

Insulin Perceptions of Adult Type 2 Diabetes Patients at Eastwood Health Center

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Introduction

- CDC: 29.1 million people with diabetes in US
- Texas: 1.8 million adults have diabetes
- High prevalence in underserved populations
 - 11.0% of adult Hispanic population in Texas has diabetes
- El Centro del Corazon:
 - 93.1% of patient population Latino
 - 9.6% of adult patient population has diabetes
- Purpose: understand the perceived barriers to insulin use



Background

- Type 2 diabetes
 - Risk factors and complications
 - Lowering HbA1c levels reduces risk for complications
 - Treatment: lifestyle factors (exercise, diet), oral hypoglycemics, INSULIN
- Insulin
 - Resistance by patients
 - Wounderberg, Lucas, Latour, and Scholte op Reimer (2011) reported that 50% of patients whose next step was insulin did not start treatment until 5 years after developing complications
 - “Psychological insulin resistance” (PIR)



Methodology

- Cross-sectional pilot study x3 weeks
- Setting: Eastwood Health Center
- Sample: Type 2 diabetes adult patients
- Measure: “Insulin Perceptions Questionnaire”
 - Self-administered
 - Qualitative and quantitative questions
- Procedure: Questionnaire distributed by medical assistants and front desk clerks
- Statistical analysis: SPSS



Results

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Table 1: Descriptive Statistics

| | N | Mean | Std. Deviation |
|----------------------------|----|--------|----------------|
| Age | 33 | 51.73 | 12.885 |
| Time with diabetes (years) | 11 | 8.6136 | 6.35744 |
| Most current HbA1C | 8 | 8.425 | 2.4870 |
| Most current blood sugar | 20 | 168.70 | 72.825 |

- Quantitative Data:
 - Statistically Significant Data: Questions 1, 8, 14, and 17
 - Spanish speakers:
 - higher positive insulin benefits perception
 - English speakers:
 - more strongly agreed that the use of insulin could lead to worse health status
 - insulin would make lives less flexible (statistically significant)
 - Negative correlation between the perceived benefits of insulin to the fears/discomforts and others perceptions
- Qualitative Data:
 - Spanish respondents: concerns regarding weight gain, fetal deformity, and future need for dialysis



Discussion

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- Lack of reported HbA1c levels
- No link between acculturation and perceived insulin benefits
- Negative correlation between perceived insulin benefits to perceived fears/discomfort and others perceptions
- Limitations:
 - small sample size, disproportionately greater Spanish speaking group, literacy levels, monitor for completeness of survey
- Future Research:
 - Repeat study in larger sample size, assess other demographic variables like income and highest level of education



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Recommendations

- Address PIR at an individual level
 - Ask about fears/concerns
- Education (insulin benefits)...
 - Clarify misconceptions
 - Videos while in waiting room, pamphlets, diabetes education class
 - Significance of HbA1c
- Introduce insulin early, before patient needs it



Conclusion

- Diabetes is an important and prevalent issue
- Improve education
 - Understanding
 - Insulin perceptions
 - Prevent complications
- Approach at personal level



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