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Patient Compliance Through Education for Type 2 Diabetics on New Medications: SGLT-2 Inhibitors and GLP-1 Analogues

Lindsay Hachat
Ouachita Baptist University

Carlin Clark
Ouachita Baptist University

Tiffani Chew
Ouachita Baptist University

Jocelyn Hayes
Ouachita Baptist University

Improving Type 2 Diabetic Client Compliance Through Education on New Medications: SGLT-2 Inhibitors and GLP-1 Analogues

Carlin Clark, Tiffani Chew, Lindsay Hachat, Jocelyn Hayes
Ouachita Baptist University, Department of Nursing, Dr. Carol Carter, PhD, BSN, RN.

Objective

Type 2 diabetics have a higher prevalence of cardiovascular disease complications (Glovaci et al., 2019). Cardiovascular disease was the cause of death in 9.9% of Type II Diabetics which represents 50.3% of all deaths related to Type II Diabetes Mellitus (Einarson et al., 2017). Across the world, cardiovascular disease affects approximately 32.2% of all people with Type II Diabetes Mellitus (Einarson et al., 2017). This creates the question: *In individuals with type 2 diabetes, does medication education on Sodium-Glucose Co-Transporter 2 inhibitors, or SGLT-2 inhibitors, and Glucagon-Like Peptide-1 Agonists, or GLP-1 agonists, increase patient compliance with medication by medication education?*

Methods

A literature review was conducted using a Boolean strategy with “AND”, “OR”, and “BUT”. The search engines used were Google Scholar and PubMed. The following filters were added to the literature search: “5 years ago,” “nursing interventions,” “evidence based research,” and “peer reviewed.” A title and abstract review was utilized to narrowed down articles to identify the highest levels of evidence.

Key Words

“SGLT-2 Inhibitors”, “GLP-1 Analogues”, “Type II Diabetes Management”, “Safety”, “Congestive Heart Failure”, and “Adherence”

Background and Significance

Type 2 Diabetes is a chronic condition where the body does not properly use insulin and cannot maintain normal blood sugar. According to the American Diabetic Association, Diabetes is the eighth leading cause of death in the U.S. The prevalence of Diabetes in 2021 was “38.4 million Americans, or 11.6% of the population” (American Diabetes Association, 2024). There is an estimated 1.2 million Americans each year that are diagnosed. Individuals most at risk for Diabetes are American Indians/Alaskan Native adults (American Diabetes Association, 2024). Type 2 diabetics have a higher prevalence of cardiovascular disease complications (Glovaci et al., 2019).

References

Results

Four articles were selected for review that included two meta-analyses of randomized control groups, a cross-sectional study, and a literature review. Three articles showed that SLGT-2 inhibitors had some preventative effects on cardiovascular events, but no significant benefits were found in protecting people with type II diabetes from cardiovascular complications (Nielsen et al., 2021, Palmer et al., 2021, Sayour et al., 2024). The literature review stated that patients educated on medications are more likely to adhere to them (Nelinson et al., 2021).

Discussion

The articles selected for review did not provide enough evidence to support that adherence to these specific antidiabetic medications would decrease cardiovascular disease complications in Type 2 diabetics. The literature review did support that medication education can improve compliance with taking medications. Adherence to these particular medications may not reduce cardiovascular disease complications, but medication compliance could decrease complication risks for Type 2 diabetics. This evidence could be used to support medication education in nursing practice to increased compliance with client medication regimens.