Community Assessment Paper

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I live in zip code 11229, it is part of Brooklyn's Community District 15. District 15 includes the neighborhoods of Gravesend, Sheepshead Bay, Manhattan Beach, Gerritsen Beach, Madison, Homecrest and Plum Beach. It is delimited by Corbin Place, Coney Island Avenue, Avenue Y, 86th Street, Avenue U and McDonald Avenue, Avenue P and Kings Highway on the north, Nostrand Avenue and Marine park on the East, as well as by the Atlantic Ocean on the south (Brooklyn Community District 15, 2007). Being right up against the Atlantic Avenue, District 15 is very notable for its various beaches and marinas. In the summer time, local residents and visitors alike would flock to the Gerritsen beach, Plum beach and Manhattan beach to escape the summer heat. Sheepshead Bay is also known for its seafood market and restaurants along Emmons Avenue, which situates on the northern shoreline along the bay. Piers at Sheepshead Bay are also full of tour boats that offer fishing expeditions and party boats. For those who are more in tune with nature, they can visit the largest park in Brooklyn, the Marine Park, which is directly adjacent to the district on its eastern border. The Marine Park consists of 530 acres of grassland and precious salt marsh, protected as a Forever Wild preserve. The park also offers amenities as varied as gold course, bocce courts and baseball diamonds. Visitors can also enjoy the multiple playgrounds, bicycle greenways, and a launch and landing site for canoes and kayaks at Gerritsen inlet (Marine Park).

Because District 15 is a very densely populated area, it contains a wide range of health services to accommodate the needs of its residents. For example, there is the Chateau at Brooklyn (rehabilitation and nursing home) and the Kings Bay Community Center located on Nostrand Avenue, and the ProHealth Urgent Care of Sheepshead Bay not far down the street. There is also the First Class Home Health Care located on the corner of Ocean Avenue and Avenue U, not far from the Avenue U Family Counseling Center about a block away. There is also a plethora of medical services situated along Sheepshead Bay Road between East 13th Street and East 18th Street. For more serious and immediate medical needs, the Coney Island Hospital is located right outside of the southwestern corner of the District, on the corner of Ocean Parkway and Shore Parkway. The importance of Coney Island Hospital cannot be understated for Southern Brooklyn because there are only two trauma centers in Brooklyn and they are both in the northern parts. As such, in the event of emergencies, Coney Island Hospital is the nearest major medical center for District 15, along with half a dozen other districts (Brooklyn Community Board 15, 2005).

Like the rest of New York City, the climate in District 15 is generally considered to be a humid subtropical. Winter usually last from December to February and the average temperature is just above freezing (32 degree Fahrenheit). Snowfalls are frequent, and sometimes can be abundant, resulting in real snowstorms. On average, the whole of New York City get about 15 inches of snow fall annually. Spring usually lasts from March to May, the weather continues to be unstable (often alternating from warm to cold weather). Summer can get quite hot in New York City, and usually last from June to August. The average temperature is around 77 to 86 degree Fahrenheit and during heat waves, the temperature can go as high as 100 degree Fahrenheit. The best time of the year to visit District 15 and rest of New York City would be Autumn, where the temperature and humidity are just right, with seldom thunderstorms (Climate of New York). Having very cold winters and very hot summers mean that residents of District 15 will be more at risk during severe weather. Thus, it is important that public institutions such as public libraries and community centers be converted into cooling centers in the summer to offer people relief from the heat, and emergency shelters during winter times to offer people relief from the cold.

Contrary to the popular view that New York City, which includes District 15, is nothing more than a jungle of concrete, there is actually quite a bit of wildlife and flora. In addition to the Eastern Grey squirrels, which can be see practically everywhere in the city, people have also spotted bats, opossum, raccoons, and even striped skunks near District 15. With the Marine park nearby, there is also a great variety of birds and reptiles such as Red-tailed hawk, American Kestrel, Snapping Turtles, and Diamondback Terrapin (Wildlife in New York City). Rodents such as rats, raccoons and even skunks may carry various types of diseases, thus the city has taken multiple measures to combat the danger brought by these wild animals including pest control, cleaning known trash sites, and warning the public not to leave their garbage out in random places. In addition to dangerous critters lurking about the neighborhood, the NYC department of Environmental Conversation also listed several harmful plants that are common in the New York City area. These plants include poison ivy, poison sumac, wild parsnip and also stinging nettle (Harmful Plants). Although these plants are not fatally dangerous to human beings, coming into contact with them may cause light to severe skin irritations and parents are warned to keep learn to recognize them so they can keep their children out of harm's way.

The entire community of District 15 can be said to be of human environment, even the Marine Park, which despite the fact that it is a nature preservation, the park itself is still organized and landscaped according to human designs. Thankfully, District 15 is located at the southern most region of Brooklyn and predominately a residential neighborhood, thus it is relatively free of any harmful pollutions that would normally plague an urban setting. New York City has also enacted numerous legislatures in the past several years to ensure further reduction of air, water and land pollutions within the city limits. However, one of the main draw backs of building so close to the Atlantic Ocean is that during hurricane seasons, people who live right next to the water front are highly susceptible to flood and wind damage. In 2012, Hurricane Sandy smashed through the U.S. north east region and did almost $65 billion in damage (Hurricane Sandy). The coastal areas in the NYC area was the some of the worst hit areas, including beaches within District 15.

According to 2015 census data, District 15 has a population of 172,722. 71% of the total population are white, 16% Asian, 8% Hispanic, 3% and remaining 1% is other. Breakdown of the population by age consists of 21% age 0-17, 9% are 18-24, 27% are 25-44, 27% are 45-64, and remaining 16% are age 65 plus (Basset, 2015). Based on these numbers, almost half of the population within District 15 are over the age of 45, thus making preventative education a priority in this community. Patients over 45 should be educated on the importance of healthy diet and proper exercise as this will dramatically decrease their chances of getting serious illnesses down the line.

Like the rest of NYC and Brooklyn, District 15 is also an immigrant heavy community, with 46% of the total population being foreign born and only 31% have limited English proficiency. These numbers denote a serious need for nurses who are proficient in other languages and cultures because the ability to communicate with patients and understand their needs are fundamental to providing quality care. Having such a large immigrant population, the location health services should try to hire more nurses from the local population in order to better accommodate the local population's health needs. Furthermore, about 48.3% of the total population are male and 51.7% are female. With a total area of 4.7 miles, District 15 has a population density of approximately 33,968 people per square mile. The average population density of U.S. is about 1,200 people per square mile, and the average population density of NYC is 26,403 (Basset, 2015). Thus, it's clear that District 15 has a denser population than the city's average and needs to ensure that it has sufficient medical services to serve the community when in need.

According to census data, District 15's total population in 2000 was approximately 160,000 people, and in 2010 it was 159,700 (Community District Profiles). In 2015, the total population is up to 172,700 with a projected positive growth rate. However, District 15 has problems with its poverty rate. According to 2015 data, 17% of the District's population lives in poverty (Brooklyn overall is 24% and NYC is 21%), and unemployment rate is at 9% (Brooklyn overall is 11% and NYC is also 11%). This means almost 1 in 5 of the District's residents suffer from poverty and 1 in 11 adults ages 16 and older is unemployed. 54% of the residents also suffer from Rent Burden, meaning more than half of them spend more than 30% of their monthly gross income on rent (Basset, 2015). Statics have shown that poverty, unemployment and unaffordable housing are often directly linked with poor health because people who suffer from these problems often are unable to afford proper health care. In District 15, 18% of the residents do not have health care and about 9% left went without needed medical care (Basset, 2015). These number are about the same as the rest of Brooklyn and NYC. When people do not have basic health care, minor health issues are often left untreated and eventually become more serious ones, requiring more resources to treat and cure. As such, it is actually more economic to maintain a healthy life style and do check-ups regularly to avoid serious health issues later on.

Another number that is often closely associated with poverty is the education level. Only 44% of the residents within District 15 are college graduates, and only 42% are High School Graduates. To be fair, these numbers are better than Brooklyn (38% College Graduate, 41% High School) and NYC (41% College Graduate, 39% High School Graduate) (Basset, 2015). However, it is evident that the level of education of the residents have directly affected their income levels, leading to poorer health as a result.

The pattern seems to repeat itself over and over again in many societies. Lower education level often leads to lower income, and lower income often leads to higher unemployment rate and Rent Burdens, and ultimately poverty. Almost everyone who lives in poverty often suffer from poor health in one way or another because poverty is also often correlated with poor living habits such as smoking/drinking and eating unhealthy food. In District 15, 19% of the residents are current smokers, considerably higher than Brooklyn (16%) and NYC (15%). 25% of the District's residents also consume 1 or more 12 oz sugary drink per day and only 73% of the residents have engaged in physical activity within the last 30 days. Such bad habits are then reflected in the health of the overall community. According to community reports, District 15 has a 30% Obesity rate (as compared to Brooklyn at 27% and NYC at 24%), and Diabetes at a rate of 11%. In areas of prevention, the District also did not perform very well. Only 22% of District 15 residents got HPV vaccination, 37% in flu vaccination and only 53% residents ever tested for HIV (Basset, 2015). These numbers are all lower in comparison to the rest of the county and city.

Of course, there are many areas that District 15 has performed better than the rest of Brooklyn and NYC. For example, the injury assault rate is only one-third of the citywide rate at 21 per 100,000 populations. For substance abuse rate, District 15 sits at 470 for alcohol-related hospitalizations and 314 for drug-related hospitalizations (out of 100,000 population), when Brooklyn and NYC are in the thousands respectively. The District also only has 258 hospitalizations due to stroke (compared to 334 for Brooklyn and 319 for NYC) and 368 psychiatric hospitalizations (compared to 734 for Brooklyn and 684 for NYC). The District also outperformed the rest of Brooklyn and NYC in adult hospitalizations for diabetes, sitting at 163 per 100,000 adults, as compared to 357 for Brooklyn and 312 for NYC (Basset, 2015).

Looking at all the numbers in its totality, it seems that one of the biggest health hazard that continues to plague residents of District 15 is smoking because the District seems to have more percentage of smokers among its population than Brooklyn and the City overall. It just happens that community nurses have a unique advantage in combating smoking because they are on the front line everyday combating all the health hazards that are constantly plaguing the residents of the community, thus they have already earned the public's trust and is able to play a pivotal role in smoking cessation.

Countless studies have been done to research the effectiveness and success rate of nurse interventions in smoking cessation and almost all of them have come up with positive results. In a research study titles "Nursing interventions for smoking cessation (Review)" conducted by The Cochrane Collaboration and published in the Cochrane Library in 2013, researchers sought to determine the effectiveness of nursing-delivered smoking cessations interventions by extracting data from forty-nine dependent studies that were part of the Cochrane Tobacco Addiction Group Specialized Register. These studies involved over 17,000 participants and many sub-groups were created to compare intervention results between different groups of participants such as patients who suffered cardiovascular diseases versus those who didn't, and hospitalized patients versus non-hospitalized patients. The result was very clear that nurse interventions increase the likelihood of quitting among patients of all types. The studies also separated its participants into two groups. First group received low intensity intervention, meaning the nurses provided advice on smoking cessation during a consultation that lasted less than 10 minutes and only had one follow-up visit. Second group received high intensity intervention, meaning the participants were given more than 10 minutes of initial contact and were provided with additional material and multiple follow-ups. The high intensity group gave a risk ratio (RR) of 1.26 with a 95% confidence interval (CI) 1.17 to 1.36. The low intensity group gave a RR of 1.27 with a 95% CI 0.99 to 1.62 (Rice, 2017). The results from these studies indicate that nurse intervention has undeniable positive effect on getting patients to quit smoking. However, the challenge would be to incorporate this into standard practice. In addition, the evidence strongly suggests that brief interventions from nurses who combine smoking cessation work with other duties are less effective than longer interventions with multiple contacts.

One of the primary role of the community nurse is to educate the local community on how to prevent disease and injury. The first step in any battle is to muster one's own forces first, as such, the community nurse should rally all the medical professionals and health workers within the District and educate them on the importance of intervention on smoking cessation and how successful it can be if executed properly with a plan and long-term follow up. Second step would be to arrange meetings and fairs at local schools so that the dangers of smoking can be spread to the young. Currently in Brooklyn, approximately 3,000 public high school students are smokers (NYC Smoke Free Public Health Solution). Intervention should not be used only on those who are already seeking medical assistance. The third step would be to visit various establishments such as community centers, popular gathering places such as malls and entertainment establishments, and other places where the public frequents and try to put out educational materials such as hamlets or large signs, educating the public about the dangerous of smoking. The goal is not simply to get the message across once, but multiple times over a long period of time because all these studies have shown, long-term intervention are much more effective than short ones.

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