Management of type 2 diabetes mellitus in India: Need to emphasize on Diabetes Self-Management Education (DSME)

Type 2 diabetes is the predominant form of diabetes constituting more than 90 % of all the diabetic population.[1] Studies have shown a rising trend in the prevalence of diabetes across different parts of India.[2, 3] Recent estimates by the International Diabetes Federation (IDF) showed that number of people with diabetes in India is 65.1 million and is projected to increase to 109 million by 2035. The high burden of diabetes is been reflected in increased morbidity by virtue of its specific complications, high cost of treatment and reduced life expectancy. Around 1.1 million deaths are attributed to diabetes in India in 2013.[4]

Indians are also more prone to develop diabetes related complications, the most common being the coronary artery disease, neuropathy, nephropathy and retinopathy. Diabetic nephropathy is a significant cause of chronic renal failure in India. Around 5-10% of the nation's health budget is spent on diabetes prevention and treatment which is grossly inadequate to mitigate the burden of the disease.[5]

Although the last decade experienced dramatic advances in the spectrum of pharmacologic agents and conceptual transformations in the principles of diabetes management, recognizing the public health importance of diabetes, the practical management has become difficult because of several barriers existing at patient, society and health care system level. At system level there is inadequate infrastructure, lack of support service due to scarcity of health care personnel and lack of team based patient centric approach with more emphasis on acute management rather than preventive care. At societal level, changing patterns in the lifestyle, unhealthy dietary practices, lack of physical activities have increased the toll of disease and its complications to a great extent. High rate of in alternate system are some of the significant barriers for effective management of diabetes. Patient's lack of knowledge about the disease and its complications, economic constrains and lack of support mechanism further impact the health behaviour and management of the disease. Diabetes is a lifelong disease and the expenses for managing the disease are overwhelming. Both urban as well as rural diabetic patients in India spend a large proportion of their income on diabetes management, whereas lifestyle interventions are extremely effective and almost free and can be achieved through effective diabetes self management education (DSME).[6, 7]

The American Diabetes Association defined diabetes self-management education as an ongoing process of facilitating the knowledge, skill, and ability necessary for diabetes self-care incorporating the needs, goals, and life experiences of the person with diabetes and is guided by evidence- based standards. Education helps people with diabetes to cope up with the disease, perform self care and make lifestyle changes. DSME is a critical intervention helping the patient to escalate metabolic control, prevent and manage complications, and enhance quality of life in a cost-effective manner.[8] Although DSME should be universally provided to each diabetic patient, in India it is not practiced at a desired level because of several constrains at various levels.

Several studies done across India reflects the average or poor knowledge among respondents, highlighting an immense need of educating the patients to practice self-care behaviors in multiple domains, including healthy dietary practices, physical activity, drug adherence and blood glucose monitoring, each one is having the significant impact on outcome.[9, 10] Studies aimed to provide diabetes self-management

education has shown significant improvement in patient's knowledge, self care practices and metabolic control.[11,12]

Health care providers should act as a coach to provide education and support to diabetic patients, however scarcity of trained personnel, overburdened specialist, and apathy among the health care providers seriously impact their role in providing patient education in India. A patient centric team based approach is required to promote DSME. There is need to explore the potential role of grass root health workers, voluntary organizations and other stakeholders including the community in which the patient lives and practice self care. There is urgent need of designing and implementation of uniform training programmes targeting patients as well as health care providers across all levels in India.

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