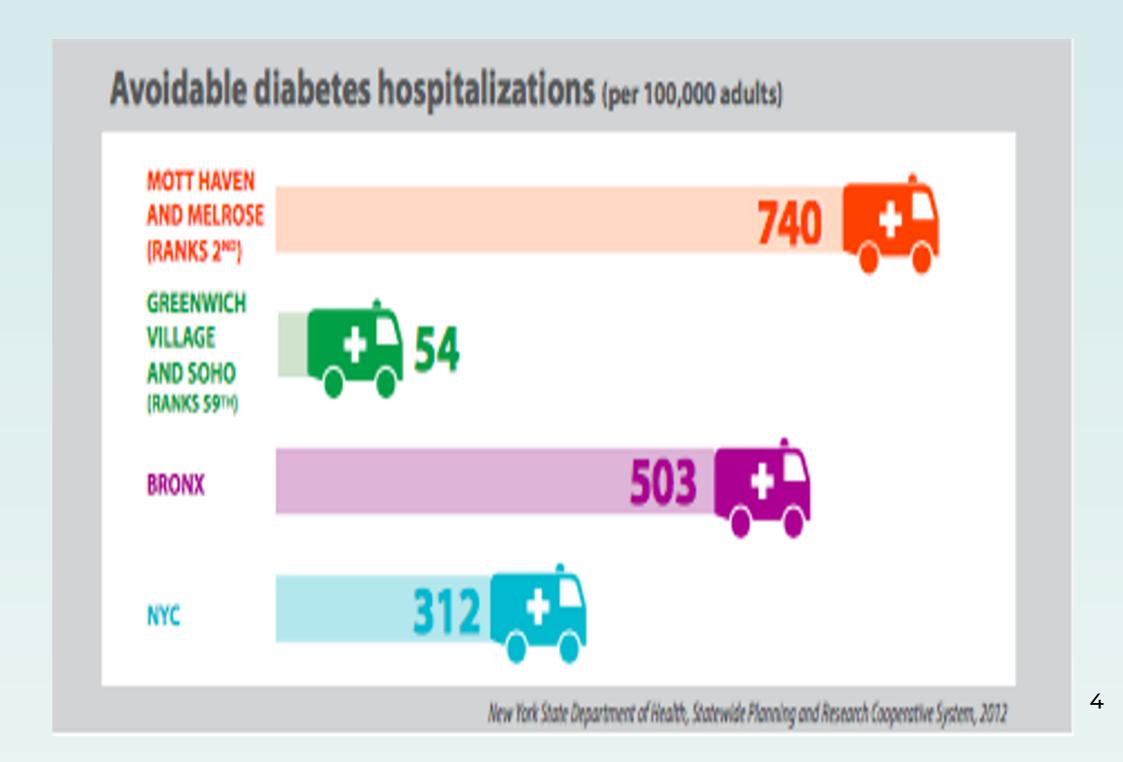
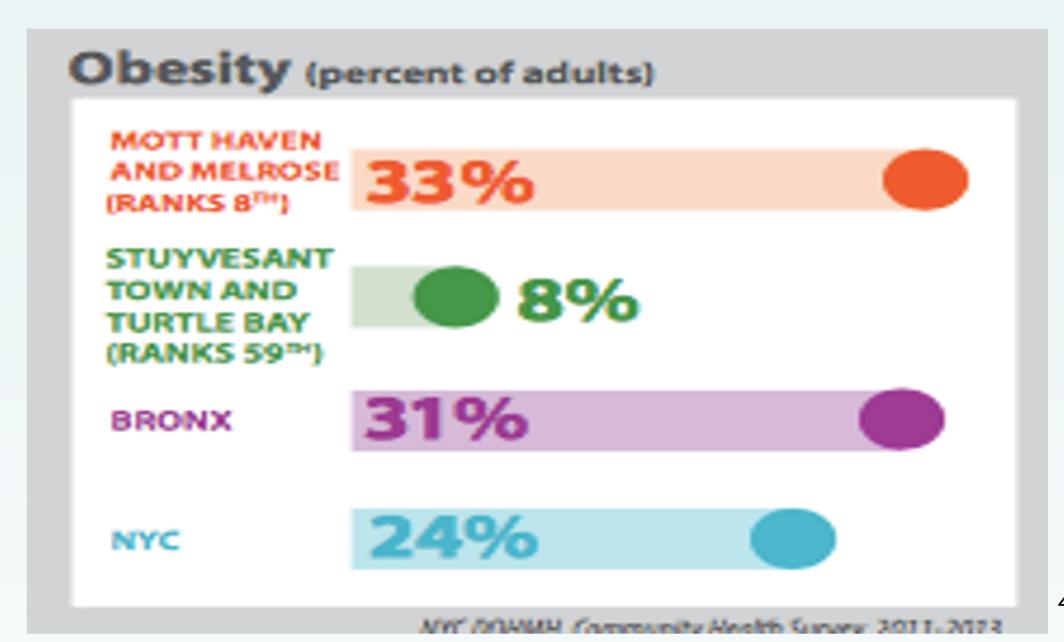
Diabetes Mellitus: Diabetes in the Hispanic Population in the South Bronx

Alma Purisic WCSN, Sammi Ruan WCSN, Paula Povzlov WCSN Wagner College Evelyn L. Spiro School of Nursing





Introduction

- ☐ Diabetes Mellitus (DM) is generally defined as a condition in which one's blood sugar level is too high. The high blood sugar can be attributed to either the body not producing enough insulin (DM Type 1) or the body is not utilizing insulin as well as it should (DM Type 2). 1
- ☐ Some complications that can occur from uncontrolled diabetes include: diabetic retinopathy (eye damage), diabetic nephropathy (kidney damage), diabetic neuropathy (nerve damage), heart disease, stroke, digestion problems, erectile dysfunction, skin problems, infection, and dental problems. ²
- ☐ In Mott Haven, 23% of adults have no health insurance, increasing the rate of preventable hospitalizations. 4
- ☐ Adults in Mott Haven are more likely to consume more sugary drinks, eat fewer fruits and vegetables, and less physical activity, which can increase their probability of diabetes. 4

Community Assessment and Analysis



- ☐ 72.3% of South Bronx's population are of Hispanic/Latino origin. ³
- \Box The median household income is roughly about \$21,737.
- ☐ There has been an increase in the number of families that rely on food stamp/SNAP benefits. In 2006, about 45.5% relied on food stamps, but in 2014, it increased to 53.4%. ³
- ☐ 31.0% have incomes below the poverty threshold. ³
- ☐ In Mott Haven and Melrose, it is estimated that 46% of deaths could have been averted. 4
- □ 33% of adults are obese, which increases their probability of diabetes and heart disease. 4
- ☐ There is an increase in avoidable hospitalizations, such as asthma exacerbations, poorly controlled diabetes, and uncontrolled hypertension. 4
- ☐ The general life expectancy for these residents is 76 years. ⁴
- ☐ Lincoln Hospital provides a diabetes prevention program, with a bilingual curriculum, which is aimed at preventing the disease and education on self-management skills to avoid complications. 4
- ☐ This program has created a Diabetes Education Advisory Board, which is comprised of a multidisciplinary group of health care professionals, administrators, community members and patients. ⁵
- ☐ The main goals of this program are to promote healthy food choices, increasing exercise, effective use of medications, preventing avoidable hospitalizations, and maintaining follow-up appointments to control their disease. ⁵

Diabetes (percent of adults) (RANKS 7TH) STUYVESANT 3% TOWN AND TURTLE BAY (RANKS 59™) 14% BRONX 10% NYC NYC DOHMH, Community Health Survey, 2011-2013

	Mott Haven and Melrose	Best-performing community district	Bronx	NYC
Poverty	43% (RANKS 3 ⁴⁰)	6% Tottenville and Great Kills (NANKS 59**)	31%	21%
Jnemployment	16% (RANKS 8 Th)	5% Greenwich Village and Soho & Financial District (RANKS 58")	16%	11%
Rent burden	59% (RANKS 11 Th)	37% Greenwich Village and Soho & Financial District	58%	51%

Proposed Solution



- ☐ Our program is based in the South Bronx.
- ☐ Our program #DiabetesWontStopUs consists of a moving van that would park at the local town square on the weekend at various times and promote education to the community members on dietary, exercise, and early screening for diabetes.
- ☐ Education is one of the most effective treatment plans available to the public at no cost.
- ☐ Our program will host a healthy plate class, in which recipes for healthy meal plans will be provided to the community.
- ☐ The healthy plate class will also emphasize the importance of how much you should eat, what you should and shouldn't
- □ Education on healthier alternatives:
- Fruits are a better choice to eat however, it is important to not eat too much fruit because they contain large amounts of glucose.
- ☐ Education on the importance of moderation.
- ☐ We would apply for a grants from the city to have our program covered.
- ☐ #DiabetesWontStopUs program is based on Dorthea Orem, a nursing theorist, believed that people are naturally able to care for themselves and nurses should increase emphasis on that ability.
- ☐ Part of self-care includes:
 - Eating healthy, living an active lifestyle, and receiving check-ups from health care facilities.
- ☐ Those three components are major issues from South Bronx location

References

- 1. What is diabetes? [Internet]. Centers for Disease Control and Prevention. Centers for Disease Control and Prevention; 2020 [cited 2021Apr21]. Available from: https://www.cdc.gov/diabetes/basics/diabetes.html (Level 5)
- 2. 10 Known Diabetes Complications [Internet]. WebMD. WebMD; [cited 2021Apr21]. Available from: https://www.webmd.com/diabetes/diabetes-complications (Level 5)
- 3. NYC Planning Population FactFinder [Internet]. NYC Population FactFinder. 2020 [cited 2021Mar31]. Available from:
- https://popfactfinder.planning.nyc.gov/profile/1057/demographic?mode=change. (Level 5) 4. PDF. Bronx: New York City Department of Health and Mental Hygiene; 2015.
- https://www1.nyc.gov/assets/doh/downloads/pdf/data/2015chp-bx1.pdf. (Level 5) 5. PDF. Bronx: NYC Health and Hospitals; 2013.
- https://www.nychealthandhospitals.org/lincoln/wp-content/uploads/sites/15/2016/08/pres.
- 6. The Real Deal. 2015 [cited 2021Mar30]. Available from: https://s14.therealdeal.com/trd/up/2015/04/Screen-Shot-2015-03-31-at-4.24.28-PM-289x300.png
- 7. Diabetes [Internet]. Diabetes Healthy People 2030. [cited 2021Mar31]. Available from: https://health.gov/healthypeople/objectives-and-data/browse-objectives/diabetes (Level 4)
- 8. Morrow R, Ferretti L, Norwood C, Reich D, Chito-Childs E, McCallion P, et al. Improving the Reach of the National Diabetes Prevention Program Within a Health Disparities Population: A Bronx New York Pilot Project Crossing Health- and Community-Based Sectors. Journal of Continuing Education in the Health Professions. 2016;36(4):300–6. (Level
- 9. Greer S, Naidoo M, Hinterland K, Archer A, Gould LH, Crossa A, et al. Health of Latinos in New York City [Internet]. NYC Health. 2017 [cited 2021Mar30]. Available from: https://www1.nyc.gov/assets/doh/downloads/pdf/episrv/2017-latino-health.pdf (Level 5)
- 10. Hispanic/Latino Americans and Type 2 Diabetes [Internet]. Centers for Disease Control and Prevention. Centers for Disease Control and Prevention; 2019 [cited 2021Mar31]. Available from: https://www.cdc.gov/diabetes/library/features/hispanic-diabetes.html (Level 5)

Problem in the Community

- ☐ With a global outlook, according to Healthy People (2030), diabetes is the 7th leading cause of death in the United States, affecting more than 30 million Americans.7
- ☐ With a local outlook within the NYC boroughs, studies have shown that the South Bronx has the highest population of adult diabetics compared to the other boroughs, affecting upward of 30% of South Bronx residents.8
- ☐ The Hispanic population, a minority population, makes up 17% of those diagnosed with diabetes compared to other New Yorkers at 10% and having diabetes as the 4th leading cause of death.9
- ☐ In a study of 1000 residents in South Bronx public housing, only 30% knew that they had diabetes and another 33% were at high risk. In addition, 25% of this population suffered from obesity and had a persistent lack of exercise and unhealthy food choices.8
- ☐ Hispanics in NYC have a higher rate of obesity at 29% compared to other New Yorkers at 20%.6 With diets high in fat and calories coupled with a high rate of obesity, Hispanics are at a higher risk for developing diabetes.¹⁰
- ☐ More than half of Hispanics in NYC live below the poverty line compared to one-third of Non-Hispanics, and they have lower rates of employment, less education, and less access to healthcare.9
- ☐ Lack of access to healthcare, screening, prevention, early intervention, and education deprives the Hispanic population of receiving the appropriate care they need in preventing and controlling diabetes.