REVIEW ARTICLE

Enhancing Healthy Living by Self-care Management for Diabetes Mellitus

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ABSTRACT

Diabetes mellitus (DM) is a chronic systemic disease caused by the lack of insulin or diminished capacity of the body to utilize insulin. Self-care management plays a significant role to control DM. Execution of diabetes management requires knowledge, faith, and mentality of the patients being dealt with. Diabetes cannot be cured; however, it can be controlled. Hence, it is the duty of healthcare professionals to ensure that a patient has sufficient understanding and ability to control DM.

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Introduction

Diabetes mellitus (DM) is a chronic condition that affects the body system due to disturbed glucose metabolism caused by insulin deficiency. It has been revealed recently that patients affected by type I and type II DM are more in the developing countries rather than in the developed countries¹. Cardiovascular diseases, neuropathy, and nephropathy are the diseases related to DM which may be fatal. The prevalence of DM has been increasing all over the world in the past 30 years, and particularly, higher prevalence is seen in the Indian subcontinent.¹ According to the International Diabetes Federation (IDF), the global diabetes prevalence for the year 2018 was found to be 8.3%, affecting 382 million adults, and it is projected to increase to 8.8% and 592 million adults by 2035.^{2,3} Currently, India is a country with the second highest number of people with type II DM. As per IDF data for the year 2019, there were 65.1 million people with diabetes in India, which is predicted to rise up to 109 million by the year 2035. Death caused by DM is high among people with low and average earnings.³

IMPORTANCE OF DIABETES SELF-CARE MANAGEMENT

Diabetes self-care management training starts with an appraisal and advancement of an instructional arrangement, one that is vigorously founded on the patient's objectives, interests, capacities, and necessities.^{4,5} The diabetes instructor enables the individual with diabetes to distinguish, organize, and move in the direction of individualized objectives to conduct changes that lead to better self-administration aptitudes and self-care practices, better wellbeing and ailment management, improved personal satisfaction, and autonomy in the way of life decisions. As the multilayered arrangement is actualized, the diabetes teacher is capable not exclusively to give absorbable measures of data and guidance, however, to evaluate the patient's advancement in learning, ability improvement, and conduct change.^{6,7} Estimating the results shown that data enables the instructor to design proper follow-up intercessions, illuminate basic leadership, and drive social insurance conveyance.8

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Self-care Management Tips on Diabetic Mellitus

Regular Exercise

Exercise is the most important factor in controlling diabetes. It helps digestion. Keeping a track on exercise will help to maintain nominal blood sugar levels. 9–11

Diet

Reduced sugar, salt, and high-calorie food intake and avoiding outside food help to maintain normal blood sugar levels. 11-13

Smoking

Patients with DM should quit smoking and restrain from drugs since they may lead to narrowing of blood vessels further leading to disruption of blood circulation. 14–17

Fiber Intake

Increased fiber intake helps in digestion, reduces cholesterol, and maintains blood sugar. 9,18

Foot Care

Persons with type II DM should wash their foot with warm water and dry them properly. The swollen and injured foot should be paid immediate attention and consulted. ^{12,19,20}

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Eye Care

Eyes need to be checked regularly, failing which may lead to retinopathy. Regular consultation will help prevent it.^{21,22}

Tooth Care

Brushing and flossing after a meal will prevent gum infection. Swollen and redness of gums need to be treated immediately. ^{23,24}

Stress Management

Stress relaxation techniques like yoga need to be adapted and managed effectively since hormones produced by stress prevent insulin from working properly.^{22,25,26}

Conclusion

Diabetes patients are prone to have a risk for getting infections which should be battled with each and every day of your life. Self-care management in DM is one of the most significant strides towards a solid life by defeating the infection and not let it control your life. Basic consistent measures can help by holding glucose levels under control.

REFERENCES

- World Health Organization. Definition, diagnosis and classification of diabetes mellitus and its complications. Geneva: World health organization; 1999.
- KinraS, Bowen LJ, Lyngdoh T, Prabhakaran D, Reddy KS, Ramakrishnan L, et al. Socio demographic patterning of non-communicable disease risk factors in rural India: a cross sectional study. BMJ 2010;341(sep27 1):c4974. DOI: 10.1136/bmj.c4974.
- 3. Chuang LM, Tsai ST, Huang BY, Tai TY. The status of diabetes control in Asia–a cross-sectional survey of 24 317 patients with diabetes mellitus in 1998. Diabet Med 2002;19(12):978–985. DOI: 10.1046/j.1464-5491.2002.00833.x.
- Narayanappa D, Rajani HS, Mahendrappa KB, Prabhakar AK. Prevalence of pre-diabetes in school-going children. Indian Pediatr 2011;48(4):295–299. DOI: 10.1007/s13312-011-0061-6.
- World health organization: Diabetes Factsheet. 2012. http://www. who.int/mediacentre/factsheets/fs312/en/index.html.
- American Diabetes Association. Implications of the United Kingdom prospective diabetes study. Diabetes Care 2004;27(Suppl 1):28–32.
- 7. Zucchi P, Ferrari P, Spina ML. Diabetic foot: from diagnosis to therapy. G Ital Nefrol 2005;22(Suppl 31):S20–S22.
- Mohan D, Raj D, Shanthirani CS, Datta M, Unwin NC, Kapur A, et al. Awareness and knowledge of diabetes in Chennai - The Chennai urban rural epidemiology study. J Assoc Physicians India 2005;53: 283–287.
- Wild S, Roglic G, Green A, Sicree R, King H. Global prevalence of diabetes: estimates for the year 2000 and projections for 2030. Diabetes Care 2004;27(5):1047–1053. DOI: 10.2337/diacare. 27.5.1047.

- Pradeepa R, Mohan V. The changing scenario of the diabetes epidemic: implications for India. Indian J Med Res 2002;116:121–132.
- Wagner EH, Austin BT, Davis C, Hindmarsh M, Schaefer J, Bonomi A. Improving chronic illness care: translating evidence into action. Health Aff (Millwood) 2001;20(6):64–78. DOI: 10.1377/hlthaff.20.6.64.
- Katulanda P, Constantine GR, Mahesh JG, Sheriff R, Seneviratne RDA, Wijeratne S, et al. Prevalence and projections of diabetes and prediabetes in adults in Sri Lanka - Sri Lanka diabetes, cardiovascular study(SLDCS). Diabet Med 2008;25(9):1062–1069. DOI: 10.1111/j.1464-5491.2008.02523.x.
- Ohkubo Y, Kishikawa H, Araki E, Miyata T, Isami S, Motoyoshi S, et al. Intensive insulin therapy prevents the progression of diabetic microvascular complications in Japanese patients with non-insulindependent diabetes mellitus: a randomized prospective 6-year study. Diabetes Res Clin Pract 1995;28(2):103–117. DOI: 10.1016/0168-8227(95)01064-k.
- UKPDS. Intensive blood-glucose control with sulphonylureas or insulin compared with conventional treatment and risk of complications in patients with type 2 diabetes (UKPDS 33). Lancet 1998;352(9131):837–853. DOI: 10.1016/S0140-6736(98)07019-6.
- Shobana R, Augustine C, Ramachandran A, Vijay V. Improving psychosocial care: the Indian experience. Diabetes Voice 2005;50(1):19–21.
- Chew LD. The impact of low health literacy on diabetes outcomes. Diabetes Voice 2004;49(3):30–32.
- Glasgow RE, Hiss RG, Anderson RM, Friedman NM, Hayward RA, Marrero DG, et al. Report of the health care delivery work group: behavioral research related to the establishment of a chronic disease model for diabetes care. Diabetes Care 2001;24(1):124–130. DOI: 10.2337/diacare.24.1.124.
- Grey M, Thurber FW. Adaptation to chronic illness in childhood: diabetes mellitus. J Pediatr Nurs 1991;6(5):302–309.
- Peel E, Douglas M, Lawton J. Self-monitoring of blood glucose in type-2 diabetes: longitudinal qualitative study of patients' perspectives. BMJ 2007;335(7618):493. DOI: 10.1136/bmj.39302.444572.DE.
- Etzwiler DD. Diabetes translation: a blueprint for the future. Diabetes Care 1994;17(Suppl. 1):1–4.
- 21. Bradley C. Handbook of Psychology and Diabetes. Chur, Switzerland: Harwood Academic; 1994.
- Johnson SB. Health behaviour and health status: concepts, methods and applications. J Pediatr Psychol 1994;19(2):129–141. DOI: 10.1093/ jpepsy/19.2.129.
- 23. Cooper H, Booth K, Gill G. Patients' perspectives on diabetes health care education. Health Educ Res 2003;18(2):191–206. DOI: 10.1093/her/18 2.191.
- Paterson B, Thorne S. Developmental evolution of expertise in diabetes self-management. Clinical Nurse Res 2000;9(4):402–419. DOI: 10.1177/10547730022158663.
- 25. McNabb WL. Adherence in diabetes: can we define it and can we measure it? Diabetes Care 1997;20(2):215–218. DOI: 10.2337/diacare.20.2.215.
- American association of diabetes educators: AADE7 selfcare behaviours. Diabetes Educ 2008;34(3):445-449. DOI: 10.1177/0145721708316625.