

## Exploring Health Beliefs Among Hispanic Adults with Prediabetes (Poster).

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# Exploring Health Beliefs Among Hispanic Adults with Prediabetes

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## BACKGROUND

- Prevalence of prediabetes (PreDM) is increasing.
- Hispanic adults with PreDM are 1.7 times more likely to progress to diabetes (DM) and 50% more likely to die from DM-related complications.<sup>1</sup>
- Understanding the health beliefs of the Hispanic community is necessary to address these health disparities with effective and culturally appropriate interventions.

## OBJECTIVE:

To explore prediabetic Hispanic adults' perceived personal health status and risk of progression to diabetes.

## STUDY DESIGN:

Initial mailing consisting of an introduction letter, 34 question, bilingual (Spanish and English) survey, and interview interest form. Survey questions included elements of the validated Risk Perception Survey for Developing Diabetes<sup>2</sup> (RPS-DD); the remainder of the survey consisted of original questions created by the study team.

### Questions addressed:

- Demographics
- Trust and satisfaction with the healthcare system
- Health behaviors
- Personal health beliefs (validated)
- Diabetes risk knowledge (validated)

## SETTING:

Registry of potential participants was created from patient panels at four practices serving an urban Eastern Pennsylvania community.

## PARTICIPANTS:

- Hispanic patients
- 18-65 years old
- Diagnosis of prediabetes
- HbA1c between 5.7% and 6.4% in past year (Stratified into mild (5.7-6.0%) and intermediate (6.1-6.4%) hyperglycemia)

## RESULTS

Figure 1: Familiarity with Prediabetes and Diabetes

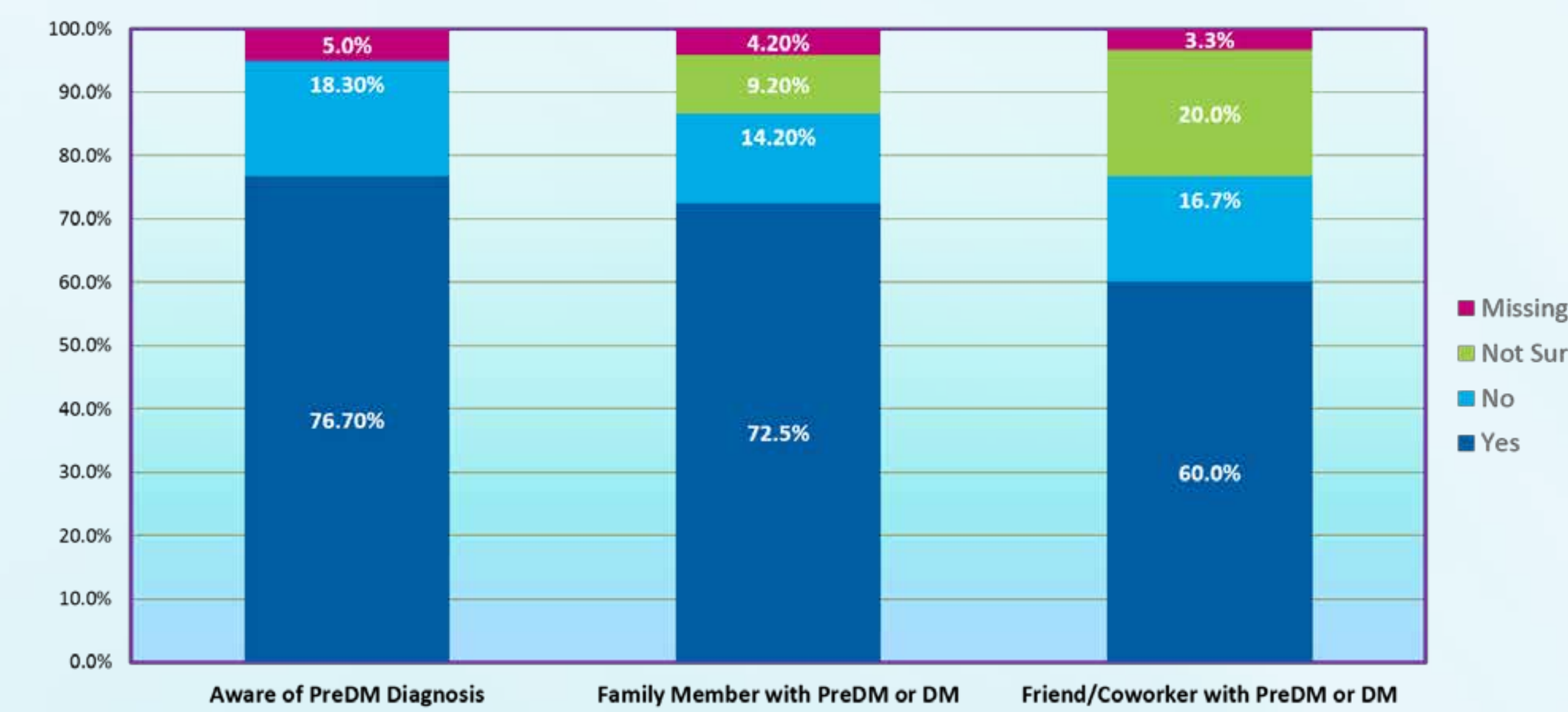


Figure 2: Interest in Healthy Lifestyle Interventions

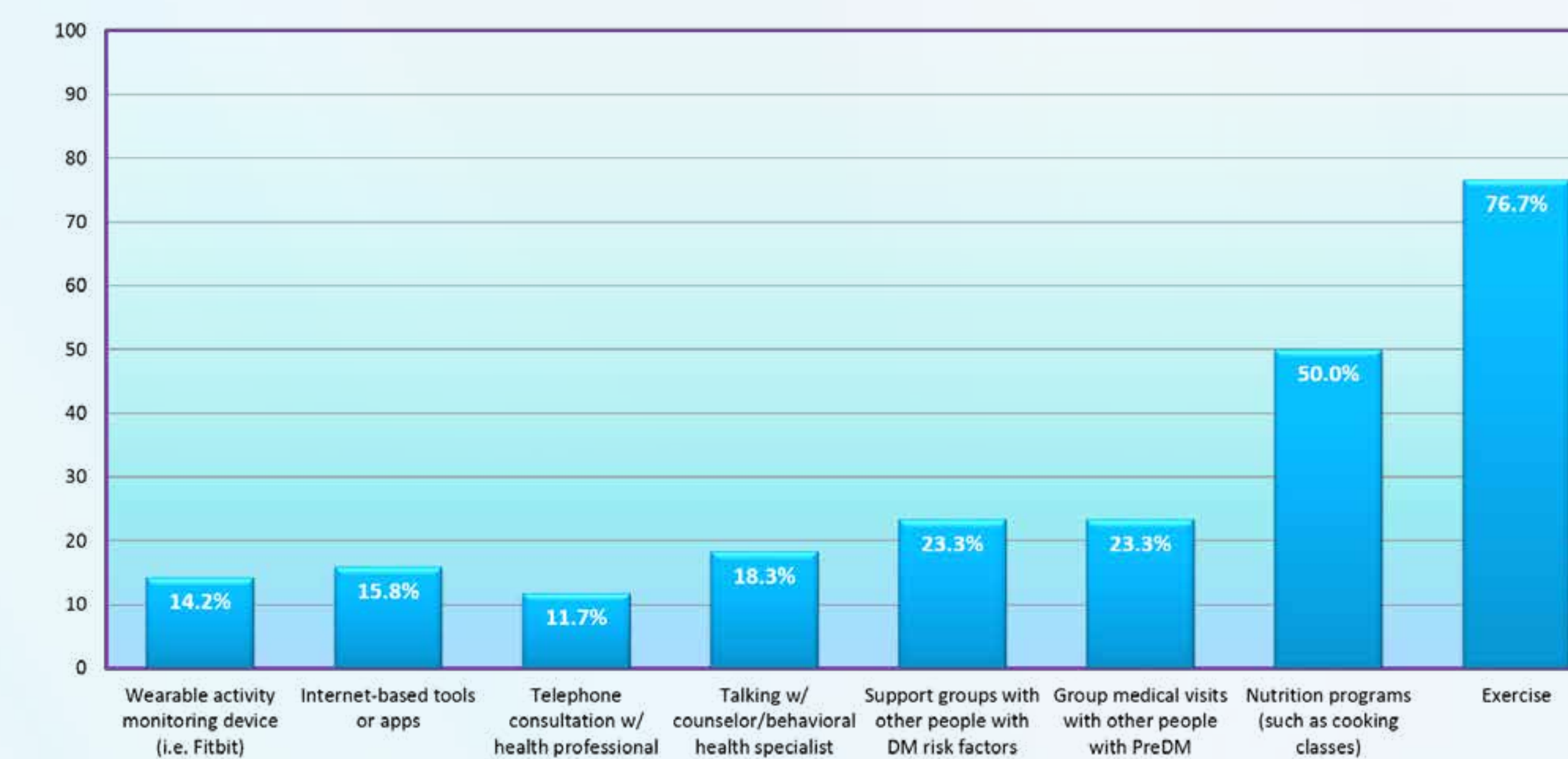


Table 1. Demographics

Prediabetes Type	Number	Percent
Mild Hyperglycemia	98	81.7%
Intermediate Hyperglycemia	22	18.3%
Sex	Number	Percent
Female	84	70.0%
Male	36	30.0%
Race	Number	Percent
White	35	29.2%
Black, African American	3	2.5%
American Indian or Alaskan Native	2	1.7%
Other	64	53.3%
Missing	17	14.2%
Highest Completed Level of Education	Number	Percent
Less than High School	28	23.3%
High School or Equivalent (GED)	53	44.2%
Non College/Business/Trade/Technical School	14	11.7%
2-Year Associates Degree	6	5.0%
4-Year College Degree and Above	16	13.3%
Missing	3	2.5%
Language Spoken Most of the Time at Home	Number	Percent
English	13	10.8%
Spanish	89	74.2%
Other	16	13.3%
Missing	2	1.7%

Table 2. Scores from Risk Perception Survey for Developing Diabetes

Risk Perception Survey - Developing Diabetes Category	Mean	Median	S.D.
Diabetes Risk Knowledge*	5.59	5.50	1.65
Personal Control**	3.05	3.00	0.53
Personal Worry**	3.21	3.50	0.73
Optimistic Bias**	2.14	2.00	0.78

\* Minimum score of 0 and Maximum of 11  
\*\* Minimum score of 0 and Maximum of 4

Table 3. Risk Knowledge Score Comparisons

	Risk Knowledge Score		t (p)
Education Level	Number	Percent	
HS or less	61	5.20	3.57 (.001)
More than HS	30	6.43	
Aware of Diagnosis	Number	Percent	
Yes	72	5.68	0.79 (.430)
No	16	5.31	
Family Member with DM or PreDM	Number	Percent	
Yes	68	5.74	.691 (.492)
No	13	5.38	
Friend/coworker with DM or PreDM	Number	Percent	
Yes	56	5.89	1.519 (.133)
No	15	5.20	

## References:

1. U.S. Department of Health and Human Services. National Healthcare Quality and Disparities Report 2014. AHRQ Publication No. 15-0007. www.ahrq.gov/research/findings/nhqdr14/2014nhqdr.pdf. Accessed August 14, 2015.
2. Walker EA, Cabon A, Schechter CB, et al. Measuring comparative risk perceptions in an urban minority population: the Risk Perception Survey for Diabetes. *Diabetes Educ.* 2007;33(1):103-110.

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## DATA COLLECTION:

414 individuals met inclusion criteria and 120 (29%) eligible surveys were returned. Responses were de-identified and entered into an online database, REDCap.

## DATA ANALYSIS:

SPSS was used to analyze survey data.

- Diabetes risk knowledge, personal control, worry, and optimistic bias scores were determined using the validated scoring guide.
- Summarizations of all variables were calculated with descriptive statistics.
- Demographic groups' RPS-DD scores were compared utilizing independent t-tests and ANOVAs.

## RESULTS:

- Over 75% of respondents had prior knowledge of their PreDM.
- Majority knew a family member (73%) and/or a friend/coworker (60%) with DM or PreDM.
- Exercise (77%) and nutritional programs (50%) were most commonly selected as preferred healthy lifestyle interventions.
- Significant differences in Risk Knowledge scores were found between education levels (p=.001).
- Awareness of PreDM diagnosis indicated higher worry scores (p=.027).
- No significant differences were found between mild and intermediate hyperglycemic participants.

## DISCUSSION:

High level of interest in healthy eating and exercise to prevent progression to DM reveals that disparities could be improved with low-cost interventions. Little difference was found in responses across demographic groups. However, the difference in risk knowledge of those with lower educational attainment highlights an opportunity for DM specific education.

## NEXT STEPS:

Moving forward, qualitative analysis of one-on-one interviews will examine health beliefs in more detail. Participants will also provide feedback on a PreDM infographic.

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