Evaluating the Effectiveness of the Personal Diabetes Questionnaire in the Primary Care Setting

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Background

- Type 2 Diabetes Mellitus affects approximately 382 million adults worldwide.
- Complications related to diabetes account for approximately $174 billion in healthcare costs nationwide.
- Proper diabetes self-management is linked to a reduction in hospitalizations, emergency room visits, outpatient visits, and overall health decline.
- Approximately 90% of diabetes care is delivered by primary care providers.
- Personal Diabetes Questionnaire (PDQ): The only tool available that assesses the patients’ self-management activities, perceived barriers, and motivational aspects of self-care.
- PDQ has not yet been studied among diverse patient populations receiving diabetes care in the primary care setting.

Study Aims

- To evaluate the PDQ in assessing patient self-management activities including perceived barriers and readiness to complete self-care in a diverse patient population with diabetes in the primary care setting.
- To explore how perceived barriers and readiness to complete self-management is related to patient-reported glycated hemoglobin values (HbA1c).

Hypotheses:

- H1: Strong, positive correlation between HbA1c and patient perceived barriers to diabetes self-management.
- H2: Strong, negative correlation between HbA1c and patient perceived readiness to complete self-management.

Methods

- Design:
  - Non-experimental, cross-sectional design using self-report surveys.
  - Non-probability, convenience sampling.
- Instruments:
  - Assessed perceived barriers and readiness to complete self-management activities.
- Data Collection and Sample:
  - N = 11; recruited from diabetes support groups and word of mouth.

Distribution of Reported HbA1c

- No statistically significant relationship between HbA1c and patient perceived barriers to diabetes self-management (H1).
- Most participants were trying to lose or maintain weight, practiced carbohydrate counting or conscious of how food affects blood glucose levels.

Discussion

- Interpretation of Findings:
  - Hypotheses were rejected.
  - Valuable information regarding self-management activity, barriers, and motivational aspects of sample were obtained.
  - Results may have been influenced by participant characteristics.
- Project Limitations:
  - Unable to successfully recruit participants from primary care clinic sites.
  - Excluded Spanish-speaking individuals.
- Research Recommendations:
  - Evaluate Spanish version of PDQ among Spanish-speaking populations.
  - Enlist a variety of primary care clinics.
  - Conduct a full study with a larger sample to further evaluate the usefulness of PDQ.

Implications for Practice:

- Utilizing the PDQ in the primary care setting will enable Family Nurse Practitioners to effectively provide more patient-centered self-management education for diabetic patients with realistic, personalized goal-setting.
- Assessing health behaviors, perceived barriers, and motivational aspects of self-care allows providers to customize education and treatment plans to improve patients’ self-management, reduce morbidity, and enhance quality of life.