Analysis of the Impact Weekly Diabetes Education Class Has On the Health of Patients with Diabetes Mellitus Type 2

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Introduction

• Diabetes Mellitus Type 2
  • Constant high blood sugar
    • Body not responding to insulin
      • And/Or
    • Lack of adequate insulin production
Background

Statistics
- 26 million Americans
  - 7 million not aware
- South Los Angeles
  - 55,500 diabetics (5.5%)
- St. John’s
  - Treats more than 5,000

St. John’s Well Child and Family Center
- Comprehensive medical care
- Dietician
- Weekly health education class
  - Presentations
  - Healthy meals
  - Exercise
  - Physician consultations

Statistics
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Methodology

1. Survey to obtain attendees’ feedback about health class
2. Quiz to assess diabetic patients’ knowledge of diabetes
3. Evaluate the impact weekly health education class has on diabetic patients’ fasting blood glucose and weight
Results — Survey/Quiz

- 26 diabetics surveyed
  - Age
    - 41 – 50 years old ----- 6
    - 51 – 60 years old ----- 4
    - 61 – 70 years old ----- 1
    - Over 70 years old ---- 2
  - Gender
    - Female --------------- 15
    - Male --------------- 6

- What do you like about the class?
  - Education, discussions, EXERCISE
- What do you dislike about the class?
  - None
- Benefits from class
  - Knowledge of diabetes, drugs/alcohol, healthier lifestyle
- Suggestions
  - More exercise!

- 26 diabetics surveyed
  - 21 have attended; 5 have not attended
  - All are aware of weekly diabetes class
    - All are interested
    - Medical providers and friends
  - Attendance since January 1, 2014
    - More than 20 sessions --- 12
    - 15 – 20 ------------------ 1
    - 10 – 14 ------------------ 1
    - 5 – 9 --------------------- 4
    - Less than 5 ---------------- 3
    - Never --------------------- 5
      - Work, transportation

Quiz Performance

<table>
<thead>
<tr>
<th>Attended (21)</th>
<th>Not Attended (5)</th>
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<tbody>
<tr>
<td>77%</td>
<td>59%</td>
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**Results — Attendance vs FBS/Weight**

- 15 sessions from Feb – June 2014
  - 14 diabetic patients
    - 6 – 14 sessions attended
      - Collective Average FBS = 126 mg/dL
        - Normal FBS is less than 125 mg/dL
      - Individual average range = 96 – 178 mg/dL
      - Collective percent change = -5%
      - Individual percent change range = -44% to 27%

- 15 sessions from Feb – June 2014
  - 14 diabetic patients
    - 6 – 14 sessions attended
      - Collective average weight gain of 0.3 lbs
Discussion

• Survey
  • Small sample size
  • All enjoyed diabetes health education class; practical

• Quiz
  • Results revealed specific areas in diabetic topics patients lack understanding

• FBS/Weight and Attendance
  • Attendees are implementing materials learned in class to lifestyle
  • Comorbidities prevent some diabetic patients from being fully physically active.
Recommendations

- Include more intense and longer duration of exercise activity
- Quiz
  - Include larger sample size
  - Include more non-attendee diabetics
- Diabetic patients
  - Weekly FBS check and hemoglobin A1c
- Data
  - Longer time span
- Weight management
  - Stronger emphasis on healthy eating and physical activities
Conclusion

• St. John’s Well Child and Family Center
  • Weekly health education classes
    • Attendees more knowledgeable
    • Decreased fasting blood sugar by 5%
    • Insignificant increased in weight
Acknowledgements

• GE-NMF Primary Care Leadership Program
• St. John’s Well Child & Family Center
• Dr. Beatrice Germain, MD, FAAP
• Dr. Kevin Lohenry, PhD, PA-C
• Dr. Helen M. DuPlessis MD, MPH
• Medical Staff at Williams Clinic
• Mr. Jim Mangia, MPH
• Ivy Marx
• Dr. Shom Dasgupta
• Dr. Rosa Rodriguez
• Ms. Elizabeth Meisler
• Patients