

Community Health and Population -Focused Nursing Field Experience.

# **Community Health Task 1**

**Nursing Diagnosis:** Impaired tissue perfusion related to excess body weight as evidenced by decreased oxygen saturation of 86% on room air.

### **Prevention of Adult Obesity**

**Population**: 28,135 was the total population of Fredericksburg City, VA in 2017. (ODN,2017). Of that Population, African-Americans (24.1%) and Hispanics (10.6%). (Census.gov, 2017). Per Open Data Network, Adult obesity rate in Fredericksburg city, VA was 29.90% in 2015. ODN also states that the population of people without Health Insurance Access is 15.40% for 18 to 64, all races, both sexes and all income levels in 2014. It also gives a pretty good percentage of 95.50% in 2015 for access to exercise. (ODN, Health, 2015). The great percentage for access to exercise should have helped with the rate of obesity and cardiac disease, right? On the contrary, there's still a rise in obesity and cardiac disease in Fredericksburg City. Virginia is one of the 13 original colonies with Fredericksburg being one of its numerous cities.

**Environment:** Fredericksburg is a city on the river of Rappahannock in Virginia, south of Washington DC. (Encyclopedia Virginia, 2019).

Per obesity state.org, Virginia State Adult Obesity rate has increased and at a current rate of 30.1% from 18.7% from 2000 and 11.3% in 1999. (State Briefs, 2019). Virginia is named the 30<sup>th</sup> State with the highest obese population. Looking at this factual data, we can clearly say obesity rate is at an increase.

The health disparities that come with obesity is extensive. This include and is not limited to atherosclerosis which is the build-up of plaque in arteries, CAD (Coronary artery disease), numerous cardiovascular diseases like Hypertension, stroke and heart attack. Last but not the least, obesity when not treated or handled can lead to mortality or death.

During my stay in Virginia these few years, I have noticed numerous fast food areas all around at least a mile apart, with enticing advertisement and pictures. I have barely come across food markets, farmers markets or better food options. Working in the hospital has also brought to light the large amount of obese population.

1. Health Inequity and Disparity

I cannot help but notice the inequity in the Virginia population. The largest difference noted is an inequity in income. Stating information retrieved from Radio Station wvtf, the Southwestern part of Virginia has the rich population whereas Northern Virginia is made of average to poor people. (wvtf.org, 2019). Looking at the population in these separate areas show a difference in not only income but in healthcare and generalized health. The obese population seem to have more correlation with the poorer community than it does the rich.

The CDC makes obesity study a bit easier by updating and informing the general population on highest incidence of obesity being Blacks/African-Americans (48.1% nationally) seconded by Hispanics (42.5% nationally).

Some easily accessible community resources include and are not limited to the YMCA and the Public Library. Refer to section C2 for detailed information on how these two resources are barely used by the community not due to scarcity but misinformation and lack of advertisements.

#### RELATED CAUSES

- 1. **Limited funds**: James A. Levine's article on Poverty and Obesity in the USA sheds light on the fact that poverty in America has a higher correlation with obesity. "In contrast to international trends, people in America who live in the most poverty-dense counties are those most prone to obesity (Fig. 1A). Counties with poverty rates of >35% have obesity rates 145% greater than wealthy counties." (Levine, 2011).
- 2. Communication Barrier: As a registered Nurse currently working on the Stroke and cardiac units in Fredericksburg, it is very easy to notice how communication is a huge factor in information receipt. Noticing that a large population we cover, mostly Hispanics and Africans who have English as a second language, sometimes find it harder to understand relayed information. Without adequate grasp on information like diet and exercise management, and the population being able to freely express their concerns, obesity can easily result.
- 3. Limited access to healthier food options: Not so far from Levine's education on the reasons for obesity in the USA, he emphasized on the fact that healthier food options are limited in high poverty communities. This is clearly depicted in my community. As stated earlier in this excerpt, most food sources easily noted are the fast food areas with great advertisement and little to none fresh food markets / farmers markets. Not only that, but these fresh foods/ organics are so highly priced making it virtually impossible for less income consumers to consider. "The Grocery Gap", an article written by Food Trust in 2010 enlightens us on the fact that most low-income community members are highly affected by diet-related diseases like diabetes and obesity. (The Food Trust, 2010).
- 4. **Knowledge Deficit**: The CDC is big on education and clearly lists lack of education as one of the contributing factors to obesity. It states an inverse reaction to obesity as education increases. It attributes adults without a high school degree to having the highest incidence of obesity (35.5%), followed by high school graduates (32.3%), adults with some college (31.0%) and lastly, college graduates (22.2%) (www.cdc.gov, 2018).

#### **Primary Community and Prevention Resources**

One will be amazed at what easily accessible information can be found in the public library to enhance health. Most of the general population would not consider the free public library as a huge source for health tips as it stands. Not only are informative books found in the library on enhancing health, but there are also videos available via DVDs (digital video disc) with free downloads and health magazines. There are two libraries in Fredericksburg County and over 80 libraries in all of Virginia. The libraries help customers to reserve and rent for free these materials that can help enhance health long term. The best part is, it is not limited to status or wealth, and it's free to the general population. Let's not forget its unlimited feature where you can keep renting from the libraries as long as you return the products as a cardholder. Another amazing feature is online reservation from public libraries that also help have your product delivered to your nearest library for free. Why is this important? The free workout routines, diet plans and education derived from these sources will help not only to combat obesity, but improve general health of the population. Librarians are also available always to assist customers in several ways including recommendations and education on how to use computers. The YMCA is another great resource for Obesity prevention. At the YMCA in Fredericksburg and meeting with Haley Jenkins (a manager at YMCA), it was brought to light that the facility has many amenities and programs to help combat obesity and keep fit. I was shown to the gym which had trainers and also the basketball/sports court which had weekly programs. With the gym and sessions, there were community involved tasks like "run-athon" in which you run comfortable miles, increase rate and pace weekly till you hit your targeted weight. These resources being available helps the community greatly and impacts premature mortality.

#### **CAUSES**

What are some of the underlying causes of obesity? Including but not limited to unaffordable healthy food choices, knowledge deficit and communication barrier; as stated in C1, obesity has several other causes. The use of steroids and other medications, including diet and exercise are major causes of obesity. The CDC mentions genetics as one of the predisposing factors in obesity among other ailments like thyroid disease. (www.cdc.org, 2018).

The CDC relates a lot of mortality causes to obesity, stating health conditions like Hypertension, coronary artery disease, sleep apnea and diabetes among others as resulting complications from obesity. Knowledge increase and shared education with exercise and conscious efforts of prevention will help eradicate this health complication.

### **EBP** (Evidenced- Based Practice)

As stated previously, by Green Tea Health News and MD. Bernstein of Mary Washington Hospital (my current hospital), Virginia state is ranking the 30<sup>th</sup> most obese in the country. (Green Tea, 2019). Let's not forget the recommendations of the Department of Health and Human Services which stating the benefits of great healthy food choices and exercising/movements. The Department recommends 75 minutes of aerobic exercise and 150

minutes of moderate activity per week. Constantly in health news including that on Fox and ABC news, 30 minutes per day of physical activity is encouraged. (Laskowski, 2016).

#### **Data Identification**

As previously stated by Green Tea Health News and Virginia State Population Census, Virginia ranks 29<sup>th</sup> to 30<sup>th</sup> in the country with high obesity rate. So, does the CDC state that the United states has approximately one third of its population affected by obesity. (CDC, 2019). The Healthy People 2020 initiative started in 2008 was to help decrease obesity, improve nutrition and overall well-being of the American population. (Healthy People 2020). It enlists overweight at BMI > and = 30).

# The Social Media Campaign Objective

The purpose of this is to create awareness and to help decrease if not abolish the steep increase in obesity here in Fredericksburg, Virginia.

As I wake up to a beautiful sunny morning, I realized that I had no sugar for my breakfast. I proceeded to my neighborhood grocery store "H Mart" to grab my needs. Not only did I notice at the cashier that most people grabbed frozen or fast foods but also, there weren't much fresh food products or organic foods. I then took a couple minutes to survey some more. I spoke with some buyers and tellers, interviewing them on what they usually get. The consensus was

- 1. Why do you opt for frozen products instead of fresh?

  Average Answer: The frozen ones are cheaper and are often pre-cooked and clean, making my meal prep time shorter/easier.
- 2. Are you aware what the obesity rate in the United States? Average Answer: High? I don't know.
- 3. Is your current weight within normal limits?
- Average Answer: No
  4. How many diets have you tried in the past 2 years?

ANS: Average number: 3

In today's media enveloped society, I believe I can help by developing health and exercise apps and sharing links on health education verified by the United States Health department will help spread awareness. The medias I can use include Facebook, Instagram and Snapchat which are widely used by todays millennials and population. I believe a reduction in obesity of about 10% in my community will be achieved.

2. Recommend **two** population-focused social marketing interventions and justify how *each* would improve the health message related to your selected Field Experience topic.

- a. A great Social media platform using great Graphic designers and media developers will help draw and capture the attention of the public and help reduce obesity through education and challenges.
- b. Coordinating and partnering with IT professionals will help me develop an app to shed light on educating the community and the public on nutritional facts, portion control, nutrition and resources available to prevent obesity and heart disease.

Discuss how the target population will benefit from your health message

Spending time at the food pantry and soup kitchens with my church Fountain Gate Chapel in Dumfries, helped obtain information on the population's knowledge and interventions on obesity prevention.

As stated in above texts, the creation of the app and social media links will provide the community and population with the needed resources to the knowledge, prevention and treatment of obesity. The education will illuminate that heart health and obesity have a firm relation. With obesity comes more heart diseases like Stroke, Coronary artery disease and hypertension. Sleep apnea and diabetes is another health issue that's now more prevalent due to obesity.

Describe best practices for implementing social media tools for health marketing.

My chosen means was to share links on active social media platforms like Facebook, Snapchat and Instagram. It also included devising an app that shares nutritional facts, consults nutritionists and safe recommendations. Almost everyone today uses smartphones and these apps will be interesting enough to capture the attention. Tests and feedback will be assessed using reviews and surveys to monitor the growth and improvement in obesity prevention.

# Create a social media campaign implementation plan

1. Describe stakeholder roles and responsibilities in implementing the plan

Who are some of the stake holders in plan implementation? PCP or primary care Physicians are one of the major stakeholders. Not only do they see and influence the population, but their advices and recommendations are highly respected by the communities and general public. Seeking after such help and allowing the PCPs to enforce the need for dietary restrictions and recommendations will help drastically reduce obesity and promote health.

Another stakeholder will be Registered Nurses. Registered nurses like myself can help provide and facilitate education to the public. Our education and aid can be given while administering medications and providing medication education; can also be while taking vital signs and explaining the risks of it being abnormal, including the importance of keeping them within normal limits. We can provide encouragement to patient's effort to change and help with available resources.

# Discuss potential public and private partnerships that could be formed to aid in the implementation of your campaign.

Forming alliances with other hospitals and health institutions by discussing the need and benefits of the shared links/ advertisement on social media; and the undoubted benefit of the mobile apps to the general public, can be a great way to boost this campaign. Just adjoining my previous hospitals like Sentara Hospital and Mary Washington Hospital can eliminate a great deal of health issues. Adding in a Health Nutritionist like De'ja Johnson whom I interviewed to these meetings can help shed light on the benefits.

# Create a specific timeline for implementing your campaign. Explain how you will evaluate the effectiveness of the campaign.

I believe a total of 6 months will be a great time to assess the effectiveness of the campaign. The beginning 3 weeks can be shared discussing with stakeholders the plans and the benefits of implementing. The next 2 months can be used gathering resources like the nutritionist, discussing and implementing with the IT team for executing the app use. The months after can be used delivering and assessing the responses. The last 2 months can be used for feedback and edits.

A comparison between data collected before the use of social media links, the app and a post data after the campaign will help evaluate the effectiveness of the campaign. Let's take a look at the low-income population in Virginia, high income population and see if there's been a difference after the campaign. Has there been a decline in weight gain in our usual patient visits? Has there been better choices of meals and more farmers market in our low-income communities? What is the current state in heart health for our patients?

### Discuss the costs of implementing your campaign.

I believe it will cost me roughly \$7000. I'd have to hire and discuss with the app engineer on development and delivery. Also, developing and executing the social media content like videos, creating interactive content and survey developments will all fall into the estimate including unforeseen costs like providing lunch to the stakeholders during meetings.

# Reflect on how your social media campaign could apply to your future nursing practice.

Reflecting on what was previously stated in my passages backed by Evidenced based practice, the future nurse will have enough resources and its convenience like the phone app and still review contents while browsing their favorite social media sites. The future nurse can also freely refer patients/clients to these links and apps knowing that they are proven to work and have seen its effectiveness from previous tests. Personally, these research and interventions with stakeholders, nutritionists and IT technicians will add to the repertoire needed for further developments and ideas.

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