

Capstone for Impact Submission | GY2019

Project Title: Microvascular and Microvascular Complications in Patients with Type 2 Diabetes

Student Name(s): Abdulghani, Mariam

Advisor Names(s): Gretchen Piatt

Branch: Systems & Hospital Based Care

Path of Excellence: Global Health Disparities

Handover/Transition:

If this project can be continued by another UMMS student, you may contact them at the following email address/phone number (N/A if project cannot be handed over): **N/A**

Summary:

As a member of the the Global Health Disparities Path of Excellence and the Systems and Hospital Based Care Branch, I sought to carry out a project focused on underserved populations. After browsing through the literature, I found that there is an increased prevalence of diabetes among minority populations, particularly African-American and Latino populations.

Given this information, I decided to work with Dr. Gretchen Piatt, who is involved in a number of diabetes management programs, to assess the association between diabetic complications and socioeconomic status among Detroit residents. When it came to socioeconomic status, I wanted to specifically look at income status. However, with the data that we had, that information was not available. We instead decided to look at education and employment status as a marker of socioeconomic status. Other variables that we also included were age and insulin use.

Methodology:

With the help of a statistician, we performed logistic regression as well as other analyses to assess the association between the above variables.

Results/Conclusion:

Increased age and insulin use are significantly associated with having both microvascular and macrovascular complications.

Being employed is significantly associated with not having macrovascular complications compared to being unemployed.

Reflection/Lessons Learned:

When considering disease management, it is important to take into account factors that affect a patient's outcomes, such as race and employment status.