REVIEW ARTICLE

Nursing and Diabetes: A Review

Ulfat Amin¹, Rajwant Randhawa Kaur²

¹Faculty at Islamic University of Science and Technology, Awantipora, Kashmir, India

²Professor, Desh Bhagat University, Gobindgarh Punjab, India

Corresponding Author: cuteulfat@gmail.com

ABSTRACT

Recent changes, such as the COVID 19, pandemic have brought attention to diabetes's significance in describing health, especially uncontrolled diabetes outcomes. Lack of exercise and education is a key barrier in maintaining good glycaemic control. Lack of knowledge at the individual/client, family/group, and community level contributes to delayed diabetes diagnosis, recognition, and control. Nurses play a clinical role in diagnosing, caring for, and supporting diabetic patients. Nurse educators also have special duties in the evaluation of each diabetic patient. They provide diabetic patients with the knowledge, resources, and continuing support they need to adhere to their diabetes treatment plan on a daily basis.

Keywords-- Diabetes, Obesity, motivation, Education

INTRODUCTION

An epidemic that shows no signs of abating is diabetes. Recent changes, such as the COVID 19, pandemic have brought attention to diabetes's significance in describing health, especially uncontrolled diabetes outcomes [1, 2]. The bulk of the approximately 422 million individuals with diabetes globally reside in low- and middle-income nations, and diabetes is directly responsible for 1.5 million fatalities

annually. Over the past few decades, diabetes has been rapidly growing in both instances and prevalence [3, 4].

Lack of exercise and education is a key barrier in maintaining good glycaemic of knowledge control. Lack individual/client, family/group, community level contributes to delayed diagnosis, recognition, and diabetes control [5, 6]. This creates a difficult situation, where retaining control becomes increasingly challenging to achieve and patient satisfaction with healthcare decreases [7].

One of the first step is to educate more & more people, and empower the general public about the means of ensuring prompt acceptance of and access accessible medical treatments [8, 91. However, it is simpler said than done, there are not enough doctors in certain countries, notably those in South Asia, to meet the needs of the population's healthcare. This establishes a wall in the delivery of every type of healthcare service [10].

The number of capable Endocrinologists and Diabetologists alone cannot guarantee that all people with diabetes get high-quality care as per the condition. Diabetes is a catastrophic issue that requires quick and early responses at a very large-scale [11]. As a result, it makes perfect sense to incorporate the function of professional Nurses in managing diabetes prevention, control, and education. When caring for diabetic patients, each member of the nursing team has a crucial role to play and specific duties to fulfil. Nurses from all www.matjournals.com

areas of nursing, such as occupational health nurses, public health nurses, and school nurses, are likely to deal with patients who have diabetes or are undergoing testing to identify diabetes [12-14]. Nurses play a clinical role in diagnosing, caring for, and supporting diabetic patients. Nurse educators also have special duties in the evaluation of each diabetic patient. They provide diabetic patients with the knowledge, resources, and continuing support they need to adhere to their diabetes treatment plan on a daily basis [2, 15].

Role of nurses in Diabetes care

Nurses play vital role as educators, caregivers, motivators

As Educators

A novel strategy for raising the standard of patient education is the inclusion of nurse educators in clinical settings and hospital teams. Each diabetes patient's evaluation falls under the purview of the nurse educator [16]. An evaluation of each person's interest in learning as well as what they know about their condition and where their educational requirements are. The main purpose of the nurse educator is to raise the standard of patient education [17, 18]. The nurse educator has more opportunity to spend with the patients and family members than the doctor does with each diabetes patient due to their restricted contact time. Before beginning the teaching-learning process, it is important to hear what each person has to say about their diabetes and other health issues. In addition to having knowledge about diabetes, including its complications and issues, the nurse educator must be proficient in this teaching-learning process. Importantly, the educator must be able to assess the success of the teaching and learning being done and focus on following points [19, 20].

 Provide information about diabetes and the underlying disease.

- Focus on problems associated with; Blood glucose self-monitoring and injection procedures; prevention and treatment of complications.
- Create and implement educational initiatives for Clients, families, and communities.
- Inform Clients and families of potential long-term issues.
- Offer clients monitor their blood sugar levels so that their medications may be controlled and adjusted for diabetics who are insulin- and non-insulindependent.
- Evaluate, oversee, and put treatment plans into action for patients at various illness stages, to avoid diabetic complications and get treatment.
- Arrange for the schools to participate in community outreach education classes [21, 22].

Moreover, nurse educators should stay updated with current research being conducted, and nurses must educate diabetic patients about the various updates in the field of diabetes [23, 22].

As Care givers

Nurses as Diabetes caregivers have emerged as a crucial and financially advantageous addition to the medical staff whose efforts are focused on enhancing the overall care given to diabetes patients. A novel strategy for raising the standard of care is the nurse educator's engagement in clinical practise [24, 4].

As Motivators

In order to successfully treat diabetes, it is important for a nursing professional motivate clients to accomplish the following objectives: (1) alleviation of symptom; (2) resume normal day to day activity; (3) maintaining normal body mass index; (4) no amount of glucose in urine; (5) blood sugar level of 80-110 mg/dl before meals; and (6) normal Haemoglobin A1C

www.matjournals.com

levels. Each client is diverse in their upbringing and culture, no single programme can meet all of their demands. To achieve the objectives of diabetes management, education must be tailored to each patient's needs as much as possible. This will enable each patient to become a responsible, valuable part of the healthcare team [25, 26].

The first objective of diabetes client's education is to teach them the right techniques in the survival skills required to manage his ailment; however, it is equally important to provide the education required to help the client become independent, i.e., to think for himself as important member of society, to resolve issues on his own, and manage his day-to-day activities [7, 27]. Each client should take ownership of his or her own health. Once this is achieved, diabetes clients will experience life just like any other normal, healthy person who accepts rules in life and is a well-adjusted, contributing member of society. Otherwise, Diabetes sufferers will continue to consider themselves "hampers" in a society of "normal" peers [22].

CONCLUSION

Nurses play vital role in providing quality patient care and encouraging selfcare management among diabetic patients. Diabetic specialized Nurses can operate in a number of care settings and specialise in the treatment of diabetes. People frequently make their initial contact with a Nurses, which then directs them to additional specialised services. Each diabetes client's evaluation falls under the purview of the nurse educator, evaluation of each client's willingness to learn as well as what they know about their condition and where their educational requirements are. In addition of having knowledge about diabetes, including its complications and issues, the nurse educator must be proficient in educating & motivating the clients. The frequency of doctor's appointments, phone calls, and hospital stays is decreased with proper care and management. Governments and healthcare institutions must acknowledge the rising effect of diabetes in the world. In order to address the corresponding issues, nurses play a crucial role. However, they won't be able to carry out their duties to the fullest extent unless there is a substantial investment in recruiting, training, and education.

REFERENCES

- 1. Garver, W. S., Newman, S. B., Gonzales-Pacheco, D. M., Castillo, J. J., Jelinek, D., Heidenreich, R. A., & Orlando, R. A. (2013). The genetics of childhood obesity and interaction with dietary macronutrients. *Genes & nutrition*, 8(3), 271-287, DOI: https://doi.org/10.1007/s12263-013-0339-5
- 2. Mehra, B., & Dessel, A. (2011). The role of library and information science education in the development of community health information services for people living with HIV/AIDS: Perspectives of directors and managers of public libraries. *World Journal of AIDS*, *1*(03), 78, Available at https://www.scirp.org/html/7506.html
- 3. Diabetes, Available at https://www.who.int/health-topics/diabetes#tab=tab_1
- 4. Amin, U. (2017). All about breastfeeding for mothers. *Nurs Health Care Int J*, 1-3.
- 5. Kalra, S., & Sharma, S. (2022). Diabetes is too important to be left to diabetologists alone. *Journal of the Pakistan Medical Association*, 72(5), 800-801.
- 6. Amin Bhat U. JOJ Nurse Health Care Art of Parenting. JOJ Nurse Heal Care [Internet]. 2022 [cited 2022 Aug 15];12(2). Available from: https://juniperpublishers.com/online-submission.php

- 7. Grant, J., Lines, L., Darbyshire, P., & Parry, Y. (2017). How do nurse practitioners work in primary health care settings? A scoping review. *International journal of nursing studies*, 75, 51-57, DOI: https://doi.org/10.1016/j.ijnurstu.2017.0 6.011
- 8. Amin U, Rasool I, Jan R, Yousuf R, Mabool S, Qadir H. Assess the level of stress and coping level among married working women in Kashmir. IP J Paediatr Nurs Sci. 2022 Apr 28;5(1):22–8.
- 9. Friedemann, C., Heneghan, C., Mahtani, K., Thompson, M., Perera, R., & Ward, A. M. (2012). Cardiovascular disease risk in healthy children and its association with body mass index: systematic review and meta-analysis. *Bmj*, *345*, DOI: https://doi.org/10.1136/bmj.e4759
- 10. Mutea, N. K., & Baker, C. M. (2008). Kenyan nurses' involvement in managing hospitalized diabetic patients. *International Journal of Nursing Practice*, *14*(1), 40-46, DOI: https://doi.org/10.1111/j.1440-172X.2007.00660.x
- 11. Jacobson, A. F., Warner, A. M., Fleming, E., & Schmidt, B. (2008). Factors influencing nurses' participation in clinical research. *Gastroenterology Nursing*, 31(3), 198-208, Available at https://journals.lww.com/gastroenterologynursing/Abstract/2008/05000/Factors_Influencing_Nurses_Participation_in. 4.aspx
- 12. Schneider, A. L., Kalyani, R. R., Golden, S., Stearns, S. C., Wruck, L., Yeh, H. C., ... & Selvin, E. (2016). Diabetes and prediabetes and risk of hospitalization: the Atherosclerosis Risk in Communities (ARIC) Study. *Diabetes care*, *39*(5), 772-779, DOI: https://doi.org/10.2337/dc15-1335
- 13. Amin U, Yousuf R, Rasool S, Rasool I. Nursing & Healthcare International

- Journal Committed to Create Value for Researchers Vital Parameters in Children. 2022
- 14. Amin, U., Rasool, I., & Maqbool, S. Stress and Coping Strategies Among Working Women.
- 15. Sun, D., Reziwan, K., Wang, J., Zhang, J., Cao, M., Wang, X., ... & Liu, Y. (2019). Auricular acupressure improves habit reversal treatment for nail biting. *The Journal of Alternative and Complementary Medicine*, 25(1), 79-85, DOI:
 - https://doi.org/10.1089/acm.2018.0063
- 16. Jansen, W., van de Looij-Jansen, P. M., de Wilde, E. J., & Brug, J. (2008). Feeling fat rather than being fat may be associated with psychological wellbeing young Dutch in adolescents. Journal of Adolescent Health, 42(2), 128-136. DOI: https://doi.org/10.1016/j.jadohealth.200 7.07.015
- 17. Amin, U. (2017). Post Traumatic Stress Disorder (PTSD) in children of Kashmir and role of nurse. *Indian Journal of Psychiatric Nursing*, 14(1), 37, Available at https://www.ijpn.in/article.asp?issn=223 1- 1505;year=2017;volume=14;issue=1;sp age=37;epage=40;aulast=Amin
- 18. Moens, E., Braet, C., Bosmans, G., & Rosseel, Y. (2009).Unfavourable family characteristics and their associations with childhood obesity: a cross-sectional study. European Eating Disorders Review: The Professional Journal of the Eating Disorders Association, 17(4), 315-323, DOI: https://doi.org/10.1002/erv.940
- 19. Schwimmer, J. B., Burwinkle, T. M., & Varni, J. W. (2003). Health-related quality of life of severely obese children and adolescents. *Jama*, 289(14), 1813-1819, Available at https://jamanetwork.com/journals/jama/article-abstract/196343

www.matjournals.com

- 20. Carey, N., & Courtenay, M. (2008). Nurse supplementary prescribing for patients with diabetes: a national questionnaire survey. *Journal of Clinical Nursing*, *17*(16), 2185-2193, DOI: https://doi.org/10.1111/j.1365-2702.2007.02238.x
- 21. Bhatia, V. (2004). IAP National Task Force for Childhood Prevention of Adult Diseases: insulin resistance and type 2 diabetes mellitus in childhood. *Indian pediatrics*, 41(5), 443-458, Available at https://www.indianpediatrics.net/may20 04/may-443-457.htm
- 22. Wexler, D. J., Beauharnais, C. C., Regan, S., Nathan, D. M., Cagliero, E., & Larkin, M. E. (2012). Impact of inpatient management, diabetes education, and improved discharge transition on glycemic control discharge. Diabetes months after research and clinical practice, 98(2), 249-256. DOI: https://doi.org/10.1016/j.diabres.2012.0 9.016
- 23. Kenealy, T., Arroll, B., Kenealy, H., Docherty, B., Scott, D., Scragg, R., & Simmons, D. (2004). Diabetes care: practice nurse roles, attitudes and concerns. *Journal of Advanced Nursing*, 48(1), 68-75, DOI:

- https://doi.org/10.1111/j.1365-2648.2004.03173.x
- 24. Raballo, M., Trevisan, M., Trinetta, A. F., Charrier, L., Cavallo, F., Porta, M., & Trento, M. (2012). A study of patients' perceptions of diabetes care delivery and diabetes: propositional analysis in people with type 1 and 2 diabetes managed by group or usual care. *Diabetes Care*, 35(2), 242-247, DOI: https://doi.org/10.2337/dc11-1495
- 25. Abarca-GÃ L, Abdeen ZA, Abdul Hamid Z, Abu-Rmeileh NM, Acosta-Cazares B, Acuin C, et al. Worldwide trends in body-mass index, underweight, overweight, and obesity from 1975 to 2016: a pooled analysis of 2416 population-based measurement studies in 128·9 million children, adolescents, and adults NCD Risk Factor Collaboration (NCD-RisC)
- 26. Amin, U. (2017). Post-Traumatic Stress Disorder (PTSD) in children of Kashmir and role of nurse. *Indian Journal of Psychiatric Nursing*, *14*(1), 37, DOI: https://doi.org/10.2337/dc11-1495
- 27. Koren, D., Dumin, M., & Gozal, D. (2016). Role of sleep quality in the metabolic syndrome. *Diabetes, metabolic syndrome and obesity: targets and therapy*, 9, 281, DOI: https://doi.org/10.2147%2FDMSO.S951 20