HARRIS HEALTH SYSTEM

Telehealth is Changing the Way We Manage T2D

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Background & Significance

❖ Diabetes Mellitus type 2 is a chronic metabolic disorder associated with insulin resistance and hyperglycemia. Increased blood sugar levels with increased hemoglobin A1C can lead to life long-term complications such as damage to the heart, eyes, nerves, kidneys, and large and small blood vessels. Diabetes Mellitus is also one of the world's greatest health threats due to its increased prevalence and growing public health problem.

❖ The cost of diabetes care is also rising, nearing about $30 billion per year, representing about 12% of the United States' total health care expenditures.

❖ Managing diabetes can be complex and challenging (access to care and lack of finances). Education on lifestyle modifications and healthy habits is essential to achieve optimal glycemic control and reduce the risk of long-term complications.

❖ Telehealth interventions (smart apps, video, and telephone) have proven to significantly lower HbA1c compared to usual care alone. Other benefits of telehealth are healthcare cost savings, greater patient compliance with care plans, and improved communication.

PICO Question

❖ Among adults with type 2 diabetes (P), how does patient education via telehealth intervention (I) compare to medical management alone (C) in reducing the hemoglobin A1C?

Purpose

❖ A team of diabetes educators for a large safety net healthcare organization launched an evidence-based practice (EBP) study to prove that diabetes education via telehealth reduced hemoglobin A1C.

Methodology

❖ Source of Evidence: Nursing Reference Center, PubMed, CINAHL.
❖ Search yielded research and non-research articles (N= 47); 19 articles met the specific inclusion criteria.
❖ John Hopkins EBP criteria were used to appraise research and non-research articles by team members
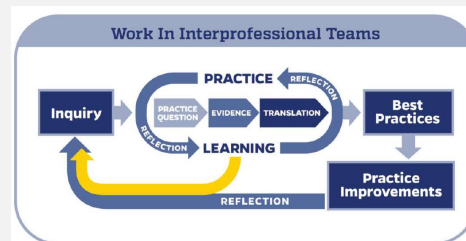
Findings

Research	Non-Research
Level I: n = 10	Level IV: n = 3
Level III: n = 3	Level V: n = 3

Work In Interprofessional Teams

JHNEBP Strength of Evidence

❖ Level I:
   Randomized Controlled Trials (RCT); Meta-analysis of RCTs
❖ Level II:
   Quasi-experimental
❖ Level III:
   Non-experimental; Qualitative; Meta-synthesis
❖ Level IV:
   Systematic Review; Clinical Practice Guidelines
❖ Level V:
   Organizational (e.g., Quality Improvement); Expert Opinion; Case Study; Literature Review

Translation into Practice

❖ Offering telehealth interventions such as follow-up or initial diabetes education will help manage type 2 diabetes and reduce the patient's HbA1C.
❖ Telehealth provides accessible, cost-effective diabetes management at the patients' fingertips.
❖ Medication management with the knowledge that someone is reviewing their data made clients more committed to self-management
❖ Telehealth helps alleviate healthcare disparities in communities where access to care is not easily accessible.
❖ Patients participating in telehealth showed a significant improvement in lowering Hemoglobin A1C.

Implications for Nursing

❖ Teach clients unfamiliar with video technology how to access the invitation link for video conferencing.
❖ Send reminders to clients regarding telehealth dates and times (but only a few reminders). Too many reminders were seen as intrusive.
❖ Implementation of telehealth helps patients self-manage diabetes and improve hemoglobin A1c.
❖ Telehealth increases adherence to treatment plans and patient outcomes.
❖ Telehealth services are convenient for the patient and cost-effective in managing diabetes.

References

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