

11-4-2025

Enhancing Diabetes Self-Management Education and Support Knowledge and Awareness Among Nurses

Tamba Sam-Manimoi
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Nursing Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Nursing

This is to certify that the doctoral study by

Tamba Sam-Manimoi

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Marilyn Losty, Committee Chairperson, Nursing Faculty

Dr. Robert McWhirt, Committee Member, Nursing Faculty

Chief Academic Officer and Provost

Sue Subocz, Ph.D.

Walden University

2025

Executive Summary: Staff Education Project
Enhancing Diabetes Self-Management Education and
Support Knowledge and Awareness Among Nurses

by

Tamba Sam-Manimoi

MSN South University, 2019

BSN, Grand Canyon University, 2014

Executive Summary Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

November 2025

Summary

Diabetes mellitus (DM) affects 12% of the United States population at an annual cost of \$412.9 billion. In the local clinic, 20% of the patient population has a diagnosis of DM. Despite the importance of diabetes self-management education and support (DSMES) in managing DM, patients are often not educated on this important strategy. Leadership identified that patients were reporting a lack of knowledge regarding DSMES practices and that the nurses lacked the necessary knowledge and awareness to educate patients in DSMES. Thus, the purpose of this DNP project was to determine if an educational intervention focused on DM and DSMES increased knowledge and awareness among nurses working in a local clinic. With the support of leadership, all 10 registered nurses were able to attend the education intervention. The average age of the participants was 39.70 years ($SD = 6.63$) with 60% ($n = 6$) of the participants identifying as female and 40% ($n = 4$) identifying as male. The mean pretest score for knowledge was 7.60 ($SD = 1.58$) and the mean posttest score was 10.00 ($SD = 0.00$). Using a Wilcoxon signed rank test to estimate the data, there was a statistically significant difference between the pretest and posttest scores ($z = -2.68, p < 0.01$) indicating an increase in knowledge among the participants. Participants were also asked to rate their awareness of three specific areas using a Likert scale. A Wilcoxon signed-rank test showed a statistical difference between pretest and posttest scores among all three content areas, indicating an increase in awareness among the participants. The increased knowledge and awareness among the participants may translate into practice and ultimately lead to positive patient, provider, and organizational outcomes.

Background

DM is a chronic, metabolic disorder that affects how the body uses glucose for energy. It occurs when the pancreas does not produce enough insulin or the body does not use insulin effectively, resulting in elevated blood glucose levels (American Diabetes Association [ADA], 2024). Prolonged hyperglycemia damages multiple organ systems, including the blood vessels, eyes, kidneys, heart, and nerves (Centers for Disease Control and Prevention [CDC], 2024). Consequently, DM is a leading cause of cardiovascular disease, peripheral vascular disease, stroke, renal failure, retinopathy, blindness, and death, with more than 100,000 people dying from DM annually (CDC, 2024). In the United States, DM affects 38.4 million individuals—or approximately 12% of the population—at an annual cost of \$412.9 billion, including \$307 billion in direct medical costs and \$106 billion in indirect costs (Parker et al., 2024).

DM is generally classified into three major types: Type 1 (insulin-dependent), Type 2 (noninsulin-dependent), and gestational diabetes, which occurs in about 10% of pregnancies among women without preexisting diabetes (ADA, 2024). Type 1 diabetes accounts for 5–10% of cases, while most individuals have Type 2 diabetes (CDC, 2024). Among adults aged 18 years and older who meet laboratory criteria for diabetes, approximately 23% are unaware of their diagnosis (CDC, 2024). Prevalence also varies across demographics, with men (18%) more likely than women (14%) to develop DM, and rates increasing with age. Racial and ethnic disparities are significant as well, with African Americans, Hispanics, and American Indians disproportionately affected compared to non-Hispanic Whites (CDC, 2024). On average, individuals with DM have a life expectancy reduced by 15 years due to disease complications (ADA, 2024).

Traditionally, the treatment of DM has centered on glycemic control to reduce acute and chronic complications, thereby lowering morbidity and mortality (Clark et al., 2001). However, over the past 2 decades, advances in DM management have emphasized not only pharmacologic therapy but also prevention strategies and patient-centered care. Self-management education (SME) has emerged as the “cornerstone of care” (Clark et al., 2001, p. 324; Ellis et al., 2004), expanding beyond knowledge of the disease to include behavior change strategies and lifestyle modification.

Patient education is critical to effective DM management as it provides individuals with the knowledge and skills necessary to make informed decisions about their health (Holmes & Dyer, 2013; Ningsih et al., 2025). Research has demonstrated that the more a patient understands their diagnosis, the greater their sense of control and self-efficacy in managing the disease (Yacoub et al., 2014). By equipping patients with strategies such as healthy eating, physical activity, medication adherence, and stress management, DSMES improves self-management behaviors and reduces the risk of complications (Ellis et al., 2004; Gerald et al., 2010).

Despite its proven benefits, DSMES is underutilized (Bober et al., 2023; Chrvala et al., 2016). A contributing factor is that healthcare staff, particularly nurses, often lack the training and knowledge to effectively deliver DSMES to patients (Bober et al., 2023). Nurses are frontline providers who frequently interact with patients, making them well-positioned to promote self-management (Yoshida et al., 2021). However, without proper education, they may feel unprepared to provide evidence-based guidance and support. This gap highlights the importance of ensuring that nurses receive training in DSMES so

that they can empower patients to effectively manage their condition (Deakin et al., 2005; Odgers-Jewell et al., 2017).

In the local organization, organizational leadership identified that patients were reporting a lack of knowledge regarding DSMES practices. Further, leadership recognized that nurses lacked the necessary knowledge and awareness to educate patients in DM and DSMES practices. Thus, the purpose of this DNP project was to determine if an educational intervention focused on DM and DSMES practices increased knowledge and awareness among nurses working in a local clinic. It was hoped that the increased knowledge and awareness may then translate into practice and result in positive patient, provider, and organizational outcomes.

Staff Education Project Development

During the organizational evaluation, I conducted an organizational readiness assessment and stakeholder analysis, which established the commitment from the organization and its leadership for this DNP staff education project. A strengths, weaknesses, opportunities, and threats analysis was completed at the project site. The analysis highlighted organizational strengths such as strong commitment to staff education and excellent communication among employees. However, key weaknesses included concern with evaluations of quality improvement projects and internal competing priorities among the nurses. However, opportunities for the organization included the current evidence supporting DSMES and increasing demand for DM education among patients. Threats to the organization include strict health regulations and guidelines regarding diabetic care and emerging competition among external organizations.

Following formal approval of the project and informed by the evidence, I conducted a review of the literature to identify relevant articles on DM and DSMES. Drawing from the evidence, I developed an educational intervention (Appendix A), pretest (Appendix B), and posttest (Appendix C). Following the development of the materials, an expert panel reviewed the educational intervention, pretest, and posttest to establish the content validity of each item. The Item-Content Validity Index and Scale-Content Validity Index were used as a guide; the indices of each tool were 1.0, which met and exceeded the threshold of 0.80 as acceptable standards across all three tools (Polit & Beck, 2006).

Procedures

All nurses working at the clinic were invited to participate in the educational intervention. Participation was voluntary and the participants were not compensated. With the support of organizational leadership, all 10 registered nurses working in the clinic were able to attend the educational intervention. Prior to the educational intervention, the participants were asked to create a unique identifier to identify and link their pretest and posttest. They were then asked to complete the pretest (Appendix B), which consisted of five demographic questions to describe the sample; 10 multiple choice questions to assess knowledge of DM and DSMES; and three Likert-scale questions to determine their awareness level. Participants were asked to rate each awareness question using a Likert-scale that ranged from 1 (*no awareness*) to 7 (*full awareness*). The questions encompassed three content areas: (a) awareness of diabetes self-management knowledge, (b) awareness of diabetes self-management guidelines for patients with

diabetes, and (c) awareness of the importance of diabetes care and education specialists (DCES).

After obtaining the completed pretests, I administered the educational intervention (Appendix A). Immediately following the educational intervention, the participants were asked to complete a posttest (see Appendix C). The posttest consisted of the 10 multiple choice questions to assess their knowledge and three Likert -scale questions to determine their awareness level on a scale of 1 (*no awareness*) to 7 (*full awareness*) of the three content areas. Following the completion of the posttest, the educational intervention concluded.

After completing the intervention, each pretest was matched with its posttest using the unique identifier. Each pretest and posttest was reviewed and scored for number of correctly answered questions to create a pretest and posttest score. Demographic information, pretest, and posttest scores were entered into a Microsoft Excel spreadsheet and uploaded into SPSS for analysis. Descriptive statistics were used to describe the sample, and inferential statistics were used to determine if there were differences in pretest and posttest scores.

Results

Demographic Results

A total of 10 individuals were invited to participate in the educational intervention. With the support of leadership, 10 individuals were able to attend the education intervention. The average age of the participants was 39.70 years ($SD = 6.63$) with a range of 29 to 50 years. Sixty percent ($n = 6$) of the participants identified as female with the remaining 40% ($n = 4$) being male. All participants were registered

nurses. Thirty percent ($n = 3$) had a masters' degree, 40% ($n = 4$) of the participants had a bachelor's degree, and three participants (30%) had an associate's degree. The mean number of years of experience was 5.80 years ($SD = 5.10$) with a range of 1.0 to 18 years and the mean number of years working in the participant's current position was 5.20 years ($SD = 5.16$) with a range of 1.0 to 18 (Table 1).

Table 1
Sample Demographics (N = 10)

Characteristic	<i>n</i>	%	<i>M (SD)</i>	Range
Gender				
Female	6	60		
Male	4	40		
Education				
Associate degree	3	30		
Bachelor's degree	4	40		
Masters' degree	3	30		
Age			39.70 (6.63)	29 to 50
Years in nursing			5.80 (5.10)	1 to 18
Years in current position			5.20 (5.16)	1 to 18

Statistical Analysis

Knowledge

The mean pretest score for knowledge was 7.60 ($SD = 1.58$) with a range of 5 to 10 and the mean posttest score was 10.00 ($SD = 0.00$) with a range of 10. Using a Wilcoxon signed rank test to estimate the data, there was a statistically significant difference between the pretest and posttest scores ($z = -2.68, p < 0.01$) indicating an increase in knowledge among the participants.

Awareness of Diabetes Self-Management Knowledge

The mean pretest score for the awareness of diabetes self-management knowledge was 5.40 ($SD = 0.96$) with a range of 4 to 7. The mean posttest score for the awareness of diabetes self-management knowledge was 7.00 ($SD = 0.00$) with a range of 7. Using a Wilcoxon signed rank test to estimate the data, there was a statistically significant difference between the pretest and posttest scores ($z = -2.70, p < 0.01$) indicating an increase in the awareness of diabetes self-management knowledge among the participants.

Awareness of Diabetes Self-Management Guidelines for Patients with Diabetes

The mean pretest score for awareness of recommended diabetes self-management guidelines for patients with diabetes was 5.40 ($SD = 0.96$) with a range of 4 to 7. The mean posttest score for awareness of recommended diabetes self-management guidelines for patients with diabetes was 7.00 ($SD = 0.00$) with a range of 7. Using a Wilcoxon signed rank test to estimate the data, there was a statistically significant difference between the pretest and posttest scores ($z = -2.71, p < 0.01$) indicating an increase in the awareness of recommended diabetes self-management guidelines for patients with diabetes among the participants.

Awareness of Importance of Diabetes Care and Education Specialists (DCES)

The mean pretest score for the awareness of the importance of DCES was 5.50 ($SD = 0.97$) with a range of 4 to 7. The mean posttest score for the awareness of the importance of DCES was 7.00 ($SD = 0.00$) with a range of 7. Using a Wilcoxon signed rank test to estimate the data, there was a statistically significant difference between the

pretest and posttest scores ($z = -2.84, p < 0.01$) indicating an increase in the awareness of the importance of DCES among the participants.

Table 2
Pretest Versus Posttest Knowledge and Awareness (N = 10)

Variable	<i>M (SD)</i>	Range
Knowledge*		
Pretest	7.60 (1.58)	5 to 10
Posttest	10.00 (0.00)	10
Awareness of knowledge*		
Pretest	5.40 (0.96)	4 to 7
Posttest	7.00 (0.00)	7
Awareness of recommended guidelines*		
Pretest	5.40 (0.96)	4 to 7
Posttest	7.00 (0.00)	7
Awareness of DCES*		
Pretest	5.50 (0.97)	4 to 7
Posttest	7.00 (0.00)	7

Strengths and Limitations

The main strength of this project was the culture of the organization driven by motivation to change and the immense support from the leadership team and participants. Despite the strengths, there are limitations. First, the participants were drawn from a single organization; therefore, the results may not be generalizable to other settings. Second, the sample of 10 participants may only adequately represent part of the population of the organization, warranting replication with a larger sample for validation of the results. Last, given that the data were measured at one point in time, the sustainability of the knowledge and awareness is unknown.

Conclusions

Implications for the Organization

The results of this project demonstrated that the educational intervention increased the participants' knowledge and awareness of DM and DSMES. As a result, there are several important implications for the organization. First, the project demonstrated the importance of using the evidence to identify issues in clinical practice. By grounding the purpose of the intervention on existing organizational data, I was able to reflect the needs of the organization and strengthen the relevance to nursing practice. Second, this project demonstrated the value of using the evidence to create tools, such as educational intervention, to educate nursing staff on important clinical issues. Last, the project demonstrated the value of staff education to address a clinical concern within the organization. The increased knowledge and awareness that results from educating nurses and nursing assistants on DM and DSMES may translate into practice that promotes positive patient, provider, and organizational outcomes.

Implications Beyond the Organization

The outcome of this project also has implications beyond the local organization. Given the significance of this educational intervention, the organization's leaders should consider sharing the project with other institutions through presentations at local forums to demonstrate its importance. The outcome of this project has demonstrated that an educational intervention can increase knowledge and awareness of DM and DSMES, which in turn may increase information sharing to patients and increase the use of DSMES practices among patients with DM. Further, the increased knowledge and

awareness may then translate into practice that promotes positive patient, provider, and organizational outcomes and ultimately contributes to positive social change.

Recommendations

There are several recommendations based on the results of this DNP project. First, it was demonstrated that an evidence-based educational program targeted at a specialized need within the organization increased knowledge and awareness among nurses. Thus, I recommend that leadership continue to evaluate areas of practice that may be improved by continued education and implement those educational interventions with the hope that the increased knowledge is then translated into practice to promote patient, provider, and organizational outcomes. Second, to maintain the staff's current knowledge and awareness level, I recommend that the organization include this educational intervention as part of their annual educational requirements and as onboarding for new staff. It is critical that new staff members have a working knowledge of the importance of DM and DSMES. Current staff should also be reminded of the importance of educating nurses about diabetes and the importance of DSMES.

Third, I recommend that organizational leaders frequently meet with patients with diabetes to determine if there is an improvement in patients' engagement with DSMES practices. In addition, organizational leaders, given their team-based approach to primary care, may wish to develop a "standing order" within the organization for DSMES appointments with nurses to enhance and maintain the translation of evidence into practice. Last, considering the organization's commitment to continuous quality improvement, it is essential that the results of this project be shared with the leadership

and clinicians to emphasize the importance of staff education in promoting patient, provider, and organizational outcomes.

Summary

The educational intervention significantly improved knowledge and awareness of DM and DSMES among nurses in the local clinic. It is hoped that the increased knowledge and awareness may then translate into practice among patients with DM. Recommendations for further sustainability of increased knowledge and awareness of DM and DSMES include continuation of the educational intervention annually and for new hires. The project results have implications for the local organization as well as beyond the organization and serves as a call to action for other organizations to provide education on this important topic, which ultimately may positively affect patient, provider, and organizational outcomes.

References

American Diabetes Association. (2025). *Diabetes statistics*.

<http://www.diabetes.org/diabetes-basics/diabetes-statistics>

Bober, T., Rothenberger, S., Lin, J., Ng, J. M., & Zupa, M. (2023). Factors associated with receipt of diabetes self-management education and support for Type 2 diabetes: Potential for a population health management approach. *Journal of Diabetes Science and Technology*, 17(5), 1198–1205.

<https://doi.org/10.1177/193229682311763>

Centers for Disease Control and Prevention (2024). *National diabetes fact sheet. General information and national estimates on diabetes in the United States*

www.cdc.gov/diabetes/data/statistics

Clark Jr., C.M., Fradkin, J.E., Hiss, R.G., Lorenz, R.A., Vinicor, F., & Warren-Boulton, E. (2001). The National Diabetes Education Program: Changing the way diabetes is treated. *Diabetes Care*, 24(4), 324-325.

<https://doi.org/10.2337/diacare.24.4.617>

Chrvala, C. A., Sherr, D., & Lipman, R. D. (2016). Diabetes self-management education for adults with Type 2 diabetes mellitus: A systematic review of the effect on glycemic control. *Patient Education and Counseling*, 99(6), 926-943.

<https://doi.org/10.1016/j.pec.2015.11.003>

Deakin, T.A., McShane, C.E., Cade, J.E., & Williams, R. (2005). Group based training for self-management strategies in people with type 2 diabetes mellitus. *Cochrane Database of Systematic Reviews*, 18(2).

<https://doi.org/10.1002/14651858.CD003417.pub2>

- Ellis, S.E., Speroff, T., Dittus, R.S., Brown, A., Pichert, J. W., & Elasy, T.A. (2004).
Diabetes patient education: A meta-analysis and meta-regression. *Patient
Education and Counseling*, 52(1), 97-105. [https://doi.org/10.1016/S0738-
3991\(03\)00016-8](https://doi.org/10.1016/S0738-3991(03)00016-8)
- Gerald, S., Griffin, M., & Fitzpatrick, J. (2010). Advancing quality diabetes education
through evidence and innovation. *Journal of Nursing Care Quality*, 25(2), 160-
167. [https://doi.org/ 10.1097/NCQ.0b013e3181bff4fa](https://doi.org/10.1097/NCQ.0b013e3181bff4fa)
- Holmes, C. & Dyer, P. (2013). Diabetes training for nurses: The effectiveness of an
inpatient diabetes half-day workshop, *Journal of Diabetes Nursing*, 17(3), 86-94.
- Ningsih, O. S., Efendi, F., & Dewi, Y. S. (2025). Nursing interventions for diabetes
prevention in individuals at risk or with prediabetes: A literature review.
Malaysian Journal of Nursing, 16(3), 253-262.
<https://doi.org/10.31674/mjn.2025.v16i03.025>
- Odgers-Jewell, K., Ball, L. E., Kelly, J. T., Isenring, E. A., Reidlinger, D. P., & Thomas,
R. (2017). Effectiveness of group-based self-management education for
individuals with Type 2 diabetes: A systematic review with meta-analyses and
meta-regression. *Diabetic Medicine*, 34(8), 1027-1039.
<https://doi.org/10.1111/dme.13340>
- Parker, E. D., Lin, J., Mahoney, T., Ume, N., Yang, G., Gabbay, R. A., El Sayed, N.A., &
Bannuru, R. R. (2024). Economic costs of diabetes in the US in 2022. *Diabetes
Care*, 47(1), 26-43. <https://doi.org/10.2337/dci23-0085>

Yacoub, M., Demeh, W., Darawad, M., Barr, J., Saleh, A., & Saleh, M. (2014). An assessment of diabetes-related knowledge among registered nurses working in hospitals in Jordan. *International Nursing Review*, *61*, 255-262, <https://doi.org/10.1111/inr.12090>

Yoshida, Y., Hong, D., Nauman, E., Price-Haywood, E. G., Bazzano, A. N., Stoecker, C., Hu, G., Shen, Y., Katzmarzyk, P.T., Fonseca, V.A., & Shi, L. (2021). Patient-specific factors associated with use of diabetes self-management education and support programs in Louisiana. *BMJ Open Diabetes Research and Care*, *9*(Suppl 1), e002136. <https://doi.org/10.1136/bmjdr-2021-002136>

Appendix A: Outline of Educational Intervention

1. Introduction
2. Review of Diabetes
3. Introduction to Diabetes Self-Management Education and Support (DSMES)
4. Importance of DSME
5. Role of the Nurse in DSME
6. Diabetes Self-Management Components
 - a. Nutritional Management
 - b. Physical Activity
 - c. Medication and Medication Safety
 - d. Monitoring Blood Glucose
 - e. Preventing Acute Complications
 - f. Preventing Chronic Complications
 - g. Strategies to Promote Health and Well-being
7. Benefits of Implementing Diabetes Self-Management Education
8. Questions and Answers
9. Conclusion

Appendix B: Pretest

Thank you for agreeing to participate in this educational intervention. Please create a unique ID that is only known to you. You will not be asked to share this ID with anyone, nor should you share your ID with anyone. The ID will only be used to match your pretest with your posttest. No identifying information will be asked for and please do not provide any additional information outside of the questions being asked. All information collected will be reported in the aggregate. Thank you again for agreeing to participate in this educational intervention.

My Unique ID: _____

Knowledge Questions

Please read each question and choose the best answer for each questions.

1. What is diabetes?
 - a. Body produces too much glucose.
 - b. Body does not make or use insulin properly.
 - c. Joints are stiff and painful.
 - d. A and B

2. Which of the following is/are symptoms of Type 1 diabetes?
 - a. Increased urination
 - b. Increased thirst
 - c. Increased hunger
 - d. All of the above

3. Which of the following is a common complication of poorly controlled diabetes?
 - a. Increased risk of infections
 - b. Nerve damage (neuropathy)
 - c. Kidney disease (nephropathy)
 - d. All of the above

4. Insulin makes the blood glucose go:
 - a. Down
 - b. Up
 - c. Stay the same

5. What is the primary goal of diabetes self-management?
 - a. To completely eliminate the need for medication.
 - b. To maintain blood glucose levels within a target range and prevent complications.
 - c. To eat whatever you want, as long as you take your medication.
 - d. To focus solely on physical activity and disregard diet.

6. Which of the following is NOT a KEY component of diabetes self-management?
 - a. Testing and tracking blood sugar levels.
 - b. Knowing what and when to eat.
 - c. Taking medications as prescribed.
 - d. Ignoring symptoms of low or high blood sugar.

7. What is the 15-15 rule for treating low blood sugar?
 - a. Eat 15 grams of carbohydrates, wait 15 minutes, and check blood sugar.
 - b. Drink 15 ounces of water, wait 15 minutes, and check blood sugar.
 - c. Take 15 units of insulin, wait 15 minutes, and check blood sugar.
 - d. Exercise for 15 minutes, wait 15 minutes, and check blood sugar.

8. What is the importance of regular physical activity for people with diabetes?
 - a. It helps lower blood glucose levels.
 - b. It helps manage weight.
 - c. It can improve cardiovascular health.
 - d. All of the above

9. Which of the following is NOT a key component of diabetes self-management?
 - a. Blood sugar monitoring
 - b. Medication adherence
 - c. Regular exercise
 - d. Avoiding all carbohydrates

10. What is the best way to manage diabetes?
 - a. Following a strict diet without any flexibility
 - b. Taking medication exactly as prescribed and working with your healthcare team
 - c. Only checking blood sugar levels when you feel symptoms
 - d. Ignoring your doctor's advice and doing what you think is best

Awareness Questions

Please rate your awareness of the following statements using the indicated scale of 1 to 7 where 1 = "no awareness" and 7 = "full awareness".

Knowledge of diabetes self-management guidelines.	1	2	3	4	5	6	7
The recommended diabetes self-management guidelines for patients with diabetes.	1	2	3	4	5	6	7
Importance of Diabetes Care and Education Specialists (DCES)	1	2	3	4	5	6	7

Appendix C: Posttest

Thank you for agreeing to participate in this educational intervention. Please use your unique ID that is only known to you for this posttest. No identify information will be asked for and please do not provide any additional information outside of the questions being asked. All information collected will be reported in the aggregate. Thank you again for agreeing to participate in this educational intervention.

My Unique ID: _____

Posttest: Knowledge Questions

Please read each question and choose the best answer for each questions.

1. What is diabetes?
 - a. Body produces too much glucose.
 - b. Body does not make or use insulin properly.
 - c. Joints are stiff and painful.
 - d. A and B

2. Which of the following is/are symptoms of Type 1 diabetes?
 - a. Increased urination
 - b. Increased thirst
 - c. Increased hunger
 - d. All of the above

3. Which of the following is a common complication of poorly controlled diabetes?
 - a. Increased risk of infections
 - b. Nerve damage (neuropathy)
 - c. Kidney disease (nephropathy)
 - d. All of the above

4. Insulin makes the blood glucose go:
 - a. Down
 - b. Up
 - c. Stay the same

5. What is the primary goal of diabetes self-management?
 - a. To completely eliminate the need for medication.
 - b. To maintain blood glucose levels within a target range and prevent complications.
 - c. To eat whatever you want, as long as you take your medication.
 - d. To focus solely on physical activity and disregard diet.

6. Which of the following is NOT a KEY component of diabetes self-management?
 - a. Testing and tracking blood sugar levels.
 - b. Knowing what and when to eat.
 - c. Taking medications as prescribed.
 - d. Ignoring symptoms of low or high blood sugar.

7. What is the 15-15 rule for treating low blood sugar?
 - a. Eat 15 grams of carbohydrates, wait 15 minutes, and check blood sugar.
 - b. Drink 15 ounces of water, wait 15 minutes, and check blood sugar.
 - c. Take 15 units of insulin, wait 15 minutes, and check blood sugar.
 - d. Exercise for 15 minutes, wait 15 minutes, and check blood sugar.

8. What is the importance of regular physical activity for people with diabetes?
 - a. It helps lower blood glucose levels.
 - b. It helps manage weight.
 - c. It can improve cardiovascular health.
 - d. All of the above

9. Which of the following is NOT a key component of diabetes self-management?
 - a. Blood sugar monitoring
 - b. Medication adherence
 - c. Regular exercise
 - d. Avoiding all carbohydrates

10. What is the best way to manage diabetes?
 - a. Following a strict diet without any flexibility
 - b. Taking medication exactly as prescribed and working with your healthcare team
 - c. Only checking blood sugar levels when you feel symptoms
 - d. Ignoring your doctor's advice and doing what you think is best

Awareness Questions

Please rate your awareness of the following statements using the indicated scale of 1 to 7 where 1 = "no awareness" and 7 = "full awareness".

Knowledge of diabetes self-management guidelines.	1	2	3	4	5	6	7
The recommended diabetes self-management guidelines for patients with diabetes.	1	2	3	4	5	6	7
Importance of Diabetes Care and Education Specialists (DCES)	1	2	3	4	5	6	7