Type: PICO Question

Subject: State of the Science Quality Improvement Paper Part 1, 5 pages in APA

Subject area: Nursing

Education Level: Undergraduate/College

Length: 5 pages

Referencing style: APA

Preferred English: US English

Spacing Option: Double

School: Chamberlain University

Instructions: the week 4 paper attachment includes the directions to the paper. the jh pico development attachment just shows how i developed my pico question which i also presented under the file attachment section. if you need additional information please reach out to me! pico question does the use of culturally congruent interprofessional education for newly diagnosed diabetic patients between the ages of 40-70 years old, as opposed to no educational intervention, impact a1c levels and weight over a 90-day period? theory choice: cultural competency

Important notes: this is a 2-part quality improvement research paper but this is the first part of this paper. the next part is due in another two weeks. i was told to let the writer know so i can see how i can go about submitting the 2nd part of this assignment. i need a minimum of 6 topic related research-based scholarly references. references are current within a 5-year time frame.

State of the Science Quality Improvement Paper Part 1

Student's Name

Institution of Affiliation

State of the Science Quality Improvement Paper Part 1

Introduction

Diabetes is a severe life-threatening illness characterized by high blood glucose levels that result from compromised insulin production, insulin action, or both. In the US, the growth of diabetes has been steady, adding to the health care burden. According to the Center for Disease Control and Prevention (CDC) (2017), more than 100 million US adults are currently living with diabetes or pre-diabetes. The report by CDC also indicates that approximately 84.1 million US populations have pre-diabetes, a condition that, if not treated early enough, can result in Type 2 diabetes within five years (CDC, 2017). Similarly, studies indicate that the rate of new cases of diabetes diagnoses have also remained steady (Schreier, 2020). Notably, it continues to represent a significant health problem in the US. Statistics indicate that in 2015, diabetes was the seventh leading cause of death in the US.

Besides, some regions in the US experience increased burden of diabetes than others, indicating the disparities in the efforts to prevent or reduce the incidence and prevalence of diabetes in the US. Research indicates there is significant progress in the management and prevention of diabetes. However, there are still too many Americans living with diabetes and pre-diabetes, showing how serious the problem of diabetes is in the US, even though it is preventable and manageable (Rowley et al., 2017). Diabetes can be managed through various strategies such as dietary intervention and appropriate utilization of insulin as well as other methods aimed at managing or controlling blood sugar levels in the body. The other common method of controlling blood sugar levels in the body is education tailored to reduce diabetes, such as the use of culturally congruent inter-professional education for newly diagnosed diabetic patients. This paper assesses the impact of culturally congruent inter-professional education on A1C levels and weight for newly diagnosed diabetic patients between the ages of 40-70 years old, compared to no educational intervention.

Problem statement

In the US, diabetes burden is substantially increasing at an alarming rate despite that it is manageable and preventable. As a chronic health problem, diabetes has devastating effects with severe consequences if not detected early enough. Diabetes can have severe effects on different body parts and is linked to serious complications like stroke, heart problems, kidney failure, blindness, and lower-limb amputation as well as other severe conditions (Rowley et al., 2017). Besides, statistics indicate that a total of 7.8 million hospital discharges were reported with diabetes as any listed diagnosis among older adults in the US. Among these discharges related to diabetes, 1.7 million hard major cardiovascular diseases, ischemic heart illnesses, and stroke (Schreier, 2020).

Studies also indicate that newly diagnosed diabetic patients do not receive a proper education, yet they need to manage this chronic health issue successfully. Patients often go through brief office visits with health care providers without any education. As a result, scholars have proposed the use of culturally congruent inter-professional education for newly diagnosed diabetic patients to control diabetes. Notably, culturally congruent education implies applying evidenced-based nursing that is compliant with the preferred cultural values, beliefs, worldviews, and practices of the patient. Cultural competence denotes the process by which nurses showcase culturally congruent practice in the care of patients (Hamilton, 2016). Therefore, this paper compares the impact of culturally congruent education for newly diagnosed diabetic patients on A1C levels and weight as compared to no education intervention.

Purpose of the Study

The purpose of this study is to assess the impacts of culturally congruent education for newly diagnosed diabetic patients on A1C levels and weight as compared to no education

intervention. Research indicates that diabetes, such as Type 2 diabetes is a chronic health problem that, if left, can lead to serious health problems and complications and significantly affects the individual's quality of life. This study proposes culturally congruent diabetic education to help in the management and prevention of diabetes. Education will act as a way to enhance the quality of life and reduce severe health complications resulting from diabetes.

PICOT

PICO Question: Does the use of culturally congruent inter-professional education for newly diagnosed diabetic patients between the ages of 40-70 years old, as opposed to no educational intervention, impact A1C levels, and weight over 90 days?

PICOT Components

Population: Newly diagnosed diabetic patients age 40-70

Intervention: Use of culturally congruent inter-professional education for newly diagnosed

Comparison: Results of A1C levels and weight from patients who received inter-professional education as opposed to no educational intervention

Outcomes: Decrease A1C levels and weight over a 90-day period

Overview of literature search strategy

In this study, the researcher will use the Chamberlain library to search through various databases using keywords to locate different articles concerning diabetes. In this case, the researcher will start by researching articles on Google scholar then proceed to CINAHL and Medline or PubMed databases as initial search strategy databases. For a comprehensive search, the researcher will search through EBSCOHost, Cochrane Database of Systematic Reviews, Embase, and MEDLINE databases. The key terms include newly diagnosed diabetic patients, diabetic education, and culturally congruent education, and diabetes management, the prevalence

of diabetes, diabetes management, Type 1 diabetes, Type 2 diabetes, pre-diabetes, A1C levels,

and weight. From the search, the researcher will locate six peer-reviewed research articles

published within the last five years and in English.

References

CDC. (2017). New CDC report: More than 100 million Americans have diabetes or prediabetes. Retrieved 29 March 2020, from

https://www.cdc.gov/media/releases/2017/p0718-diabetes-report.html

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.

Creamer, J., Attridge, M., Ramsden, M., Cannings-John, R., & Hawthorne, K. (2016). Culturally appropriate health education for Type 2 diabetes in ethnic minority groups: an updated Cochrane Review of randomized controlled trials. *Diabetic Medicine*, *33*(2), 169-183.

Hamilton, L. A. (2016). Utilizing culturally congruent educational interventions to improve Native American diabetic outcomes.

Navodia, N., Wahoush, O., Tang, T., Yost, J., Ibrahim, S., & Sherifali, D. (2019). Culturally tailored self-management interventions for South Asians with type 2 diabetes: A systematic review. *Canadian journal of diabetes*, *43*(6), 445-452.

Nazar, C. M. J., Bojerenu, M. M., Safdar, M., & Marwat, J. (2016). Effectiveness of diabetes education and awareness of diabetes mellitus in combating diabetes in the United Kigdom; a literature review. *Journal of nephropharmacology*, *5*(2), 110.

Rowley, W. R., Bezold, C., Arikan, Y., Byrne, E., & Krohe, S. (2017). Diabetes 2030: insights from yesterday, today, and future trends. *Population health management*, *20*(1), 6-12.

Schreier, L. (2020). Diabetes Statistics. Retrieved 29 March 2020, from

https://www.diabetesresearch.org/diabetes-statistics

Weller, S. C., Baer, R., Nash, A., & Perez, N. (2017). Discovering successful strategies for

diabetic self-management: a qualitative comparative study. *BMJ Open Diabetes Research

and Care*, *5*(1), e000349.

Appendix

Johns Hopkins Nursing Evidence-Based Practice

Individual Evidence Summary Tool

Date:	**EBP Question:** Does the use of culturally congruent inter-professional education for newly diagnosed diabetic patients between the ages of 40-70 years old, as opposed to no educational intervention, impact A1C levels, and weight over 90 days?					
Article Number	Author and Date	Evidence Type	Sample, Sample Size, Setting	Findings That Help Answer the EBP Question	Observable Measures	Limitations	Evidence Level, Quality
1	Weller, Baer, Nash, & Perez (2017)	qualitative comparative study	A sample of adult patients with type 2 diabetes. Sample size of 56. Setting was university-affiliated Family Medicine Clinics in Galveston, Texas.	Reoffering diabetes education classes may help improve poor control of diabetes.	type 2 diabetes explored diet, food preparation, physical activity, medication use and glucose monitoring	Small non-representative samples limited generalizability of the study. Besides, this study used standardized scales and questionnaires that could not explore personal practices in depth.	Level V, High quality.
2	Hamilton (2016)	mixed methods	Convenience sample of type II Diabetic mellitus female and male patients between the ages of 21 and 65. Sample size of 6 under primary care clinics for an Indian Health Services clinic setting.	Using a Native American nurse to offer culturally sensitive education to Native American diabetic patients decreases trust and linguistic obstacles to understanding.	hemoglobin A1c value, Medication adherence, and health recommendations by the provider	The Native American convenience sample obtained was insufficient to illustrate an improvement in outcomes. Besides, Hemoglobin A1c was inconsistently obtained by the providers who saw the participants in their follow up.	Level IV, Low quality.
3	Nazar, Bojerenu, Safdar, & Marwat (2016)	systematic review	A random sample of articles on knowledge about diabetes, a sample size of 25 articles in the United Kingdom.	The review illustrated that south Asian patients face problems regarding diet aspect and show poor level of knowledge	Knowledge and Awareness	The study did not include enough sample studies to come up with a conclusion that can be generalized.	Level V, low quality because it is not supported by any credible organization.

				concerning diabetes and also are discouraged to join educational sessions. Besides, the review depicted that illiteracy and lack of knowledge poses a great challenge to effective health education.		
4	Navodia, N., Wahoush, O., Tang, T., Yost, J., Ibrahim, S., & Sherifali, D. (2019)	Systematic review	A sample of 67 randomly selected articles with recipient Population consisted of migrants, CLDP, ethnic minorities in the United States.	The findings indicated that it is essential to keep the heterogeneity among CLDP in mind and to carefully consider interactions between societal, cultural, health related and personal factors to explain and reduce healthcare disparities.	Components of culturally competent healthcare–Individual level; Components of culturally competent healthcare–Organizational level; Strategies to implement culturally competent healthcare and Strategies to provide access to culturally competent healthcare.	The effectiveness of identified components and strategies could not be confirmed and was even often impossible to evaluate because either no control group was available or the chosen control group did not give any information on the effectiveness of the culturally competent components but rather on the health intervention in combination with culturally competent elements.	Level V, high quality because it is supported by a credible organization.
5	Creamer, Attridge, Ramsden, Cannings-John, & Hawthorne (2016)	Meta-analysis	A sample of 33 original RTC studies	Culturally appropriate diabetes education showing consistent benefits over conventional care in terms of glycaemic control and diabetes knowledge,	Glycaemic control (HbA$_{1c}$) and diabetes knowledge	The risk of bias was judged to be high for many outcomes. Besides, differences in timing of assessment limit interpretation of the findings.	Level V, low quality.

				sustained in the short- to mid-term.			
6	Chrvala, Sherr, & Lipman (2016)	systematic review	A sample review of 118 unique interventions	Engagement in diabetes self-management education results in a statistically significant decrease in A1C levels.	glycemic control, Diabetes self-management education (DSME) Contact time.	Limitations include lack of blinding of assessor, healthcare providers, and participants. There was potential for contamination between the IG and CG, unintended co-interventions, and the failure to describe strategies to properly conceal study group allocation.	Level V, Low quality.