Community Health Project

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Community Health

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**Introduction**

The community health assessment is important tool that guide to better understand general picture of designated community and people who live there. Communities across New York city have own unique characteristics and inventories such as location, population, socio-economic landscape, and environmental features. While assessing community’s health status all inventories must be evaluated in order to measure relation of socio-economic picture and health in community. The goal of this project to investigate main inventories of Borough park community, identify strengths and weaknesses in community and provide effective solution to improve health characteristics in community.

**Boundary of community, location of health services, geographical features**

Borough park belongs to Brooklyn community district number 12 with primary zip code 11219. The district also includes Kensington and Ocean Parkway. The neighborhood is boarded to the Kensington to the northeast, Flatbush to the east, Midwood to the south east, Sunset park to the west, Bay Ridge to the south west and Bensonhurst to the south. Borough park is patrolled by 66th precinct of the New York City Police Department located on 5822, 16th avenue, Brooklyn NY, 11204 and politically represented by 38th, 39th, and 44th Districts. The Maimonides Medical Center located on 4802 10th avenue, Brooklyn, NY, 11219 is largest health service provider in whole neighborhood. The facility has approximately 700 beds capacity and Level 1 trauma center in community.

**Climate, flora and fauna present, human made environment**

The Green house emission in neighborhood increase in similar proportion as country average. The largest contributors to greenhouse emissions are power plants, petroleum and natural gas systems, and other (My environment, n.d.). According to the EPA air quality index, Borough Park has generally good air quality and largest pollutants been particles (PM 2.5) that contribute 57 percent of all pollution. In addition, other pollutants such as ozone 35 percent and particles (PM 10) 17 percent are considered among normal level (My environment, n.d). Prospect park, man made urban park, is nearest and largest park serving neighborhoods recreational needs. Moreover, Prospect park lake located on south part of the park is large community water resources. However, water is this lake was not evaluating for recreation, fish consumption, aquatic life and water supply. In addition, no water quality indicator available to protect water resources (My environment, n.d). According to the EPA no new companies were issued permits to discharge waste into water as well as no new companies with expiring permits.

**Size, density, composition**

The Borough park is large and dynamic neighborhood. The overall population is slightly over 200 thousand residents compare to around 8.5 million people living in NYC. The race and ethnic composition are White 63%, Asian 21%, Latino 13%, Black 2% and other 1% (New York City Community Health Profiles, n.d). The percentage of foreign-born population is 31 % compare to 37% in NYC total and 32% have limited English proficiency compare to 23% of NYC total. The population density in 2018 was 44.1 per 1,000 persons per square miles and units authorized by new residential buildings permit and issued new certificates of occupancy were 166 and 174 respectively (Borough Park Neighborhood Profile, n.d).

**Rate of growth or decline, cultural differences, social class**

The Borough park population is drastically increased since 2000 and consist of approximately 200 thousand residents. The neighborhood has one of the highest birth rates which is 24.4 per 1,000 people the major contributor to population growth. Moreover, the fertility rate is 8.7% which is double than city wide (Census profile, n.d.). The neighborhood has great degree of racial and ethnical diversity. Even though white represent largest population group, the community has significant Latino and Asian population as well. Borough park is home to one of the largest Orthodox Jewish community outside of Israel and together with Williamsburg one of the largest Jewish concentration community in the USA. Median household income is 50,551 annually which is lower than city wide 67,844 and income per capita is 21,029 compare to 38,884 to NYC (Census profile, n.d). The number of housing units occupied are 45,908 and average values of housing unit is 923 thousand (Census profile, n.d).

**Mobility, poverty level, educational level**

The neighborhood has dynamic population and decent infrastructure to encourage physical activity. Geographic mobility is lower than city average which is 5.2% compare to over 10% city wide (Census profile, n.d). Moreover, neighborhood has lowest bicycle coverage network, only 8% of roads have bicycle lines compare to 13 % in Brooklyn and 10% in NYC. For instance, largest number of bicycle lines in Prospect Heights has 45% of lines (New York City Community Health Profiles, n.d). Education is important indicator of community health and generally higher educational level equal to better health outcome. Borough park has lower elementary school absenteeism than city average and around 75% of high school students graduate in four years which is like NYC overall (New York City Community Health Profiles, n.d.). However, situation is worth for neighborhood if account college education level. About one- third of residents have college degree and 23% of adults have not complete high school such rate is higher than overall in Brooklyn and city wide (New York City Community Health Profiles, n.d). Living in poverty have negative impact on overall health and ability to accesses quality health services. About 28% of residents in Borough park live below poverty line compare to 20% in NYC and 21% in Brooklyn and 64% of residents are rent burden compare to 52% in Brooklyn and 51% in NYC (New York City Community Health Profiles, n.d).

**Unemployment rate, population by age, health status**

Access to affordable housing and job opportunities with living wage and benefits are also closely correlated with better health outcomes. Borough park unemployment rate is 6% which is lower than city average of 9 % (New York City Community Health Profiles, n.d). Besides racial and ethnical diversity, the neighborhood has diverse age representation. Population by age consist of 34% of 0-17years old, 9% of 18-24, 28% of 25-44, 18% of 45-64, and 10% of over 65 (New York City Community Health Profiles, n.d). The Borough park residents generally feel positive about their overall health. About 78 percent of residents rank their health as good or very good similar to rest of NYC, 67 percent of residents report getting any physical activities in past 30 days similar to city wide, and 87 percent report eating at least one serving of fruits and vegetables again similar to NYC average (New York City Community Health Profiles, n.d). Sugary drink consumption contributes to numbers of health problems such as heart diseases, stroke, cancer and diabetes type 2. Sugary drink consumption has decreased by 19 percent in Borough park which is slower than city overall and 22 percent of adults’ report to drink at least one sugary drink per day. Moreover, the neighborhood has similar smoking rate as NYC average (New York City Community Health Profiles, n.d). Absence or improper accesses to health insurance negatively associated with health outcome and increase risk of preventable death. About 15 percent of population are uninsured and around 9 percent report not having any medical care in past 12 month same as city average (New York City Community Health Profiles, n.d). Moreover, Brough park has lower avoidable hospitalization than city average but higher fall-related hospitalizations among adults of 65 years and over. Around half of residents report to receive Flue vaccine in past 12 month similar to NYC overall, however, only 25 percent of teenagers ages 13 to 17 received HPV vaccination compare to 59 percent of NYC and 43 percent in Brooklyn (New York City Community Health Profiles, n.d). Borough park has lower obesity, hypertension and diabetes rate than NYC. The obesity rate is 15 percent compare to 24 percent city wide, hypertension 27 percent compare to 28 percent, and diabetes is 9 percent compare to 11 percent (New York City Community Health Profiles, n.d).

**Environmental health status**

Even though overall pollution in Borough park as well as in NYC decrease the situation in not ideal. According to EPA air quality index, air quality in neighborhood consider good, however, there still 7.5 micrograms of harmful particles in the air which is same as city overall. In addition, only 9 out 10 households have working air condition and most heat stroke death occurs in houses without air condition (New York City Community Health Profiles, n.d). Poor housing conditions might contribute to worsening asthma attacks, COPD and other respiratory conditions. Unfortunately, only 57 percent of rent occupied households are properly maintained by landlords and free from heating breakdowns, cracks, holes other defects (New York City Community Health Profiles, n.d). Borough park has worth quality of pedestrian’s lines which contribute to more pedestrian injuries. Pedestrian injury hospitalizations are 25 per 100 thousand people which is higher than in Brooklyn and NYC overall (New York City Community Health Profiles, n.d).

**Problem and Solution**

The problem to focus for community health nurse (CHN) is lower rate of vaccination in community. Only around half of resident receive flue vaccination every year and only 25 percent of teenagers from 13 to 17 received HPV vaccine which much lower than city average. Such a low number of HPV vaccination increased risk for young sexually active people of getting STDs and cervical cancer. Every year influenza kills dozens of thousands of people in the USA and the fact that only half of community population get vaccine put community in significant risk for outbreak. Especially at risk are older adults which is about 10 percent of community population and people with comorbidities.

Vaccines one of the greatest public health achievement that helped to eradicate such devastating diseases like Polio and Small Pox and significantly improve health of general population. Immunization provides direct defense from infection to occur and potentially reduced complications while illness occur. Moreover, “once a large portion of the population has been

immunized, they provide an indirect effect or herd immunity that extends the benefit of the vaccine beyond those directly vaccinated” (Bowling, A.,2018). Immunizations are important part of diseases prevention and CHN paly important role in monitoring vaccination status and make sure all immunizations given to community in timely manner.

Unfortunately, parents across the country are hesitated to vaccinate their children because of variety of reasons such as lack of trust of government, lack of trust of healthcare workers, worry about vaccine safety, and associate vaccine with autism. Older people often misinform about importance of vaccines and neglect immunization protocols. The community health nurse can address this weakness in community if few different ways.

Education is a primary approach for CHN and often happens in the form of anticipatory guidance. Nurse must listen, interacting and informing patients about importance, purpose and function of vaccines through evidence-based practice. The teaching session must be focus on addressing patient’s concerns about immunizations, providing research backed evidence and clarify any misconception. The role of CHN to evaluate specific individual concerns brought by patient and investigate reason why person refuse to vaccinate. These concerns can be addressed by listening patient’s stories, validating it and engage patient in decision making process in order to provide best care possible. The important information needs to be included such as vaccine safety, research guideline prior FDA approval, and explain that vaccines are continuously monitoring for safety and effectiveness (Bowling, A.,2018). To facilitate anticipatory guideline, CHN can give written plan that enables patients to review vaccine information and be more capable of making informed decision. Parents of the children and older adults can be refer to reliable resources such as “ the Vaccine Information Sheet (VIS) that includes general information on why to get the vaccine, when to get the vaccine, who should not receive the vaccine, the risks and type of possible reactions, including serious reactions, information on the National Vaccine Injury Compensation Program (VICP), and sites with valid resources for additional information” (Bowling, A.,2018).

In the same way as education, the CHN must be equally involved in enforcement to increase immunization rate among Borough Park’s children and older people. The main goal is to protect community by implementing reasonable regulations that increase compliance to immunization schedule. For instance, CHN can lobby local politician to prevent any vaccine exemptions besides medical reasons for children in schools. In collaboration with nurses’ organizations and unions, community health nurses can be enormous voice and using their collective leverage power to mandate immunizations in public service to protect children and vulnerable older adults.

Another solution to improve vaccination is to create proper infrastructure that make more convenient for people to receive vaccines. For instance, some examples can be providing immunizations in nontraditional settings and vaccinate patients during home visits. Vaccines traditional have been administered in traditional health settings such as hospitals and health departments. However, such settings may not have proper infrastructure to handle increasing demand (Stinchfield, P.,2008). By developing alternative immunization sites, for instance schools, creates infrastructure that will be able to address increasing demands for vaccination and assist with vaccination in event of pandemics. Other nontraditional sites that can be used especially for older adults are physician’s offices, pharmacies, workplaces, and community clinics. In addition, “providing influenza vaccination services at “nontraditional” sites that offer extended hours, are easily accessible, or are frequently visited (e.g., groceries and other stores, malls, pharmacies, senior centers, churches) can increase access for those who might otherwise go unvaccinated”

(Stinchfield, P.,2008). Vaccination during home visits widely practice across Europe by Family Physicians for long period of time. The idea is that CHN can asses patient during home visits either child or older person and can offer immunization based on patient medical history. Such intervention can be directed to everyone in designated group such as low-income single mother, older person with disability, child whose parents struggle to visit hospital or clinic etc. Community health nurse during home visits can provide important education session, save patient travel time and provide safe and comfortable environment. Home visits can potentially increase vaccination participation in both children and adults.

**Conclusion**

The Borough Park community has unique set of inventories with diverse population in terms of age, race, and nationality, rich cultural representation, and broad geographic location. All these inventories contribute to communities socio-economic and health picture. The community has specific strengths and weakness mentioned in this health assessment project. The problem chosen to focus is low rate of vaccination among residents, which posse’s great public health risk for every member in Borough Park. The solutions to increase rate of vaccination that CHN can implemented are education about benefits of vaccination as primary intervention, enforcement legislation to promote immunizations by lobbying government and collaborating with nursing organizations, and providing alternative site of immunizations and home visits to make easier for people to receive vaccine.

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