An overview on the effects of diabetes mellitus education programs and patient compliance: Literature Review.

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Patients with diabetes are at risk for hospital readmission due to comorbidities affected
by poor glycemic control. Therefore, researchers set to modify the discharge process of patients
with Type 2 diabetes (T2DM) to better glycemic control and possibly reduce complications of
uncontrolled diabetes. This quantitative study followed 200 patients through the discharge
process and 120 days after to assess the effects of modified discharge variables and their effects
on glycemic control compliance. This literature review aims to analyze the research study and
point out what aspects were neglected to provide an opportunity to expand on the topic.

**Effects of an intensive discharge intervention on medication adherence, glycemic control,
and readmission rates in patients with type 2 diabetes.**

Type 2 diabetes is an increasingly common health complication in the medical field. The
quantitative article assesses the effects of an intensive discharge intervention on medication
adherence, glycemic control, and readmission rates in patients with type 2 diabetes. The primary
goal is to evaluate the compliance of lifestyle modifications, medical adherence, glycemic
control, and reduce hospital readmissions T2DM. While evaluating these imperative criteria for
T2DM care, researchers developed an efficient and effective discharge process to better equip
patients for success after discharge. The study included 200 patients discharged with insulin
therapy and intensive lifestyle modifications; A1C level monitoring occurred after 120 days post-
discharge. A multifaceted program including medication consultations and checkups are critical
concepts to this study.

Key Points

To increase the likelihood of treatment compliance, researchers implemented various resources for patients discharging with newly diagnosed T2DM. Researchers integrated discharge advocates to assist patients in the various needs of post-discharge care (Magny-Normilius et al., 2021). Other components include pharmacist counseling, visiting nurses to assist in the home environment, and follow-up calls within the first 48 hours of discharge to increase the likelihood of patients being compliant with their post-discharge regimen. These all-inclusive interventions created a more effective discharge plan for patients with T2DM. As a result, researchers hope to reduce A1C levels and readmission of T2DM patients with a full circle care plan for discharge.

Assumptions

The researchers assumed extensive discharge care with a decreased A1C levels and medical compliance to lifestyle modifications. This article was based on the assumption that "an ideal discharge has several components" (Magny-Normilius et al., 2021, p. 76), and by implementing more resources and components, improved patient outcomes will follow. Ideally, implementing a multifaceted discharge program would be all-inclusive and easily acquired.

Deficit/Conclusion

The outcomes of the article supported the argument of multidisciplinary care post-discharge and the reduction of T2DM admissions and decreased A1c. There was a trend in patients from the study's intervention group and a 1.09 % decrease in A1c (Magny-Normilius et al., 2021). The acceptance of this article's study is implied; the research group sought to implement a more effective discharge plan for T2DM patients and succeeded. Although there are obvious positives to this post-discharge plan, there are also many implications. Some of the

deficits in this study include a small study size. This study was also hindered by being reduced to the population of one state. The most significant limitation of this study is that many patients do not have the appropriate insurance to cover the expenses that expensive post-discharge care requires.

Effect of simulation education and case management on glycemic control in type 2 diabetes.

Glycemic control in type 2 diabetes mellitus T2DM patients dramatically influences their future health. The quantitative article assesses the effects of simulated education and improved patient's glycemic control compliance. The primary goal of this study is to evaluate the effectiveness of simulated education to T2DM patients and its effect on their A1C levels after six months. The study included 100 T2DM patients; 50 patients received simulated education, and 50 patients only received a three-month follow-up from case management. The simulation education includes 2-hour group training weekly for two weeks and two 30 minute education videos after three and six months. The experimental group also received follow-ups from a case manager every month. The fundamental concepts of this study include frequent case management checkups and educational videos to supplement client adherence to the glycemic control program.

Key Points

Increased education resources improved the likelihood of treatment compliance. Therefore, diabetes education curriculum, simulation education, and case management were critical concepts of this study. The Simulation education presented to the experimental group involved educational videos promoting healthy lifestyle changes. After watching the educational videos, patients were prompted to imitate or recite the given education, further promoting learning. With an improved learning environment, increased follow-ups with case management,

and a thorough educational curriculum, researchers hope to reduce A1C levels in the experimental group.

Assumptions

The researchers assumed that a simulated educational environment would promote learning and medical compliance to lifestyle modifications. In addition, the article was based on the assumption that a multifaceted educational program will also reduce A1C levels in patients with T2DM. By providing educational videos, monthly follow-ups to case management, and promoting reenactment techniques, researchers hoped to decrease A1C levels in diabetic patients. Preferably this simulated program would be easily accessible and cost-effective for the patients.

Deficit/Conclusion

The outcome of the research supported the argument that simulated education being effective in managing T2DM. There was a 1.13% more decrease in A1C levels of the experimental group (Ji et al., 2018). The nursing student accepts the study's findings; the researchers set out to manage A1C levels through an improved education and compliance program. The deficits of the study include limited sample size and health insurance accessibility of patients.

Effect of a nurse-led diabetes self-management education program on glycosylated hemoglobin among adults with type 2 diabetes: Literature Review.

Diabetes is associated with an increased risk of premature mortality and vascular complications (Azami et al., 2018). This quantitative article sought to determine nurse-led T2DM education effectiveness compared to the usual education given to newly diagnosed patients. This program includes critical concepts such as checkups and medication consultations.

The primary goal is to manage lifestyle behaviors to promote healthy eating, exercise, glucose monitoring, insulin adherence, and medication compliance. Nurses hope to reduce significant health diseases caused by non-compliant glucose adherence by successfully managing these lifestyle applications. The study included 142 patients; the experimental group was given the ordinary T2DM teaching in conjunction with the nurse-led management and education. After 12 weeks of the new program, patients retested their A1C levels.

Key Points

To improve the educational experience of newly diagnosed T2DM patients, researchers implemented a multifaceted healthcare team to work with patients. Researchers integrated nurses to provide discharge teaching to clients and nutritionists to assist with diet modifications. Endocrinologists and pharmacists were other resources the patient could access. Other components include 10-minute movie clips, weekly group sessions, and weekly follow-up calls to assess the patient's current state of compliance. These interventions promote learning and lifestyle modifications in T2DM; as a result, researchers hope to improve A1C levels of patients receiving the nurse-led education successfully.

Assumptions

The research team of this study assumed that with an extensive team assisted by nurse-led education, patients with T2DM would be more compliant. Improved compliance is associated with improved A1C levels; A1C was assessed after 12 weeks of modified education. To have an impactful change in patient education, resources must be accessible.

Deficit/Conclusion

The outcome of this study supported the hypothesis that nurse-led education improves the compliance of T2DM patients. The experimental group had an average reduction in 1.4% of A1C

levels; patients also had improved blood pressures, weight loss, and overall improved health due to lifestyle modifications and medication adherence (Azami et al., 2018). The nursing student accepts the effectiveness and goal of this study; the research team sought to improve A1C levels and patient health through proper education and monitoring, which was a success. This study's deficiencies include a small sample size, boundaries of research were limited to Iran, and the article did not mention financial assistance for the program.

Conclusion

Approximately 79% of readmissions to the clinical setting are preventable with proper patient education and proper hospital interventions (*Improving discharge instruction compliance,* 2021). With improved discharge education, clinical resources, and medical follow-ups, the healthcare field could reduce the number of readmitted T2DM patients. The three quantitative articles supported the nursing process by providing information on successful education techniques to promote T2DM patient lifestyle modifications and improved A1C levels. These articles can improve the world of healthcare by providing a more efficient and effective way to educate patients. In addition, the articles have impacted research as a whole by assessing the deficits of discharge education related to T2DM.

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