Topic: Knowledge and Attitude of diabetics related to diet and foot care

Co-Authors

<table>
<thead>
<tr>
<th></th>
<th>Ms. Shenelle Ragbir</th>
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<tbody>
<tr>
<td>Ms. Nalini Ramsood</td>
<td></td>
</tr>
<tr>
<td>Ms. Shauna-Marie Blake</td>
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<tr>
<td>Dr Esther Daniel</td>
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</table>
Map of the Caribbean
<table>
<thead>
<tr>
<th>CONFLICT OF INTEREST (IF ANY)</th>
<th>NONE</th>
</tr>
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<tbody>
<tr>
<td>OVERALL GOALS</td>
<td>The study was to determine the levels of knowledge and attitude about diet and foot care in the self-care management of patients with type11 diabetes at a tertiary care institution in Trinidad and Tobago</td>
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<tr>
<td>OBJECTIVES</td>
<td>1. To assess knowledge and attitude of patients regarding the importance of Diabetic Foot Care and Diet.</td>
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<td>2. To determine the effectiveness of Health Exhibition on knowledge and attitude of patients regarding the importance of Diabetic Foot Care and Diet</td>
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</table>
NEED FOR THE STUDY

• “Diabetic Foot - a national disaster”
• Trinidad and Tobago has been severely affected by the epidemic of diabetes.
• T&T is the 4th in the world on amputations due to diabetes complications
• Limbs are amputated at a rate of 500 per year (Naraynsingh, 2018)
REVIEW OF LITERATURE

• Diabetes is the 2nd leading cause of death in T&T (MOH, 2016)

• There were 117,400 cases of diabetes in Trinidad and Tobago in 2017 (IDF, 2019)

• Cultural practices may be an important contributor to lower limb wounds in persons with diabetes (Harnarayan, et al. 2014).
### Prevalence of diabetes and related risk factors

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diabetes</strong></td>
<td>10.9%</td>
<td>14.1%</td>
<td>12.5%</td>
</tr>
<tr>
<td><strong>Obesity</strong></td>
<td>24.9%</td>
<td>39.5%</td>
<td>32.3%</td>
</tr>
<tr>
<td><strong>Physical Inactivity</strong></td>
<td>29.9%</td>
<td>53.1%</td>
<td>41.7%</td>
</tr>
</tbody>
</table>

*Total population: 1,360,000*
Health Belief Model

**Individual Perceptions**
- Perceived susceptibility to disease "X"
- Perceived seriousness (severity) of disease "X"

**Modifying Factors**
- Demographic variables
- Sociopsychological variables

** Likelihood of Action**
- Perceived benefits of preventive action minus perceived barriers to preventive action
- Likelihood of taking recommended preventive health action

**Cues to Action**
- Mass media campaigns
- Advice from others
- Reminder postcard
- Illness of family member/friend
- Newspaper of magazine article
METHODOLOGY

• Research Design: A quantitative experimental design

• Variables:
  - Independent Variable- persons with type 11 diabetes
  - Dependent Variable- diet and foot care practices

• Population: Male and female attendees of the outpatient diabetic clinic
METHODOLOGY

Study sample:
- 60 Adult subjects diagnosed with Type 2 diabetes

-Sampling technique: Random Sampling

Inclusion criteria:
- ambulant and non-institutionalised, taking insulin and/or oral medication

Exclusion criteria:
- Patients with type 1 diabetes, gestational diabetes
METHODOLOGY

• Setting of the study:
  - Eric Williams Medical Complex Diabetic Outpatient Clinic.

• Ethical considerations:
  - University of The West Indies Ethnics Committee
  - North Central Regional Health Authority
SELECTION AND DEVELOPMENT OF THE TOOL

Description of tool:

- A researchers’-structured Likert-type questionnaire was developed and pretested for the study

Description of scoring: Pre test- Post test
ANALYSIS OF THE STUDY

• The eta squared statistics (0.55) indicated a large effect size with a substantial difference in participants scores obtained before and after the intervention.
ANALYSIS OF THE STUDY

• Majority of subjects - 46-55 age group, 12.9%

• Gender - Female 66.7% ; Male 33.3 %

• Ethnicity- Africans - 41.9 %, East Indian 32.3%, Mixed 25.8%

• Education Level - 41.9% attained tertiary level
ANALYSIS OF THE STUDY

Knowledge and Attitude of patients regarding the importance of diet in self management

• Health-related behaviours had significant difference in the pre/post

• Medications- 1/3 of the subjects took medications only when they feel ill

• Glucose monitoring
  - 60% of the subjects did bi-weekly testing
  - No one tested daily.
Analysis

• 50% of the subjects had high glucose levels, avoided sugary or sweet foods, but continue to have carbohydrates as the main ingredient in their meals consumed 3 times a day.

• 10% attended the support group of the DATT
  - Tested blood glucose daily
  - Eat several small meals
  - Took their medication as prescribed
## Analysis of the Study

Knowledge and Attitude of Patients Regarding the Importance of Diabetic Foot Care

<table>
<thead>
<tr>
<th></th>
<th>Paired Differences</th>
<th></th>
<th></th>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Std. Error Mean</td>
<td>95% Confidence Interval of the Difference</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td></td>
</tr>
<tr>
<td>Pair 1</td>
<td>Feet Inspection</td>
<td>2.097</td>
<td>2.150</td>
<td>.386</td>
<td>1.308</td>
<td>2.885</td>
<td>5.429</td>
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<tr>
<td></td>
<td>P_Feet_Inspection</td>
<td></td>
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<tr>
<td>Pair 2</td>
<td>Feet Signs</td>
<td>.161</td>
<td>.934</td>
<td>.168</td>
<td>-.181</td>
<td>.504</td>
<td>.961</td>
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<tr>
<td></td>
<td>P_Feet_Signs</td>
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<tr>
<td>Pair 3</td>
<td>Footwear Inspection</td>
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<td>1.746</td>
<td>.314</td>
<td>.230</td>
<td>1.512</td>
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<tr>
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<td>P_Frequent Inspection</td>
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Conclusions: Although subjects were exposed to self care practices during diabetes education sessions it is unclear to what degree these practices have been incorporated into everyday life

Recommendations:
- Wellness clinics
- Specialized clinicians
- EBP
REFERENCES


Thankyou