Health Education in FQHC

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Federally Qualified Health Centers

- FQHC community based health centers funded by HRSA
  - Primary care provided in underserved areas
  - Care provided on sliding fee based on ability to pay
  - Operating under a governing board that includes patients

- May be Community Health Center, Migrant Health Centers, Health Care for the Homeless, and Health Centers for Residents of Public Housing
  - Often have a blended population

- Primarily moving toward interdisciplinary care
  - Often offer Primary Care, Dental, Women’s Health, Behavioral Health, Pharmacy, Lab, and Radiology Services under one roof
Obesity Statistics

- **Prevalence of obesity 42.4% in 2017-2018**
  - 1999-2000 prevalence was 30.5%
  - Prevalence of severe obesity increased from 4.7% - 9.2%
- **Non-Hispanic Black adults 49.6% (highest)**
  - Followed by Hispanic adults (44.8%)
  - non-Hispanic White adults (44.2%)
  - non-Hispanic Asian adults (17.4%)
- **Age prevalence**
  - 20-39yo (40%)
  - 40-59yo (44.8%)
  - 60 and older (42.8%)
Obesity and Socioeconomic Status

- Typically a bell-curve distribution
  - The lowest and the highest income groups typically suffer from obesity the least
    - Small differences interracially, not statistically significant though
  - But why?
  - Open discussion!
Peasant-King Paradox in Obesity

- 500 years ago, obesity was the disease of privilege
  - Access of resources and foods
- Today, the wealthiest among us trend toward a more health conscious diet
  - Low-calorie, plant based, more akin to the lower SE peoples of a different time
Our Low-Income Youth

- The statistics strategically ignore the affluent youth of our world
  - Typically low income (college/graduate students, young tradespeople and entrepreneurs)
  - Typically better access to health education
The Sugar Diabetes

- Diabetes (here referring to T2DM) follows a more predictable model
  - 4.2% 18-44yo
  - 17.5% 45-64yo
  - 26.8% greater than 65yo

- 12% biologic females, 14% biologic males

- Race
  - Hispanic 14.7%
  - Asian, non-Hispanic 14.9%
  - Black, non-Hispanic 16.4%
  - White, non-Hispanic 11.9%

- Overall, 10.5% of the US population suffers from diabetes
Diabetes and Socioeconomic Status

- Poverty has become such a factor in the rates of T2DM, that even in the presence of Universal Health Coverage, it is still correlated with an increased incidence of the disease (Hsu 2012)

- Factors that place patients at an **INCREASED** risk for T2DM
  - Lower level of education
  - Lower income
  - Unstable housing (multifactorial)
  - Toxic exposures
  - Food access/security/availability
  - Access to healthcare (**conflicted**)
  - Affordability
  - Quality
  - Social cohesion and support
Associated Co-Morbidities of T2DM

- Hypertension
- Chronic Kidney Disease
- Retinopathies and associated ophthalmic disorder
- Hyperlipidemia
- State of chronic low-grade inflammation
- Smoking
- Mental Health Disorders (reflexively)
Metabolic Syndrome & The Social Determinants of Health

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Our Project

- **Health Education for Patients Suffering from Type II Diabetes Mellitus and Class III Obesity at an FQHC: A Quality Improvement Project**
- **Our facility has an abundance of resources**
  - Primary Care Physicians
  - Behavioral Health
  - Diabetic Education and Diabetes Clinic
- **But still, disproportionate numbers of chronic disease**
  - Uncontrolled T2DM
  - Class III Obesity
  - HTN
  - Metabolic Syndrome
Selection Criteria

- For Type II Diabetes
  - HgA1c > 6.5%
  - Consent to Health Education separately from Diabetic Education
  - New or prior diagnosis

- For Class III Obesity
  - BMI > 39.9
  - Consent to Health Education separately from Diabetic Education
  - New or prior diagnosis
Goals and Standards

- Set a standard for Health Education in FQHCs
- Identify resources for dedicated Health Educator position
- Show that the Health Education position is a necessity in FQHCs
- Help our patients control get better control of their weight and T2DM
Our Intervention

● Dedicated Health Educator role for 1 month
  ○ Offered and available to all patients in the clinic
  ○ For study purposes, included only those that met criteria
  ○ 1-2 meetings, usually during visit
  ○ In-depth counseling on nutrition and exercise

● Resources for Nutrition
  ○ Included
    ■ Cost effective grocery shopping/guided shopping trips
    ■ Food choices
    ■ Meal planning/recipes

● Resources for Activity
  ○ Included
    ■ Cost effective activity resources
    ■ Schedule management
    ■ Expectation counseling and value of activity
Example Clinic Day

- Health Educator during clinic hours on-call service
  - Similar to some Behavioral Health Models
- Patient consents to Health Education
  - Patient seen after provider has completed their visit
- Spends as much time as needed going over interventions
  - Provide paper or electronic copies of resources
- Follow either in-person or virtually 1mo, 3mo, 12mo, or as needed
Example Encounter

- **Dietary Interventions**
  - Low starch or “slow-carb” approach
    - Grocery store perimeter:
      - Whole unprocessed meat, fruit, vegetables
      - Minimize anything in a box or in a can
    - Toxin exposure discussion
    - Consistency and adherence is the most important factor

- **Exercise Interventions**
  - Attainable goals
    - 3-4 days of 15-30min high intensity exercise for most people
    - ~3 days 20-30min low-to-moderate intensity exercise for more disabled
  - Resources:
    - Park/outdoor gyms
    - Silver Sneakers or other health facility programs
    - Used equipment
    - creativity
Our Results

- 11 patients met criteria for BMI
  - 5 followed up; average of 41.4 BMI
- 17 for HbA1c
  - 7 followed up, average of 9.23%
- Many others screened and requested intervention from Health Educator but were excluded for not meeting criteria
- Significant issues related to provider turnover at our clinic
- BMI decreased to average of 38.70 SD 2.82
- HbA1c decreased to average of 8.06% SD 1.78
How to Implement?

- Food Lists
- Exercise templates
- Dedicated Health Educator
  - Can be a paid position
  - With the resources we had available (multiple universities, medical schools, and a chiropractic school) we were able to fill this position for two years for free as part of an internship exchange for clinical experience
    - Many of these allied health professional studies need clinical exposure
Discussion: Is Access the Issue? Or Is Information?

- Problem: Despite a successful implementation of *quality* access to care, health disparities still exist in these communities
- Project: address this by providing dedicated Health Education to patients
- Results: *improvements in metabolic biomarkers*, even with small interventions
- The goal going forward is to create a template for *any clinic* to implement this intervention in a *cost-effective* way
Resources

Bibliography:


