating, and Stereotyped diet.

The authors list 3 more causes: expensive and ineffective diet, work conditions and dislike for prescribed diet, and a feeling of being hungry and weak.<sup>3</sup> While work conditions and dislike for food can be discussed under situational challenges and stereotyped diets, Spending limitations and Scanty nutrition allow two more points to be added to the list of shortcomings of MNT (Table). This information allows

**Table:** Medical nutrition therapy for diabetes: barriers and bridges.

| Barriers                                | Bridges  |
|---|--|
| Scientific illiteracy/lack of awareness | Preparing and explaining MNT in simple ways, e.g., using pictorial representations such as 'Healthy thali'. <sup>4</sup>   |
| Situational challenges                  | Creating healthy alternatives during feasts, at restaurants/hotels; Sensitizing the public towards 'culinary cooperation' rather than 'culinary cruelty'. <sup>5</sup>               |
| Support from family                     | Involving the family in procurement, preparation, plating and preservation of food, while explaining the importance of a healthy diet. <sup>6</sup>                                  |
| Stress and eating                       | Focusing on stress management as an integral part of diabetes care. <sup>7</sup>   |
| Stereotyped diet                        | Involving the culinary team in preparation of tasty and appealing food, while ensuring its healthiness; using culinary ingredients to add spice and flavour to cooking. <sup>9</sup> |
| Spending limitations                    | Exploring low-cost alternatives for protein and fat; kitchen gardening; Cooperative farming. <sup>10</sup>   |
| Scanty nutrition                        | Ensuring balanced diet with adequate macro- and micro-nutrients; Supplementing deficient vitamins and minerals if clinically appropriate. <sup>4</sup>                               |

us to plan appropriate interventions at both clinical and public health levels. These are listed in Table as well. MNT prescriptions should be not only physio-friendly and accurate but psycho-friendly and acceptable, as well as practice-friendly and affordable as well.

The authors must be commended for their work on a topic relevant not only for individuals, but for the society and nation as a whole. In fact, the impact of this seemingly simple but strikingly significant study should be felt beyond Pakistan and South Asia. The authors also deserve commendation for the person-centric nature of their work, in which they have listened to the complaints, concerns and challenges of person living with type 2 diabetes. Their use of the word 'adherence', instead of 'compliance', and the phrase 'culturally appropriate dietary education' are testimony to this. The call to understand "the patient's psychological, sociocultural, and socioeconomic conditions, individual's level of understanding and dietary preference" is the key to successful MNT.

We thank the scientists from NIDE for focusing on this aspect of diabetes care, as well as Journal of Pakistan Medical Association (JPMA) for highlighting person-centred diabetes research from our part of the world.

<sup>1</sup>Department of Endocrinology, Bharti Hospital, Karnal, India; <sup>2</sup>University Center for Research & Development, Chandigarh University, India;

<sup>3</sup>Department of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, India; <sup>4</sup>Non communicable disease unit, Baker Heart and Diabetes Institute, Melbourne, Victoria, Australia.

**Correspondence:** Sanjay Kalra. e-mail: brideknl@gmail.com  
ORCID ID: 0000-0003-1308-121X

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