

# Assessing Effectiveness of Educational Interventions to Increase Literacy about Diabetes Mellitus Type 2 in the Latino Community of Reading, PA



Alvin Soto-Soto, MD, PGY-21, Francisco Rosa-Gonzalez, MD, PGY-21, Kaelor Gordon, DO, PGY-11, and Juan Perez, DO, Faculty<sup>1</sup>

Department of Family and Community Medicine, Penn State Health – St. Joseph Medical Center, Reading, PA, USA<sup>1</sup>

#### Background

- 1.Insufficient literacy regarding risk factors, diagnosis, and management of Diabetes Mellitus Type 2 (DMT2) within Latino Population in Reading
- 2. Focus: Amplify DMT2 health literacy.
- 3.Community-based approach.
- 4. Recognize cultural and linguistic factors on health education,
- 5. Collaborate with churches, civic groups, small clinics, and community organizations,

### **Objective**

1.To empower individuals to manage Diabetes Mellitus Type 2 to reduce disparities.

#### Methods

- 1. Patients will receive a questionnaire. Participants who identify as Latino and have several risks factors for, or a diagnosis of, Diabetes Mellitus Type 2 will be selected for the study.
- 2.POC Blood Glucose screens to catch the public's attention, screen for new-onset DMT2, ignite an individual discussion and link patients to appropriate resources.
- 3. Workshops, discussion, and lectures for community members in a variety of settings. Individual sessions for each topic will be conducted.
- 4.Use of Pre- and Post-intervention Questionnaires for evaluating knowledge acquisition / attitudinal shifts.

#### **Participants and Recruitment**

Latinos with risk factors, current diagnosis of, and / or low DMT2 literacy on risk factors, diagnosis, and treatment.

#### **Initial Survey**

See Attachment 1

Results

1. Work in progress, results to be determined when interventions are done.

### **Discussion**

1. In conclusion, Latino DMT2 Outreach aspires to catalyze positive transformations in the DMT2 literacy landscape of the Latino population in Reading, PA.

#### References

1. Alsunni AA, Albaker WI, Badar A. Determinants of misconceptions about diabetes among Saudi diabetic patients attending diabetes clinic at a tertiary care hospital in Eastern Saudi Arabia. J Family Community Med. 2014 May;21(2):93-9. doi: 10.4103/2230-8229.134764. PMID: 24987277; PMCID: PMC4073566.

#### **Contact Information**

asotosoto@pennstatehealth.psu.edu

### Main Point #1

Assess participants' health literacy regarding Diabetes Mellitus Type 2 through Pre-intervention questionnaires

### Main Point #2

Select each session topics based on Patient's Diabetes Knowledge Questionnaire (Attachment 1).

### Main Point #3

Implement educational strategies based on common misconceptions (Table 1).

## Main Point #3

Assess effectiveness of our interventions through post intervention questionnaires

## Main Point #4

Screen for DMT2 through POC Glucose and link patients to appropriate continuity of care, preferably our Family Medicine Practice.

#### Attachment 1. Patient's Diabetes Knowledge Questionnaire

	Questions	Yes	No	Don't Know
1	Eating too much sugar and other sweet foods is a cause of diabetes.			
2	The usual cause of diabetes is lack of effective insulin in the body.			
3	Diabetes is caused by failure of the kidneys to keep sugar out of the urine.			
4	Kidneys produce insulin.			
5	In untreated diabetes, the amount of sugar in the blood usually increases.			10
6	If I am diabetic, my children have a higher chance of being diabetic.			
7	Diabetes can be cured.			
8	A fasting blood sugar level of 210 is too high.			
9	The best way to check my diabetes is by testing my urine.			
	Regular exercise will increase the need for insulin or other diabetic medication.			
11	There are two main types of diabetes: Type 1 (insulin-dependent) and Type 2 (non-insulin dependent).			
12	An insulin reaction is caused by too much food.			
13	Medication is more important than diet and exercise to control my diabetes.			
14	Diabetes often causes poor circulation.			
15	Cuts and abrasions on diabetes heal more slowly.			
16	Diabetics should take extra care when cutting their toenails.			
17	A person with diabetes should cleanse a cut with iodine and alcohol.			
18	The way I prepare my food is as important as the foods I eat.			
19	Diabetes can damage my kidneys.			
20	Diabetes can cause loss of feeling in my hands, fingers and feet.			V.0
21	Shaking and sweating are signs of high blood sugar.			
22	Frequent urination and thirst are signs of low blood sugar.			
23	Tight elastic hose or socks are not bad for diabetics.			
24	A diabetic diet consists mostly of special foods.			
	Source: Starr County			

