Gestational Diabetes Crisis Education Curriculum Lancaster County

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Problem

- The prevalence of diabetes in Lancaster County in 1998 was higher than the national average. (National-5.9%, Lancaster-6.4%, State-5.7%)
- The Diabetic Education Center(DEC) has seen a dozen patients since June who were referred from their OB-GYN with a diagnosis of Gestational Diabetes.
- The DEC has had problems with this population of patients because they are in “shock” over their diagnosis, do not understand the seriousness of their disease and do not return for follow-up visits.
- The DEC does not have an established curriculum to educate these patients about Gestational Diabetes involving understanding their disease, diet/exercise control, checking their blood sugars daily, and administration of insulin.

Aim

- To educate pregnant women with Gestational Diabetes about their disease, instruction techniques for self-administration of insulin and self-monitoring of blood glucose level, and ways they can control their blood sugars with exercise and diet.
- Improve the health of these patients by creating a change in their health care behavior.
- Provide the patients with key information about gestational diabetes on their initial visit in hope that they will understand the importance of returning for follow-up visits.
- Use the previous projects and curriculums that have developed at the DEC along with this project to strengthen the patient’s knowledge of diabetes and how to control it.

Measures

- Utilize the resources, curriculums and previous projects that are available at the DEC to educate the mothers about gestational diabetes and how they can control it.
- Look at the blood sugars before the first visit and 1-2 weeks after the initial visit to determine if the mothers show improvement in glucose control and are monitoring their blood glucose levels at least 2-3 times per day.
- Pre-test and post-test to determine baseline attitude towards and knowledge gained from the session.
- Feedback from health care providers on the use of this new curriculum and needed areas of improvement.
- Feedback from patients about the impact of this information and how helpful it is to them.

Possible Changes for Improvement

Development of Gestational Diabetes Crisis Education Curriculum

Drivers:

- Easy identification of patients with Gestational Diabetes through referral from OB-GYN physicians in the area.
- Lack of a curriculum to efficiently educate patients about Gestational Diabetes, diet/exercise control, insulin administration, and self-monitoring of blood glucose.
- Access to DEC and educators that are extremely knowledgeable about diabetes and how to control it.

Barriers:

- Low compliance of patients with respect to follow-up visits.
- Low educational level of patients.
- Lack of patient understanding about Gestational Diabetes and how important it is that they control this disease throughout their pregnancy.

PDSA Cycle
Plan

- To design a crisis curriculum that educates the patients about Gestational Diabetes and how it can be controlled by diet, exercise and insulin administration.
- Utilize past curriculums that have been developed to teach the patients about insulin administration, self-monitoring of blood glucose levels and diet control of diabetes.
- To create a test that can be used pre/post curriculum to ensure that the patients understand the concepts of Gestational Diabetes.

PDSA Cycle
Do

- Educated myself about Gestational Diabetes.
- Identified target population through the Diabetic Education Center.
- Underwent education by clinical dietitian and personnel at the DEC pertaining to ADA diet, controlling Gestational Diabetes with diet control, insulin administration and self-monitoring of blood glucose levels.
- Submitted preliminary curriculum and pre/post test for approval by the health care professionals at the Diabetic Education Center.

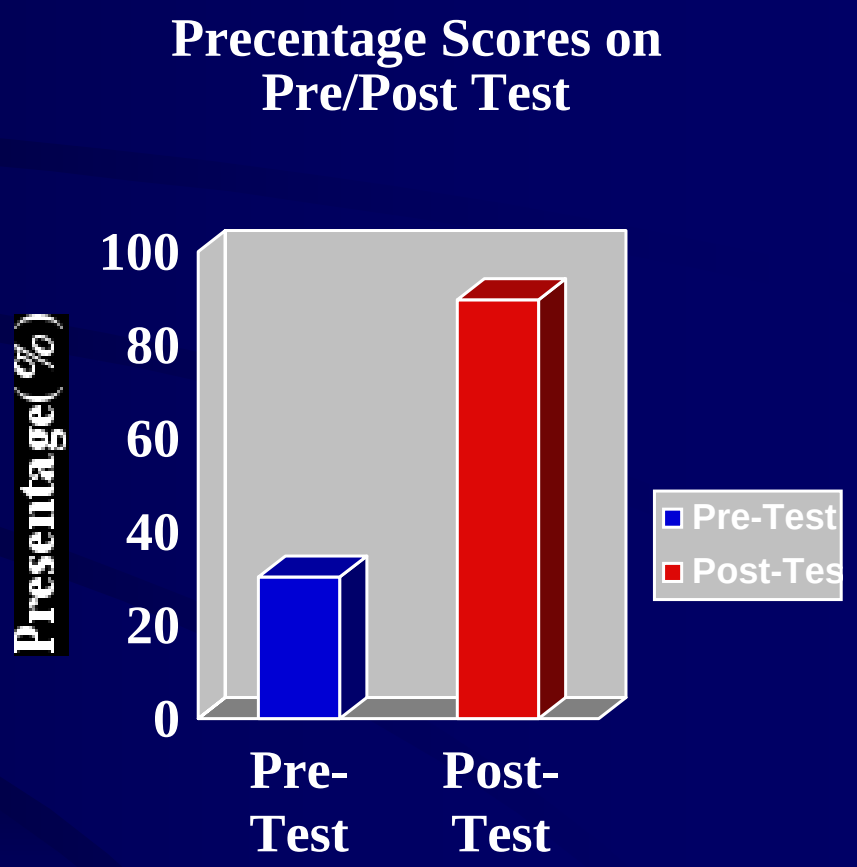
PDSA Cycle
Study/Data

- Administered pre-test and curriculum to a patient with Gestational Diabetes who was referred for education classes to the DEC from her OB-GYN.
- Assessed progress and administered post-test to patient at cessation of curriculum presentation.
- Analyzed data from pre/post test that was administered to the patient.
- I was unable to receive adequate follow-up information from the patients due to time constraints.
- Received feedback from the patient about the curriculum and possible areas of improvement.

PDSA Cycle Data

Assessment of Gestational Diabetes Crisis Education Curriculum by evaluation of scores on Pre and Post Test:

60% improvement in test percentage



PDSA Cycle
Data Analysis

- The patient showed 60 % improvement in test score percentage when comparing pre-test vs. post-test.
- I was unable to receive pre-visit blood glucose levels because this was the patients first visit and was referred for a positive OGTT diagnosing her with gestational diabetes.

PDSA Cycle
ACT

- The Gestational Diabetes Crisis Education Curriculum will be helpful to educate patients in the future.
- Evaluate patients in follow-up visits for:
  - knowledge obtained from the curriculum about exercise, diet and insulin administration
  - log of self-monitored blood glucose levels to determine if the patient has lowered and kept a consistent blood glucose level.
- Continue to evaluate the effectiveness of the curriculum and adjust in areas in response to patient and health care personnel feedback.

Lessons Learned

- Patient compliance can hinder the collection of data and determination of the effectiveness of your work.
- Personal education about gestational diabetes.
- Patients don’t understand the seriousness of taking care of their health even when they are pregnant.
- All work must be subject to change to suit the patient’s needs and limitations.