

Type 2 Diabetes in The Community

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Type 2 diabetes mellitus is a disease that is rapidly growing in communities all around. Type 2 diabetes mellitus (T2DM) is defined as a metabolic disease caused by reduced insulin uptake and insulin resistance presenting as hyperglycemia (elevated blood glucose level). Due to the gradual development of hyperglycemia, this can cause T2DM to go undiagnosed for many years. T2DM is mostly present in adults and is a known chronic disease (ClinicalKey, 2025). T2DM is a complex disease that affects communities due to lack of information, other comorbidities, and limited access to resources which can impact nursing treatment.

Statement of Problem

T2DM is a highly prevalent disease that is very common and rising in the United States (US) (Conlin et al., 2024). This disease often occurs with other comorbidities. This is due to chronic hyperglycemia that can affect bodily processes and increase the risk for complications, such as heart disease, retinopathy, stroke, and nephropathy. These other health issues may influence or affect the course T2DM takes (Conlin et al., 2024). T2DM requires healthcare intervention to be managed correctly, however, availability may be scarce or difficult to afford in specific cases. This can lead to trouble with screening and testing to aid in prompt diagnosing or receiving the necessary and timely treatment. Without access to resources and lack of information are two of the key factors why T2DM can go undiagnosed for many years (Boulton, 2021).

T2DM has become an economic burden to those affected due to the cost to manage and treat. Those with T2DM in lower socioeconomic status struggle more to care for themselves when faced with food insecurity (Blonde et al., 2022). Without the access to proper management of the disease and impaired glycemic control, this can lead to other comorbidities. T2DM has been linked to assisting with effects on mental health, such as depression (Blonde et al., 2022).

Treating mental health concerns secondary to T2DM results in increased self-care, treatment and reduction in severity of the disease (Blonde et al., 2022). With the increasing amounts of cases in the community, there needs to be reachable health interventions to promote fighting against the disease. These interventions can include telehealth which allows for a multidisciplinary team to be available right at the fingertips of patients (Blonde et al., 2022). Patients with this new diagnosis may require more interactions to aid in monitoring of glucose levels and telehealth has provided a solution in alleviating some episodes of hypoglycemia and monitoring symptoms in T2DM. With telehealth becoming more available and cost-effective in several communities, this can be an excellent resource to fight against T2DM (Blonde et al., 2022).

In regard to T2DM in the United States, there are eye opening statistics that reveal how this disease impacts those of all ages and how undetected it truly is. Almost 29 million or 11.3% of Americans are currently diagnosed with diabetes, with majority having T2DM. This reveals how large of a disease T2DM is and how prevalent it is in adults (13%) living in the US (Conlin et al., 2024). About 8.7 million adults in the US with diabetes are undiagnosed today (Centers for Disease Control and Prevention [CDC], 2024). With so many Americans undiagnosed, this can lead to worsening of the disease as it develops. This showcases the importance of awareness and education for T2DM as it continuously grows in the US. T2DM generally occurs in adults that are 45 years or older, however, younger generations are also affected including children to young adults (CDC, 2024). This can be credited to the lack of resources in the US and the daily lifestyle choices that are made.

If T2DM is left untreated in the US, it can have a negative impact on the nursing community. With the increase in complications, this would result in a higher patient to nurse ratio and demand for additional resources (Rosenberg, 2021). This would trickle into nurses reaching out

to nearby communities and advocating the need for more capital to combat and prevent T2DM. With more resources and nurses, this would pave the way for diverse interventions and patient centered care (Rosenberg, 2021).

Risk Reduction/Treatment of the Problem

T2DM is a preventable and detectable disease. Ways to be proactive and prevent developing T2DM includes having regular activity or exercise and maintaining a healthy diet (Blonde et al., 2022). This will allow for a healthy weight and BMI to be achieved. Obesity is connected to development of T2DM by the gradual increase in insulin resistance from consistently high glucose levels or hyperglycemia (American Diabetes Association [ADA], 2022). Hyperglycemia can cause increased thirst, urination, hunger, headaches, delayed wound healing and vision changes. Usually, T2DM is caught when signs and symptoms of diabetic ketoacidosis are present, however, this disease can be caught early through screening. A workup of present risk factors including family history, age, ethnicity, and activity level can provide insight on likelihood of disease (ADA, 2022). Obtaining A1C, fasting and 2-hour plasma glucose can be used to provide a definitive diagnosis of T2DM (ADA, 2022). This disease can be managed and treated depending on how well-controlled glucose levels are. Exercise and diet can aid in glucose levels being maintained if carbohydrates are monitored (Conlin et al., 2024). Glucose monitoring before meals can assist in food choices to lessen the risk of a hyperglycemic episode from occurring (Blonde et al., 2022). The first pharmacotherapy line of treatment includes oral agents to help with insulin sensitivity but if levels are too out of control, insulin would be last resort (ADA, 2022)

Researching prevention, screening, and treatment for T2DM allows for an improved comprehension of how to do early detection and understand risk factors (ADA, 2022). This

information also provides insight on how T2DM affects patients in a multitude of ways. Patient care will be impacted by targeted medications and increased knowledge to aid in education.

Teaching

Educating the local community in the upcoming health care event about T2DM is crucial. This disease can be undiagnosed and progress gradually over time causing more comorbidities. A couple learning objectives for the population to recognize T2DM are risk factors and signs or symptoms of hyperglycemia. This can be taught through interactive games and activities, a questionnaire form to fill out and asking the community to state back key topics that were educated on. Teaching tools that will be utilized to reinforce ideas and keep attention on T2DM will include a visual poster and informational pamphlets to hold and follow along with. Providing the community with take home material and hands on activities will assist with retaining the essential details revolving around T2DM.

Conclusion

Type 2 diabetes mellitus is a health concern on the rise in communities and if left undetected, not monitored and treated properly, it can lead to more comorbidities. Communities need to recognize risk factors and how lack of information and resources has a direct impact on management of the disease. Nursing practice can be affected by the growing number of cases to treat and not enough means available to lessen the effects that occur. Overall, type 2 diabetes mellitus is a complex disease in the US that chronically affects numerous amounts of individuals in several areas that constantly face daily underlying issues.

References

- American diabetes association professional practice committee (2022). 2. Classification and diagnosis of diabetes: standards of medical care in diabetes-2022. *Diabetes care*, 45(Suppl 1), S17–S38. <https://doi.org/10.2337/dc22-S002>
- Blonde, L., Umpierrez, G. E., Reddy, S. S., McGill, J. B., Berga, S. L., Bush, M., Chandrasekaran, S., DeFronzo, R. A., Einhorn, D., Galindo, R. J., Gardner, T. W., Garg, R., Garvey, W. T., Hirsch, I. B., Hurley, D. L., Izuora, K., Kosiborod, M., Olson, D., Patel, S. B., Pop-Busui, R., ... Weber, S. L. (2022). American association of clinical endocrinology clinical practice guideline: Developing a diabetes mellitus comprehensive care plan-2022 update. *Endocrine practice: official journal of the American College of Endocrinology and the American Association of Clinical Endocrinologists*, 28(10), 923–1049. <https://doi.org/10.1016/j.eprac.2022.08.002>
- Boulton, A. (2021). It's time to tackle the growing diabetes pandemic. *Diabetes research and clinical practice*, 182, Article 109158. <https://doi.org/10.1016/j.diabres.2021.109158>
- Centers for Disease Control and Prevention. (2024, May 15). National diabetes statistics report. [National Diabetes Statistics Report | Diabetes | CDC](https://www.cdc.gov/diabetes/data/statistics-report/)
- ClinicalKey. (2025) Diabetes mellitus type 2 in adults. Retrieved March 16, 2025, from <https://www.clinicalkey.com/>
- Conlin, P., Burke, B., Hobbs, C., Hurren, K., Lang, A., Morrison, J., Spacek, L., Steil, E., Watts, S., Weinred, J., Pogach, L. (2024) Management of type 2 diabetes mellitus: Synopsis of the department of veterans affairs and department of defense clinical practice guideline.

Mayo clinic proceedings, 99(8), 1323-1336.

<https://doi.org/10.1016/j.mayocp.2024.04.014>

Rosenberg, K. (2021). Minimum nurse-to-patient ratios improve staffing, patient outcomes. *The American journal of nursing*, 121(9), 57.

<https://doi.org/10.1097/01.NAJ.0000790644.96356.96>