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Barriers to Preventive Care for the Immigrant Population in Minnesota

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BARRIERS TO PREVENTIVE CARE FOR THE IMMIGRANT POPULATION IN MINNESOTA

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Abstract

Immigrants in Minnesota face several barriers regarding access and use of preventive healthcare services. Current literature indicates a high area of need exists within the immigrant population for the prevention of chronic illness. Language, health literacy, cultural norms, and citizenship all play a role in limiting the use of preventive care. As the number of elderly immigrants increases and the overall immigrant population steadily rises in the United States, it is in the best interest of patients and providers to prevent or reduce the burden of long term diseases like diabetes, cancer, and hypertension. Knowing that barriers are present within the U.S. healthcare system requires change for all parties involved in the healthcare process. Changing health care policies, improving the health literacy in each ethnic group, and removing physical barriers are all important steps in closing the gap in preventive care and improving the health of the immigrant population in America. Through a bilingual survey of the Oromo tribe of Ethiopia, the researchers assessed the barriers that Minnesota immigrants from Ethiopia face when accessing preventive care. The study collected the results of the surveys and performed a statistical analysis of the results to see what preventive services are being utilized and what barriers, if any, exist that prevent immigrants from accessing these services. Based on the data analysis, difficulty finding time to go for an annual visit was the most statistically significant barrier to preventive care with a p-value at 0.05. Among the responders that stated they never or sometimes find time to go for annual visits, 46% have not had any preventive care in the last five years. 92% of the same respondents however have had at least one clinic/hospital visit that was for a sick/acute-care visit. Through the data collection process, the research demonstrated the barriers to preventive care found in the literature review are present in the Oromo community but not at a statistically significant level.

TABLE OF CONTENTS

List of Appendices

List of Figures

Chapter 1: Introduction

Introduction

In hopes to reduce the number of premature deaths, save money, and improve the overall health of the United States, the government passed a law under the Affordable Care Act which requires all insurance companies to cover the cost for certain preventive services (Preventive Health Services, 2010). To broaden the reach of health care even further, Minnesota offers 105 clinics that are free to the public and available to all people with or without health insurance (Free and Income Based Clinics in Minnesota, n.d). Even with support at the national and state level, immigrant families in America have not participated in preventive care at the same rate as native born residents (Pylypchuck & Hudson, 2008). The ever-growing immigrant population in Minnesota was estimated at 8.3% in 2016, which means over 450,000 residents in Minnesota were born outside the United States (U.S.) (Minnesota Compass, 2016). The reduced ratio of people who utilized preventive care and the growth in the immigrant population point towards a major economic and health burden for the immigrants of Minnesota.

Background to the Problem

The Center for Disease Control and Prevention (CDC) estimated that over 900,000 deaths of Americans each year are premature, and further states that up to 40% of those individuals could have been prolonged their life with preventive care and education ("Preventive Health Care", 2014). Influenza, pneumococcal disease, herpes zoster, and pertussis cost the United States 26.5 billion dollars in 2013 despite the fact that effective vaccinations exist for all four of those illnesses (McGlaughlin, McGinnis, Tan, Mercatante, & Fortuna, 2015). Preventive medicine is a key component to a healthy society and can save individuals, clinics, and the

government an incredible amount of money, so the question that is begging to be asked is: Why have immigrants not utilized their access to preventive care?

Immigrants have faced multiple barriers that hinder full access to preventive health care in the United States. Some of these barriers stem from poor quality of healthcare in the immigrant's country of origin. According to Minnesota Compass, most immigrants in Minnesota immigrated from countries with limited access to healthcare (Minnesota Compass, 2016). Immigrants often come from cultures that have negative social stigmas associated with seeing a healthcare provider (Jang, 2016). Some immigrant women, who are victims of abuse from their husbands, are afraid to visit a clinic due to cultural norms about speaking out against their husbands (Sheridan, 2008). Spiritual beliefs may also play a role as some may see suffering as a spiritual act to experience (Sheridan, 2008). Patients who use providers from a different race and culture face another barrier, a general lack of cultural understanding between each party. Many immigrants report having a preference for seeing health care providers of similar race, language and culture, but this preference reduces options as some immigrants may not have providers who speak their language available in their community (Jang, 2016).

Language is another significant barrier that immigrants face in accessing American healthcare. According to Jang, "an individual is more likely to choose a doctor of the individual's same race or ethnicity and to feel higher satisfaction with the doctor-patient relationship if the doctor and patient share the same culture and language" (Jang, 2016, pg. 94). Language barriers have been partially relieved with the advent of digital translating devices now widely available in hospitals across the country.

Statistics also show that a lack of formal education is a significant hindrance to immigrants seeking healthcare. According to a US Census Bureau survey provided by Minnesota

Compass (2016), 26% of immigrants do not have the equivalence of a high school degree. The lack of health literacy among immigrants is a sticking point that may need to be addressed in our society in order to improve the health of immigrants. Perhaps immigrants do not understand all the preventive services Minnesota's health system provides free of charge.

Several other factors play a role in health care access for immigrants. Lack of citizenship can be a deterrence for some, while geographic proximity to hospitals and access to public transportation are barriers for others. Statistic show immigrants are less likely to be connected to a point of care than US citizens (Wilson, Wang, & Stimpson, 2015). Financial barriers can also play a role as a significant number of immigrants tend to live below the poverty line (Camarota, 2012).

The Oromo People

The Oromo tribe is the largest tribe in Ethiopia with many living in the northern regions of Kenya and Somalia as well. According to the Migration Policy Institute (2014) nearly 250,000 first and second-generation Ethiopians live in the United States, many of whom are of the Oromo tribe. Today it is estimated that around 40,000 people who identify as Oromo call Minnesota their home with the Twin Cities Metro area commonly being referred to as "Little Oromia" (Melo, 2015). They are a growing and thriving cultural group in Minnesota and will be the representative immigrant population in our research study.

Problem Statement

Barriers to medical care and preventive service for the immigrant population who are living in Minnesota are prevalent. How prominent these barriers are for immigrants in Minnesota in not well understood. Specifically, in the Oromo immigrant population. In addition, there is a need to understand the gap so that it can be closed.

Purpose

The purpose of this study was to identify any significant barriers that block the immigrant population living in Minnesota from using or obtaining preventive care. Knowing and understanding these barriers is a key component to providing care to all immigrant residents of Minnesota.

Significance of the Study

As previously stated, immigrants in Minnesota account for 8.3% percent of the population, and this group faces several barriers to accessing medical services in general (Minnesota Compass, 2016). According to a study conducted by Yun et al. (2012), half of the adult immigrants studied eight months after resettlement in the US had at least one non-infectious chronic illness that required medical intervention. In addition, 20% of the adults had more than one illness (Yun et al., 2012). Research also shows that immigrants use health care at a much lower rate than native born individuals (Pylypchuck & Hudson, 2008). Therefore, understanding the barriers that immigrants face is important so that health care providers can address illnesses that existed prior to migration and implement early intervention for new illnesses. In addition, knowing barriers to health care would help policy makers implement policies or initiatives, like health literacy, thus increasing access to preventive care to immigrants.

Research Questions

This study addressed the following research questions: What are the barriers or beliefs that restrict immigrants in Minnesota from seeking preventive care? What percentage of the Oromo population in Minnesota is receiving preventive care?

Definition of Terms

This section defines the list of terms used for this study.

Immigrant: An immigrant is a person who was born outside of the United States but does not include individuals who were born outside the US to parents who are US citizens. Second or third generation immigrants who are born in the US are not considered immigrants.

Preventive care: Preventive care is a medical service offered to anyone free of charge aimed at reducing future health problems and treating current health conditions before the condition becomes worse.

Conclusion

Immigrants in Minnesota face several barriers regarding access and use of preventive healthcare services. Language, health literacy, cultural norms and citizenship all play a role. In Chapter 2, current research found in the literature will be reviewed to see what research has been done in order to identify barriers to medical access for immigrants.

Chapter 2: Literature Review

Introduction

Preventive medicine is an essential component to the future of healthcare. Taking steps to reduce the risk of future disease can improve quality of life, increase length of life, and reduce costs for the patient and provider (Centers for Disease Control and Prevention, 2013). Not only are there strong indications in favor of utilizing preventive care, but the Affordable Care Act of 2010 allows free preventive screens and vaccinations for a variety of illnesses ("Preventive Health Services", 2010). This begs the question, why are immigrants participating in preventive care at a lower rate than native US born residents?

Lack of Utilization

In many parts of the US, preventive care provided by doctors is a new and underutilized experience for immigrants. Research by Du and Xu (2016) shows that foreign born individuals have a lower rate of clinical visits than native born residents, with the only exception being care for childbirth. Beyond pregnancy, visits to the clinic are few and far between. Of any group, Hispanics have the lowest insured rates and lowest frequency of clinical visits despite having the highest percentages of hypertension and diabetes. Du and Xu (2016) also found that the elderly immigrant population is receiving a markedly low amount of preventive screening tests for eye deterioration and for cholesterol elevation, cancer, and diabetes (Du & Xu, 2016). Not only are the rates of clinical visits and screening tests low, the elderly immigrant population is growing along with the rates of hypertension, hyperlipidemia, diabetes, and cancers of the stomach, liver, and cervix (Miller & Singh, 2004; Stimpson, Wilson, Murillo, & Pagan, 2012).

The low rate of preventive screenings in the elderly immigrant population is alarming but so are the screening rates for the young immigrant population. Singh, Yu, and Kogan (2013)

found that over 13 percent of immigrant families in the US have not brought their children for a wellness check in the last 12 months and over 16 percent of immigrant children do not have health insurance. Immigrant children have a lower rate of well visit checkups and a higher rate of being uninsured than native born children their age. Foreign born children also have a lower physical activity rating, more sedentary lifestyles, and have a higher rate of TV watching on a daily basis, which are all considered poor health habits. (Singh, Yu, & Kogan, 2013).

Some cultures encourage preventive care, but not through clinics, doctors, and hospitals. Only 12 percent of Somali women interviewed by Carroll et al. (2007) would be willing to visit a doctor without being sick, and a majority preferred practicing preventive medicine through prayer and cultural health practices organized by a community religious healer rather than visiting a doctor. A high percentage of the women interviewed also reported using home remedies like garlic, incense, herbs, and lemon to cure illness, but would not take medication without first feeling symptoms (Carroll et al., 2007). Many immigrants from Somalia practicing the religion of Islam have been found to believe that preventing illness and disease is impossible, because it is ultimately Allah that decides their fate. Their only form of preventive care for themselves and their family may be prayer and attempting to live according to the laws of Islam (Pavlish, Noor, & Brandt, 2010).

The Power of Perception

Perception plays a significant role in whether or not an individual would participate in preventive care. According to a study by Du and Xu (2016), many elderly Hispanic immigrants rated their own health as excellent, but upon further review this group of immigrants have the highest rate of chronic disease and had the highest occurrence of illness disrupting daily life compared to their US born counterparts. This suggests that Hispanics are not treating their

hypertension and diabetes despite it being a serious health condition (Du & Xu, 2016). Even more concerning, is that Hispanic elderly immigrants had the longest delay in care for known illnesses and had the longest time period between being issued a prescription and picking up the medication (Du & Xu, 2016). The study also found that many Somali women perceived themselves as healthy, but most had sedentary lifestyles, were overweight, frequently ate fatty foods, and were unlikely to visit a doctor without feeling ill (Carroll et al., 2007). This data suggests that while immigrants perceive themselves as healthy, many are actually developing chronic illnesses at a faster rate than native born residents.

Many immigrants, specifically refugees, report learning about diseases for the first time after moving to the United States. Diseases like diabetes, cancer, and hypertension are either unknown or not of concern to refugees when long term life is not a strong reality. These diseases are described by some immigrants as, "American diseases." Somali women who were interviewed were far more worried about living through the week rather than fretting over what life would be like in ten, twenty, or thirty years (Carroll et al., 2007).

Identification and treatment for mental health conditions is another area of care that seems to be looked over due to negative perceptions of mental health. Clinics provide free depression and anxiety screenings to all patients, but mental illness is widely unrecognized by many in the immigrant population due to cultural and religious beliefs. Often times, mental illness is thought to be healed by prayer or by improving one's religious outlook (Pavlish et al., 2010). Many immigrants also face the double disadvantage of having to deal with being a foreigner in a new land and facing the mental challenges of adjusting to being a minority. Despite these difficult changes, research shows that immigrants turn to unhealthy coping mechanism like alcohol and tobacco rather than visiting a mental health care provider (Du and

Xu, 2016). Not only are there many conceptual issues that prevent immigrants from obtaining preventive care, there are also many physical and cultural barriers for people who want the care.

Barriers to Preventive Care

The barriers immigrants face when accessing healthcare in the United States are numerous. In addition, the American healthcare system is complex and often very different from the health care provided abroad. Immigrants have entered a new land with a new language and different customs and financial resources are often depleted when beginning a new life in the United States. Research done by Wu, Kviz, and Miller (2009) found that barriers limiting immigrants access to healthcare included, "language problems, cultural differences, lack of time, financial limitations, lack of transportation, lack of knowledge, lack of funding for community agencies, lack of partnership with churches, and perceived stigma" (Wu et al., 2009, pg. 78). For the purposes of our research we will focus on cultural and language barriers, physical and financial limitations, and health literacy.

Cultural barriers play a significant role in whether or not immigrants utilize medical services. For example, a cultural stigma and fear of rejection is commonly reported among Asians with mental health disorders which makes them hesitant to seek help. In a study of Korean women, the most commonly discussed cultural barrier when seeking treatment for mental health was the stigma of being perceived as "defective" or "weak" and the associated shame one would bring to the family if the community found out (Wu et al., 2009). Chinese people are also less likely to share their cultural practices with those not from their culture (Jang, 2016). According to Sheridan (2008), women in many cultures may be afraid to be seen in a clinic for abuse related injuries due to cultural norms about speaking against their husbands.

Sheridan also found that spiritual beliefs may be a barrier as some cultures may see suffering as a spiritual act to experience (Sheridan, 2008).

Research shows that immigrants generally prefer a provider of the same ethnicity. According to Gray and Stoddard (1997) "an individual is more likely to choose a doctor of the individual's same race or ethnicity" (Gray and Stoddard, 1997, pg. 249). Interestingly the United States has a significantly large portion of foreign born physicians. According to the Migration Policy Institute, 27 percent of all physicians and surgeons in the US and 16 percent of all health care workers in general are foreign born and of those 41% are Asian and 35% are Latin American or Caribbean (McCabe, 2012). Of note however is the lack of African born physicians such as Somali or Ethiopian born peoples which are significant immigrant groups in Minnesota. A majority of bilingual providers live and work in larger cities rather than rural areas as over 80% of immigrants in Minnesota live in the Twin Cities metro area (Minnesota Compass, 2016).

English proficiency can be a significant barrier for those immigrants who cannot access providers who share the same language. According to data from 2011, 42 percent of those who speak another primary language at home were classified as less than English proficient, or LEP, and includes over 25 million people (US Census Bureau, 2011). Those individuals who are LEP are less likely to access primary care or preventive care and are not as satisfied with the care provided (Jacobs, Shepard, Suaya, & Stone, 2004). With the increasing use of medical interpreter services as well as the advent of telemedicine interpreter services available on digital devices, the language barrier has likely been reduced in recent years. Hospitals across the county have been integrating interpreter services into the healthcare system, and are finding the service to be cost effective and efficient. According to Jacobs et al. (2004), "compared with English-speaking patients, patients who used the interpreter services received significantly more

recommended preventive services, made more office visits, and had more prescriptions written and filled. The estimated cost of providing interpreter services was $279 per person per year" (Jacobs et al., 2004, pg 866). Several companies offer medical interpreter services through which you can call in via a toll-free number and be connected with a language specialist. A video remote interpreting service is also available in which a patient or provider can sign in through an app on a computer or tablet, select your language, and begin the interpreting session.

Many physical barriers also limit access to healthcare for immigrants. According to research done by Jang (2014), "structural barriers include geographic proximity to hospitals, locations of hospitals, and access to public or private transportation to hospitals" (Pg. 94). These physical barriers are often fueled by financial restraints and the community locations in which immigrants live in. According to research by Gelatt and Koball (2014):

> Not all immigrants can afford a car, while others do not know how to drive or are not eligible for driver's licenses. In some areas, public transportation is not sufficient to connect immigrants to public benefits offices. In addition to transportation barriers, immigrants' work schedules are often incompatible with the hours when public offices are open for service (Pg 14).

Immigrants face financial barriers that also limit their access to healthcare, including lack of financial resources and health insurance. According to the Camerota (2012) 43.6 percent of immigrants live either at or near the poverty level. Camerota (2012) also reported that 34.1 percent of foreign-born people do not have health insurance (CIS, n.d.). Free clinics are an option that immigrants without health insurance or undocumented status can and do utilize, as previously discussed.

Health literacy has also been found to be a barrier that prevents immigrants from using preventive health care. A research study involving Hmong patients demonstrated that if health care providers spent more time educating their Hmong patients about the risks factors and nature of human papillomavirus (HPV) and cervical cancer then the incidence of disease would decrease (Beltran, Simms, Lee, and Kwon, 2016). Another study showed that immigrants are less likely to understand cardiovascular risk factors (Harris, 2012). In 2004, Halcon et al. (2004) found that only 33.8% of 18-25 year-old Oromo and Somali refugees living in Minnesota had a high school diploma, and 49% of those surveyed had difficulties learning English (Halcon et al. 2004), which only perpetuates a gap in health literacy for that generation of immigrants.

Public Policy

Public policies impact the immigrant population in a positive and negative way. According to Viladrich (2012), immigrants that were legal residents of the United States were allowed to participate in public assistance programs until the Personal Responsibility Work Opportunity Reconciliation Act (PRWORA) was passed in 1996. As a result of the passage of this law, lawful legal immigrants were denied or lost access to public services like Medicaid until the immigrant had lived in the United States for at least five years (Viladrich, 2012). Similarly, Green, Hochhalter, Dereszowska, and Sabik (2016) indicated that PRWORA also put the responsibility of funding for Medicaid on the individual states to extend the coverage for legal immigrants. Minnesota is the first and one of only four states that provides health care coverage to pregnant immigrant women using funds from the state regardless of their immigration status (Green et al., 2016).

Another health care policy that has impacted both the immigrant population and the rate of uninsured individuals is the Children's Health Insurance Program (CHIP) that was passed in

1997 and renewed in 2009 as the Children's Health Insurance Program Reauthorization Act (CHIPRA) (Harrington, 2015). A study by Harrington (2015) showed a decline in the percentage of uninsured children in the United States by 6 percent from the time CHIP was enacted first in 1997 to 2012. The same study showed the decline was 12 percent for children in low-income families and 17 percent for Hispanic children (Harrington, 2015).

Naturalization Participation

Citizenship is an identity of the individual that plays a significant role in whether an individual is able to get necessary medical care (Echeverria & Carrasquillo, 2006). A study by Echeverria and Carrasquillo (2006) compared how women utilized mammogram and Pap smear screening tests based on citizenship. The study found that non-US citizens received 16 percent less Pap smear screening when compared to US born women (Echeverria and Carrasquillo, 2006). After adjusting for variables like insurance status, access to care and sociodemographic identifiers, the non-US citizens who reported receiving Pap smear screening were 11 percent less than US born women (Echeverria and Carrasquillo, 2006).

Gaining citizenship may have an added benefit other than the ability to access public medical services. Gubernskaya, Bean, and Van Hook (2013) report that becoming a citizen has a positive health outcome for immigrants in middle and old age. Their study looked at American Community Survey (ACS) and Integrated Health Interview Series (IHIS) data which included questions regarding limitations to carrying out activities of daily living broken down by age at immigration and current naturalization status (Gubernskaya, et al, 2013). In this study, naturalization had the greatest effect in immigrant groups that migrated to the United States between the ages of 18 and 35 while the effect was masked by race and education but remained

significant in the age groups who migrated at less than 18 years of age (Gubernskaya, et al., 2013).

Age at Immigration

The role the age at the time of immigration plays in accessing preventive care is not well documented in the United States. A study by Ali, Mwendwa, Sims, Ricks, and Sumner (2016) investigated if a correlation existed between age at immigration and kidney function using estimated glomerular filtration rates (eGFR) in African immigrants. The study found that those African immigrants that moved to the US at 21 years of age or younger had a lower eGFR while those that immigrated later in life had a better eGFR (Ali et al., 2016). The researchers reasoning that the younger African immigrants had a negative correlation between eGFR and age at immigration was because the younger immigrants were more prone to trying to gain better socioeconomic status that is associated with increased stress and poor health outcomes (Ali et al., 2016). The researchers found that African immigrants who moved to the U.S. at an older age had better health to start with because good health was a factor in older African immigrant's decision whether or not to move to a non-native land (Ali et al., 2016).

Another study by Holmes, Driscoll, and Heron (2015) compared mortality rates of U.S. born Hispanics to Hispanic immigrants broken down by age at immigration. The study found that Hispanic immigrants that moved to the U.S. at age 25 and older had better mortality compared to Hispanics born in the U.S. as well as those who immigrated at a younger age (Holmes et al., 2015). The study suggested that those Hispanic immigrants that move to the U.S. at a younger age are likely to adopt poor eating habits, tobacco and alcohol use while those that immigrate at 25 or older are less likely to take on these habits which contributes to their positive mortality rates (Holmes et al., 2015). However, the mortality benefits for the 25 and older group

declined with extended stay in the U.S. due to adopting unhealthy lifestyles (Holmes et al., 2015).

Similar evidence was found in a self-reported health status study conducted in the Hispanic population by Gubernskaya (2015). Gubernskaya (2015) looked at the decline in self-reported health status among 50 year-old Hispanics and compared the decline by age group at immigration. The self-reported health status among those that immigrated as children (1-17 years old) was similar to those born in the U.S., declined for those that immigrated as young adults (18-34 years old) and no change for those that immigrated in adulthood (35-49 years old) (Gubernskaya, 2015). Those that immigrated as children have a similar health and socioeconomic status selectivity compared to those born in the U.S. thus explaining the similarity in self health status report (Gubernskaya, 2015). Lack of insurance, preventive care and poor working conditions are what contribute to the decline in self-reported health status among the young adult immigrants (Gubernskaya, 2015). Good initial health status, improved economic status, better jobs and access to healthcare that comes with the jobs are what contribute to lack of change in self-reported health status among the group that immigrated in adulthood (Gubernskaya, 2015).

Gaps in the Literature

Healthcare systems are more widely using digital interpretation devices; however, there is limited research or literature data available on whether the use of digital or telemed interpreter services now available in many hospitals has reduced the language barrier for those not fluent in English. Statistical information on the overall use of free health care clinics by immigrants was also difficult to find. What proportion of immigrants and the uninsured use free clinics? The

literature and data is limited on the barriers faced by some common immigrant groups like Somalis and Ethiopians found in Minnesota.

The U.S. Office of Management and Budget (OMB), has a set of required standards for classification of ethnicity for all the data collected for federal uses. These classifications are set as American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino and Native Hawaiian or Other Pacific Islander (Office of Management and Budget, 1997). This standardization creates a gap in federally collected data and reports because the classifications are too broad and do not provide specific details about individual countries or tribes within the overarching ethnic group. For example, a special report released by the United States Department of Health and Human Services along with the Centers for Disease Control and Prevention looked at health disparities within different races and ethnic groups in the United States for 2015 (US Department of Health and Human Services, 2016). The report indicated that the ethnic categories were based on the OMB standardization and thus does not capture specific immigrant populations (U.S. Department of Health and Human Services, 2016).

Another major area of need is in researching the medical outcomes of the immigrant population living in the midwest. Halcon et al. found a great deal of information on the refugee youth population from East Africa now living in Minnesota. Halcon et al. were able to deduce that many refugees were having difficulties transitioning into adulthood, but the data did not reflect how the new challenges in life translate to medical care (Halcon et al. 2004). Much of the research and publishing being done is coming from states such as Florida, New York, Texas, and California. While the foreign-born population is highest in those states, the immigrant groups being studied may not be a true representation of who is living in Midwest. Minnesota is home to a significantly higher number of refugees per capita from Somalia, Thailand, and Ethiopia

compared to the states on the east or west coast yet there is a lack of research being conducted in Minnesota with these people groups.

Conclusion

Research indicates a high area of need exists within the immigrant population for prevention of chronic illness. As the number of elderly immigrants increases and the overall immigrant population steadily rises, it is in the best interest of patients and providers to prevent or reduce long term diseases like diabetes, cancer, and hypertension. Knowing that barriers are present within the U.S. healthcare system requires change for all parties involved in the healthcare process. Changing health care policies, improving the health literacy in each ethnic group, and removing physical barriers are all important steps in closing the gap in preventive care and improving the health of the nation. The next chapter will explain research methodology in preparation to gather data on the topic of barriers to preventive care within the immigrant population.

Chapter 3: Methods

Introduction

The purpose of this study was to identify if there are any significant barriers that prevent the immigrant population living in Minnesota from accessing preventive care. This chapter covers the design, population, experimental procedures, data handling, statistical analysis, validity, reliability, and the delimitations and limitations of the study. Through our survey, we asked multiple questions to assess the barriers that exist among the Oromo immigrants living in Minnesota.

Study Design

This study was a descriptive, cross-sectional, and quantitative study using a written survey (Appendix A) that was conducted at Power of Gospel Church in Minneapolis, Minnesota. In addition to age and gender, the demographic questions asked included the highest level of education, proficiency in the English language, number of years living in the United States, and age at migration. To understand the utilization of preventive care, the participants were asked to choose if they had been screened for the top ten most common preventive screenings identified by the Affordable Care Act. The survey also included a question asking about seven items that were identified as common barriers in the literature review that prevent immigrants from seeking preventive care. A Likert scale was used to measure how each item impacts the participant's ability to seek preventive care. The answers collected from the survey were uploaded to Microsoft Excel for analysis.

Population

The participants of this study were adult immigrants; individuals who are born outside the United States but excluding those individuals born to US citizens. The specific population studied was limited to Ethiopian immigrants. This allowed control over variations between cultures. Permission was received (Appendix C) to carry out the study at Power of Gospel Church in Minneapolis, Minnesota. The church was home to approximately 120 individuals who identified as being from the Oromo tribe in Ethiopia. The survey tool was written in both English and the Oromo language to accommodate for the two most commonly used languages in this population.

To participate in the study, the individuals met the definition of immigrant set for the purpose of this study. Individuals under the age of 18 years were excluded from the survey. In addition, women who have had a child within the past year or who were pregnant at the time of the survey were excluded from the study because they may have had multiple healthcare visits which have included preventive care screenings during and after pregnancy.

Experimental Procedures

A survey was distributed at the Power of the Gospel Church among the Ethiopian congregation. In order to get as many responses as possible, the pastor announced the date of the survey within the service two weeks before and then again the day of the research study. The survey was conducted on two occasions to maximize the number of participants. After the church service, the willing participants gathered in one location within the church. The purpose behind the study and survey was explained to the participants, any questions among participants were answered, and informed consent was collected from any willing participant. Once an informed consent form (Appendix D) was signed by the participants, the survey was distributed.

To protect the identity of the participants, the paper copies of the surveys did not contain any names. In addition, the completed surveys and the signed informed consent forms were stored in a locked cabinet in the PA office until data analysis was complete at which point the data was shredded and disposed. Data analysis was done on a secured computer utilizing Microsoft Excel, and the data from the survey results and statistical analysis was stored on a thumb drive in a locked cabinet in the PA office for a minimum of 5 years. Only the researchers, research chair, and the research reader had access to the data files.

The independent variable for this research project was barriers to preventive care. The dependent variable was the Oromo identifying immigrant population of Minnesota's ability to access preventive care.

Study Tools

The participants gender and highest level of education was gathered using a nominal scale. The participants were asked to answer Yes/No questions to identify the type of screening service they had received. An interval measurement was used to assess how long the participants have lived in the US. A written survey was developed with predetermined number of questions and was given to participants who volunteered to be part of the study. The survey was developed in English and translated to the Oromo language (Appendix B) with the help of translators. Additional Ethiopian translators were asked to review the survey tool to make sure the questions were understandable and equivalent in both languages. A panel of immigrants who had moved to Minnesota were used as an expert panel to review the survey questions and offer feedback about the questions and survey experience. The feedback from the expert panel was incorporated to modify the survey questions.

The purpose of this study was to identify if there are any barriers that immigrants that

live in Minnesota face when trying to access preventive care. Therefore, the survey contained questions asking the participants to assess barriers to preventive care such as language, transportation, education, lack of insurance, health literacy, naturalization status and income utilizing a Likert scale. In order to gauge what preventive care services have been accessed by the participants, the survey included Yes/No questions asking whether the participants have received various immunizations and health screenings identified by the researchers as being a part of the USPSTF recommended services.

The survey questions remained the same for every participant and did not change for either survey sessions in order to retain reliability. To attain validity, a scripted introduction was written to introduce the topic and purpose of the survey. The premade introduction did not include the hypothesis of the study to avoid any bias before taking the survey.

Statistical Analysis

The survey questions answered in English and Oromo languages were entered into an Excel spreadsheet manually for data analysis using the add on application real statistics. The ordinal data was converted to quantitative values to assess if there were any barriers identified by participants. In addition, a correlation study was conducted to determine if the length of stay in the United States or gender influenced the types of barriers as well as preventive care accessed by the participants.

Limitations and Delimitations

The delimitations of the study included people of Ethiopian descent not born in the United States who currently reside in Minnesota. The focus of the study was only on individuals who were 18 years old or older. The study assumed that the individuals being surveyed

understand what is being asked of them because the survey was written in both English and the Oromo language.

Limitations included both language and culture barriers. Differences in language was a limitation because the individuals being surveyed may not have had proficient reading abilities in English or the Oromo language. Due to the nature of the study, all participants were born outside of the United States and identify as part of the Oromo Tribe. A cultural definition of illness, health, and being sick may also have limited the study along with any other cultural understanding of the purpose and design. Limitations when carrying out the survey included lack of response and low church attendance.

Conclusion

Through a bilingual survey of the Oromo tribe of Ethiopia, the researchers assessed the barriers that Minnesota immigrants face when accessing preventive care. The results of the surveys were gathered and a statistical analysis of the results was performed to see what preventive services were utilized and what barriers, if any, existed that prevented immigrants from accessing preventive services. The results of the statistical analysis are presented in chapter four. Chapter five outlines the summary of the findings, limitations of the study, and suggestions for further studies.

Chapter 4: Results

Introduction

This chapter will present the data analysis and explain the details of the data collected from the survey. The respondents of the survey were all adult Oromo immigrants from Ethiopia and whom were members of the Power of Gospel Church. The survey yielded 43 responses; however, one response had to be thrown out after the participant responded 'Yes' to Question 1, which asked if the individual was born in the United States. The remaining 42 responses were used to analyze the data. These responses fulfilled the minimum required number of responses for the data to be statistically significant. Some of the respondents did not complete all of the questions; however, the questions answered were used for the data analysis yielding varying totals for the survey questions. The paper surveys were assessed and the answers were transferred onto a table using Microsoft Excel. The data was then analyzed using the Real Statistics add-on tool found within Microsoft Excel. Chi-square test was used to determine the relationship between barriers and the individual's ability to access preventive healthcare, and a p-value of <0.05 was used to determine if a barrier was statistically significant.

Demographics

Male participants represented 57% of the survey respondents while female respondents accounted for 43% (Figure 1). There was no difference between genders in terms of having trouble accessing preventive health care as represented by a p-value of 0.48. Over two-thirds of the respondents arrived in the United States between the ages of 21 and 40 (Figure 2). Similarly, the age at immigration or length of stay in the United States were not significant barriers in the surveyed Oromo immigrant population represented by p-values of 0.43 and 0.20 respectively. Roughly 50% of the survey population reported living in the United States for five years or less

(Figure 3). Unfortunately, the elderly immigrants in the survey population did not participate. The elderly age group was unable to read the English or Oromo version of the survey tools, which were both written using the letters of the English alphabet.

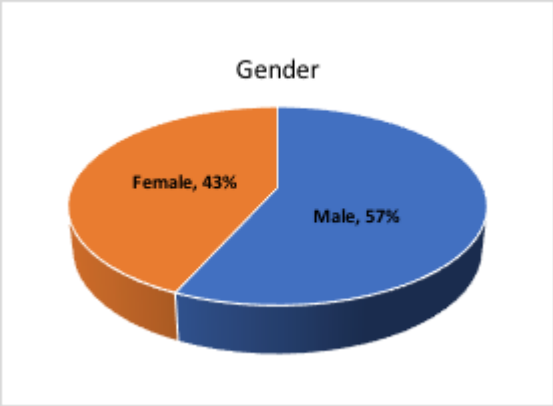

Figure 1: Percentage of Participants by Gender.

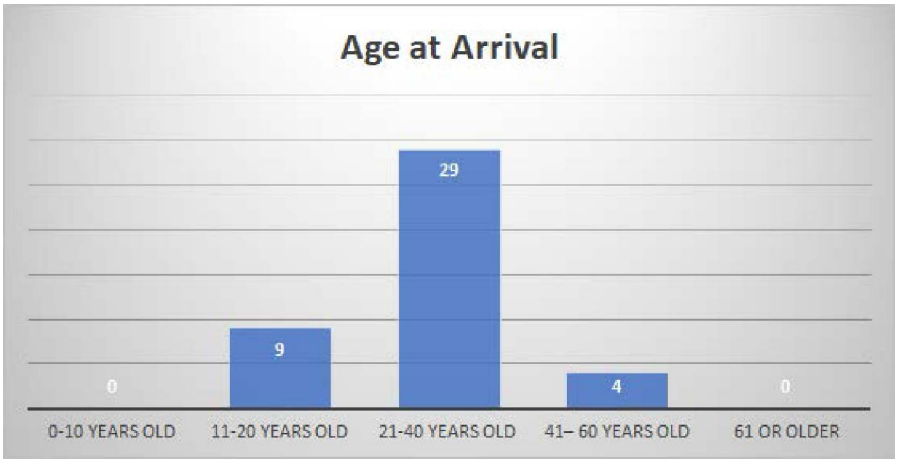

Figure 2: Age at Arrival in the United States.

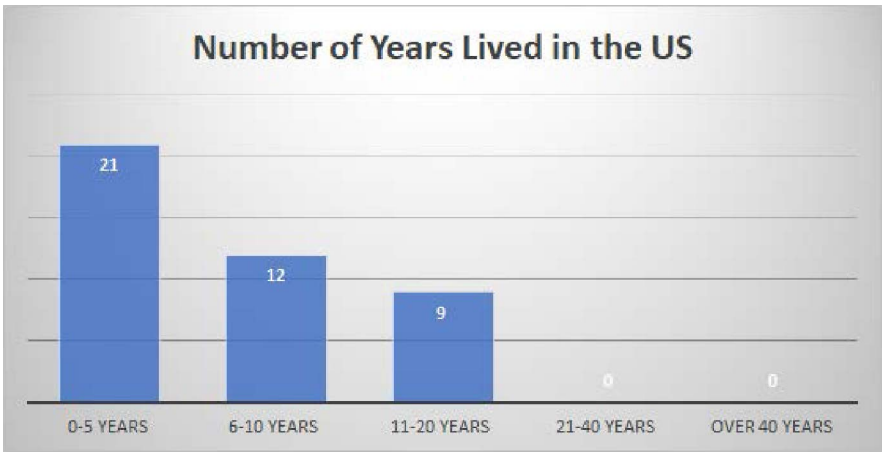

Figure 3: Number of Years Lived in the United States

Nearly 74% of the survey population reported having attended at least some college or more (Figure 4). All the respondents had some level of formal schooling.

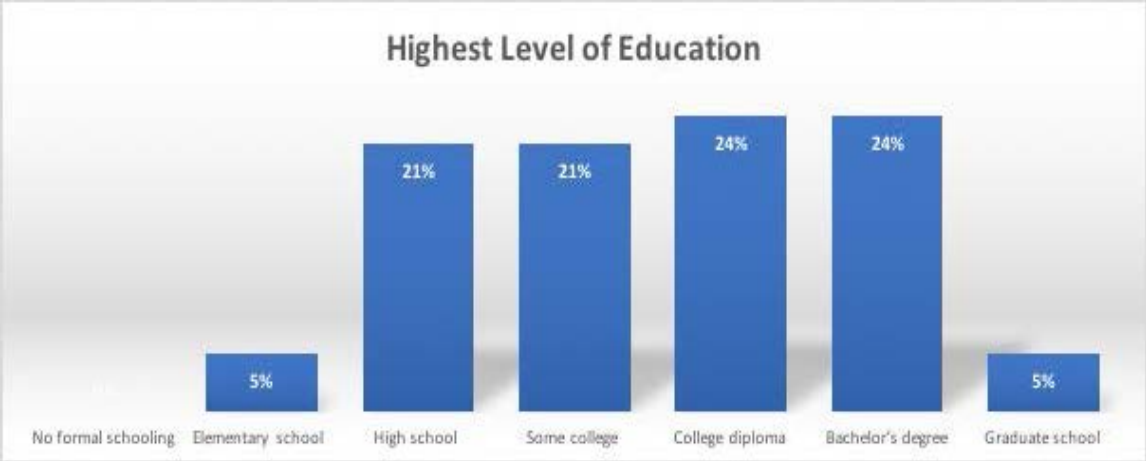

Figure 4: Q5 What is your highest level of education?

Data Analysis

One of the major barriers that came up often in the literature review was language, including both written and spoken proficiency. Only 26% of the survey population responded that they are fluent in spoken English, but none of the respondents stated that they do not speak any English. While 52% could speak English for basic daily activities, the remainder of the respondents (21%) could only speak a few words of English (Figure 5). Survey questions 9 to 11

were designed to further assess the level of understanding for spoken English. When asked "Have you ever felt like your healthcare provider did not understand you?", 38% of the respondents answered sometimes (Figure 6). On the other hand, 31% of survey respondents indicated they sometimes have difficulty understanding what their provider is saying to them (Figure 6). In terms of having difficulty understanding instructions given by healthcare providers, 5% of respondents indicated that they always have difficulty, while 26% responded they sometimes have difficulty (Figure 6).

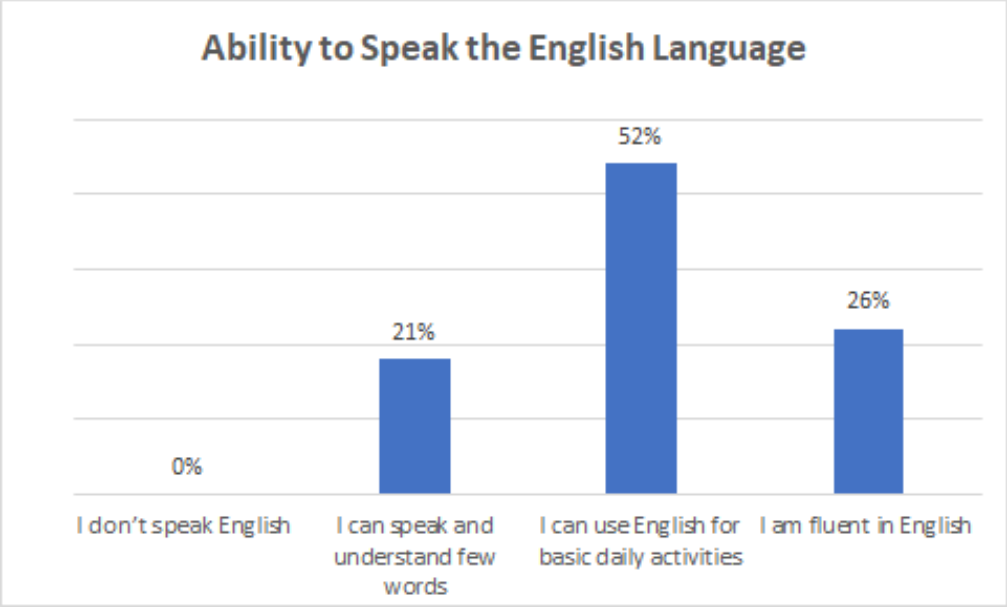

Figure 5: Ability to Speak the English Language

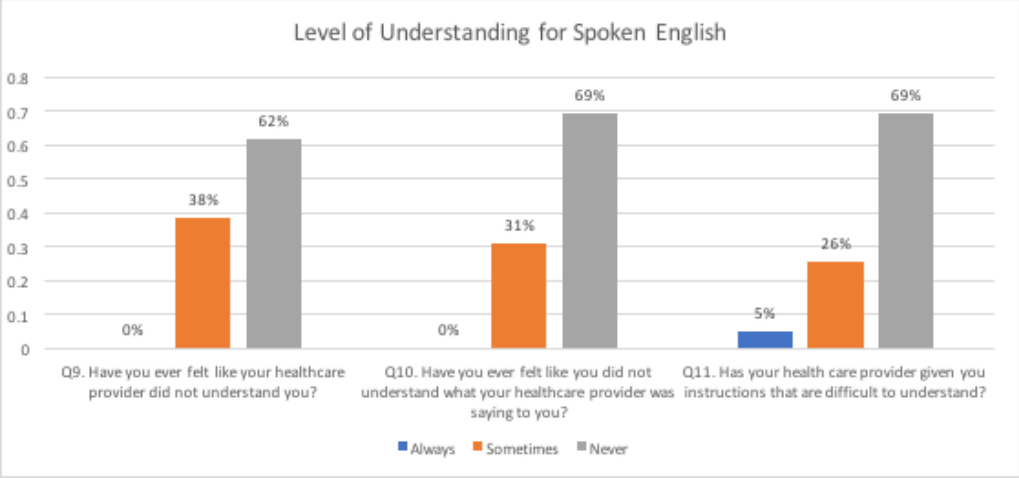

Figure 6: Q 9-11, Level of Understanding for Spoken English.

In contrast to the spoken language, the percentage of those who were able to read the English language was higher. Only 7% of the survey population indicated that they are able to read only few words (Figure 7). More than half (55%) indicated having a full understanding of written English, while the remainder (38%) reported being able to read English for basic daily activities (Figure 7). Both spoken and written language were not statistically significant barriers represented by p-values of 0.91 and 0.79.

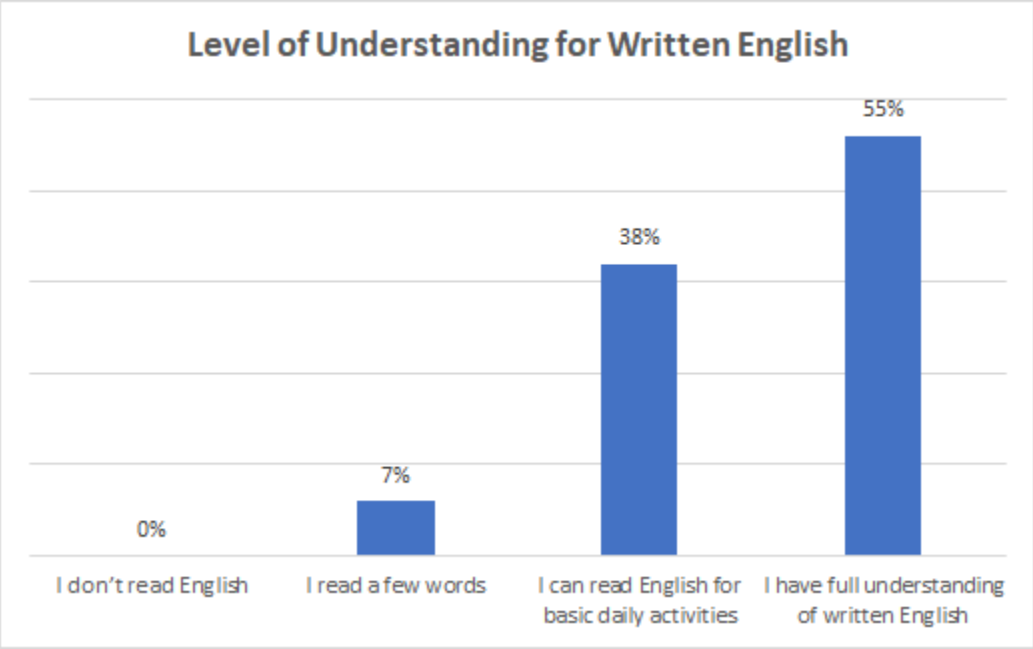

Figure 7: Q7. How well do you read English?

Transportation was identified in the literature review as another major barrier limiting immigrants from accessing healthcare in the United States. In the surveyed population, however, transportation was not an issue. Only 39 of the 42 survey respondents answered Question 12, which asked "What type of transportation do you use to get to your clinic or hospital?" 79% had their own car and 13% had someone that was able to provide them with transportation (Figure 8).

Only 8% of survey respondents used taxi, and none of the individuals used a bus or walked to clinics or hospitals. Transportation was not a statistically significant barrier represented by a p-value of 0.46.

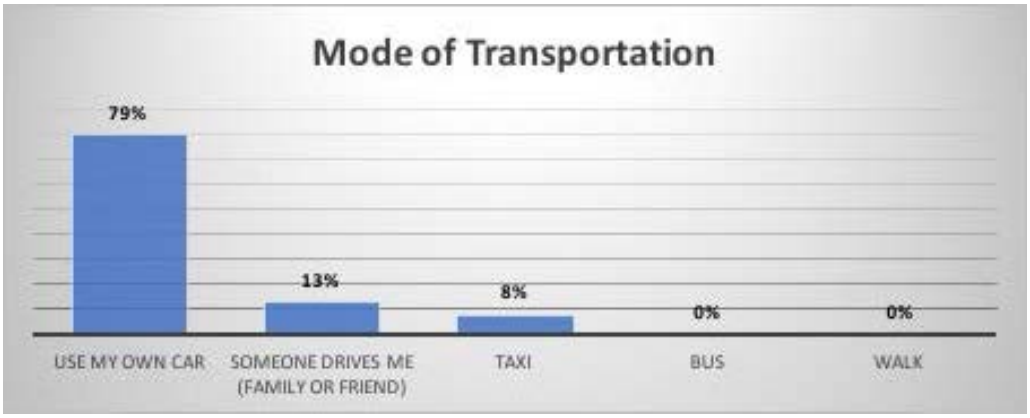

Figure 8: Q12, What type of transportation do you use to get to your clinic or hospital?

Other significant factors identified in the literature review were lack of health insurance, lack of finances, and perception. Health insurance was not a significant factor due to the fact that 83% of the survey respondents were insured (Table 1), and had a representative p-value of 0.14. In terms of finances as a barrier, 59% of survey respondents stated that they never have enough money and 27% sometimes feel like they do not have enough money to go to the clinic for annual checkups (Figure 9).

Insured	**Gender**	
	Male	**Female**
Yes	46%	37%
No	15%	2%

Table 1: Percent Insured by Gender

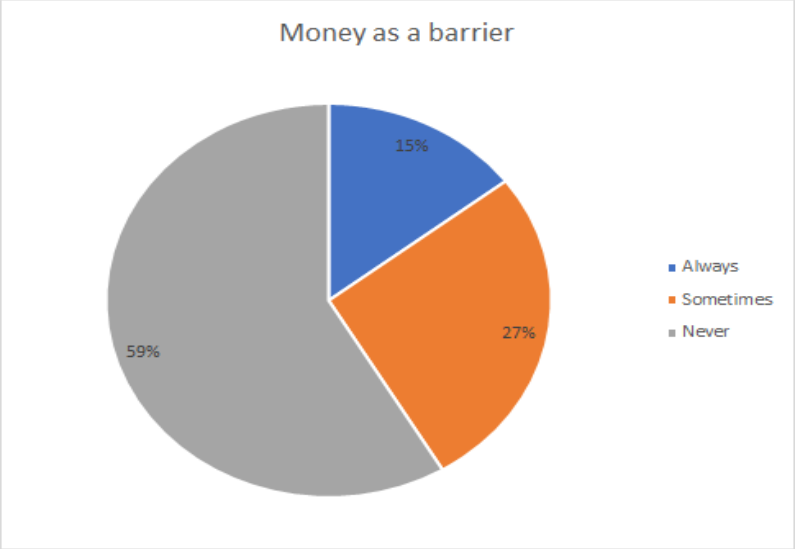

Figure 9: Q14, "Do you feel you have enough money to go to the clinic for annual check-up and not sick care?"

The majority of respondents felt that simply having the status of being an immigrant did not prevent them from accessing healthcare. When asked if they felt that they have trouble accessing healthcare because they are immigrant, 63% reported "never," while 27% reported "sometimes" (Figure 10). Both money and perception had insignificant p-values of 0.16 and 0.31 respectively.

Q15. Do you feel that because you are an immigrant you have trouble accessing health care?	**Count**	**Percentage**
Always	4	10%
Sometimes	11	27%
Never	26	63%

Table 2: Perception. Q15 "Do you feel that because you are an immigrant you have trouble accessing health care?"

Finally, respondents were asked if they are able to find time for annual checkups. Only 34% of the survey respondents indicated that they always find time to go for an annual checkup; however, 39% indicated that they sometimes find time while 27% indicated that they do not find time for annual checkups (Table 3). Difficulty finding time for an annual visit had a p -value of 0.05, which was the closest value to statistical significance.

Q16. Do you find time to go for an annual check-up?	Count	Percentage
Always	14	34%
Sometimes	16	39%
Never	11	27%
Total	41	100%

Table 3: Time as a Barrier. Q16 Do you find time to go for an annual check-up?

Utilizing Preventive Care

The second part of the research was trying to identify what percentage of the Oromo population in Minnesota has accessed preventive health care services. The results showed that 61% of the Oromo immigrants living in Minnesota have received preventive healthcare in the past five years (Figure 10).

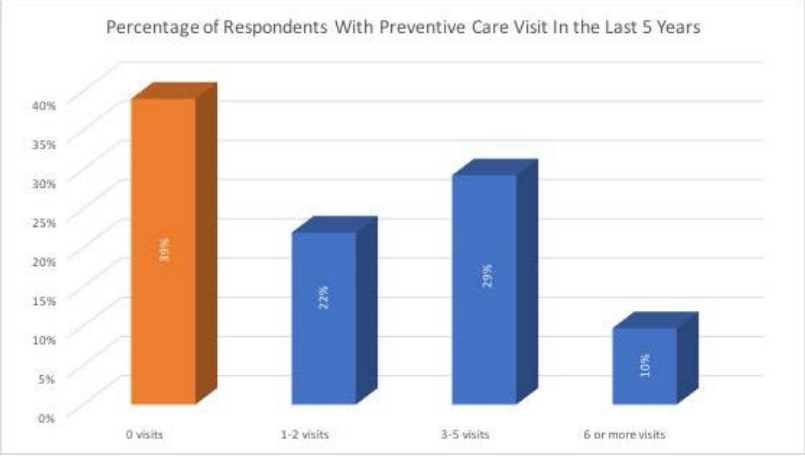

Figure 10: Percentage of Oromo Immigrants Who Received Preventive Healthcare

Conclusion

The purpose of this study was to identify barriers that affect preventive care. The major barriers that were identified in the literature review were asked about in the survey and analyzed using chi-square and p-value against Question 19 to determine if they were statistically significant. For a barrier to be statistically significant, the p-value needed to be <0.05. The results will be further discussed in Chapter 5.

Chapter 5: Discussion

Introduction

The purpose of this study was to determine if there are any barriers that restrict immigrants living in Minnesota from seeking preventive care. The second research question was to determine what percent of the Oromo immigrants from Ethiopia are receiving preventive care. To identify factors that hinder immigrants from utilizing preventive care, common barriers were researched and identified in the literature and survey questions were designed to address these common barriers. The identified barriers included age at arrival, length of stay in the United States, language, transportation, insurance status, money, perception, and time.

Demographic Data

As indicated in Figure 1, 57% of the survey respondents were males. In the surveyed population, there was no difference between genders in terms of having trouble accessing preventive health care. Similarly, the age at immigration or length of stay in the United States were not significant barriers in the surveyed Oromo immigrant population. With 74% of the surveyed immigrants having educational levels of some college or more, it was not surprising that educational level as well did not turn out to be a barrier in seeking preventive health care.

Language

A unique discovery was that the Oromo immigrants surveyed had a higher proficiency in reading language compared to spoken language. The research revealed that 79% of the participants indicated that they are able to speak English for basic daily activities or were fluent (52% can speak for daily language and 26% are fluent in English) compared to 93% that were able to read at a similar level (38% for basic daily activities and 55% having a full understanding). Perhaps this is a result of the Oromo being a more literate and highly educated

people group. Further research would need to be done across a broader spectrum of immigrant groups to see if this is the case among all immigrant groups in Minnesota. The survey respondents indicated that they sometimes feel like their provider did not understand them (38%) and that they do not understand what their provider was saying to them (31%).

While language was not a statistically significant barrier within the research analysis, it is worth noting that over 30% of the population either felt that their healthcare provider did not understand them or they did not understand what their healthcare provider was saying to them. This is an important finding because if patients do not understand their provider, it may have a significant impact on their health outcome. Lee, Noh, Kang & Hong (2017) found that patient physician communication had a positive impact on patient engagement, satisfaction and medication adherence. If this data were to remain consistent among all immigrant groups within Minnesota, the gap in understanding between provider and patient may significantly hinder the healthcare of approximately 130,000 citizens of Minnesota.

Transportation

Transportation was not a barrier to preventive care for the surveyed population. 79% of respondents either used their own cars to attend appointments or had access to healthcare through the help of a family member or friend with a vehicle. Approximately 13% of those surveyed depended on friends or family to bring them to appointments and about 8% reported using a taxi. When the data was analyzed to see if transportation had an impact on how individuals accessed preventive care, transportation was determined not to be a statistically significant barrier.

Insurance Status

The majority of the survey participants (83%) had health insurance. Only two respondents whom did not have health insurance indicated that they have had a clinic visit for preventive service. One of these individuals has had multiple sick visits. In addition, two individuals reported never having been to a clinic or hospital for sick or preventive services. These individuals also indicated that they have lived in the United States for 0-5 years. Therefore, it is not sure how recently they immigrated to the United States.

Money and Perception

While neither money nor perception were found to be significant barriers to preventive care, it is worth noting that 85% of participants reported feeling that money is at least somewhat of a hindrance to preventive care. This statistic is concerning when considering that 83% of the same population reported having health insurance. Based on the data, it is safe to assume that at least some of the surveyed immigrant population is unaware that preventive services are provided at no charge to an insured patient. This would indicate that the perception of cost is a barrier to many. The correlation between money and perception highlights the need to further educate the immigrant community on free preventive health services available to those who are insured and properly identifying clinics that offer free services to those who are uninsured.

Time

Difficulty finding time for an annual visit was the only barrier that was close to being statistically significant with a p-value at 0.05. Among the responders that stated they never or sometimes find time to go for annual visits, 46% have not had any preventive care in the last five years. 92% of the same respondents have had at least one clinic/hospital visit that was for a sick visit, but were unable to find time to complete an annual checkup. Half of the survey respondents

identified that the hindering factor to find time was work constraints. 50% of the respondents reported not being able to afford to take time off of work or indicated that they did not have time to seek preventive care while working multiple jobs.

Utilizing Preventive Care

The second question studied in the research was, "What percentage of the Oromo population in Minnesota received preventive care?" Based on the survey results, 61% of the Oromo immigrants living in Minnesota have received preventive healthcare in the past five years (Figure 10). While 61% of immigrants seeking preventive care is an encouraging statistical value, that still leaves 39% of the studied population without any type of preventive care. This begs the question: If 39% of a largely mobile, highly educated immigrant population is not accessing preventive care, what is the burden of those who are constrained by the barriers identified in the literature review? The results indicate a need for further studies including all immigrant populations in Minnesota.

Limitations

Our research population included only people of Ethiopian descent, not born in the United States and who currently reside in Minnesota. It was also limited to individuals who are older than 18. Our data analysis demonstrated that language proficiency, both written and verbal, was not a significant barrier in the studied population. Our population was also quite educated and so health literacy did not prove to be a significant barrier. The survey response rate of 42 completed surveys did meet the minimum requirement to be statistically significant.

One of the observed results during data collection was that the elderly members of the Power of Gospel Church did not participate. This was due to the fact that the survey tools included one survey written in English and one written in the Oromo language using the English

alphabet. The Amharic or Geez alphabet was used to write the Oromo language until 1991 when it was replaced with English letters for the Oromo written language (Horoo, 2009). Despite being officially replaced, most of the elderly Oromo individuals continue to use the Geez alphabet to write the Oromo language. As a result, the elderly population did not participate in the survey process. Therefore, written language was a hindering factor built within the research process, which prevented the researchers from assessing the barriers to preventive care within the elderly Oromo population. It is recommended that future studies be conducted using the Oromo language written in both the English and Geez alphabet or with oral language assistance to ensure the participation of the elderly Oromo population within the study.

Another limitation of this study was discovered during the data collection process. The church was located in an area that had no accessible routes by foot or by public transportation. The surveyed population may have been skewed towards individuals that have access to a vehicle. Therefore, it is recommended that future studies consider conducting the survey in locations that are accessible by public transportation or other modes of travel like walking or bicycling. Alternatively, the survey could be conducted in other public facilities such as grocery stores or community gathering spaces.

Future Studies for Further Research

It is recommended that this study be repeated with the modifications indicated previously to increase the participation of the elderly and to adjust to those individuals who do not own a car or have access to one. The study could also be expanded to further assess the utilization of preventive services for children within the Oromo population. Due to limited time and resources, only Oromo immigrants from Ethiopia were surveyed for this study; however, there are over 450,000 immigrants from many countries that are living in Minnesota. It is recommended that a

larger study be conducted to examine the barriers that all immigrants living in Minnesota face when accessing preventive care.

Conclusion

Based on the data analysis, there were no significant barriers that the Oromo immigrants in Minnesota face in utilizing preventive care. Difficulty finding time was the only barrier that came close to being significant and this was most commonly due to work constraints. The Oromo population studied turned out to be quite educated, proficient in both verbal and written English, insured, and had access to automobiles. To get a better understanding of the barriers all immigrants in Minnesota face, a much broader study covering multiple immigrant groups would need to be conducted.

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Appendix A
Healthcare Immigration Survey

1. **Were you born in the United States?**
    a. Yes (if yes then you do not need to complete the survey)
    b. No

2. **Gender**
    a. Male
    b. Female

3. **How old were you when you came to the United States?**
    a. 0-10 years old
    b. 11-20 years old
    c. 21-40 years old
    d. 41– 60 years old
    e. 61 or older

4. **How long have you lived in the United States?**
    a. 0-5 years
    b. 6-10 years
    c. 11-20 years
    d. 21-40 years
    e. Over 40 years

5. **What is your highest level of schooling?**
    a. No formal schooling
    b. Elementary school
    c. High school
    d. Some college
    e. 2-year college diploma
    f. Bachelor's degree
    g. Graduate school

6. **How well do you speak English?**
    a. I don't speak English
    b. I can speak and understand few words
    c. I can use English for basic daily activities
    d. I am fluent in English

7. **How well do you read English?**
    a. I don't read English
    b. I read a few words
    c. I can read English for basic daily activities

d. I have full understanding of written English

8. **Have you ever needed a medical interpreter/translator at a hospital/clinic visit when you needed one?**
    a. Always
    b. Sometimes
    c. Never
    d. Have not needed one

9. **Have you ever felt like your healthcare provider did not understand you?**
    a. Always
    b. Sometimes
    c. Never

10. **Have you ever felt like you did not understand what your healthcare provider was saying to you?**
    a. Always
    b. Sometimes
    c. Never

11. **Has your health care provider given you instructions that are difficult to understand?**
    a. Always
    b. Sometimes
    c. Never

12. **What type of transportation do you use to get to your clinic or hospital?**
    a. Use my own car
    b. Bus
    c. Taxi
    d. Someone drives me (family or friend)
    e. Walk

13. **Do you currently have health insurance?**
    a. Yes
    b. No

14. **Do you feel you have enough money to go to the clinic for annual check-up and not sick care?**
    a. Always
    b. Sometimes
    c. Never

15. **Do you feel that because you are an immigrant you have trouble accessing health care?**
    a. Always

b. Sometimes
c. Never

16. Do you find time to go for an annual check-up?

a. Always
b. Sometimes
c. Never

17. What prevents you from finding time to go to a clinic for annual check-up?

a. Child care
b. I cannot afford to get off work
c. I work multiple jobs or extra hours
d. I do not have a problem finding time

18. How many times have you been to a clinic or hospital in the last five years?

a. 0 visits
b. 1-2 visits
c. 3-5 visits
d. 6-10 visits
e. 11 or more visits

19. How many of the visits in the last five years were for annual checkups or without being sick?

a. 0 visits
b. 1-2 visits
c. 3-5 visits
d. 6 or more visits

Appendix B
Qorannoo Eegumsa Fayyaa imaaltootaa

1. Biyya Amerikaa kana keessatti dhalattee?
   a. Eeyyee (yoo Amerikatti dhalattee ta'e gaaffi fi deebii kana hin guuttiin)
   b. Waawuu

2. Saala
   a Dhiira
   b Dubartii

3. Yeroo gara biyya Amerikaa dhufte umuriin kee meeqa?
   a. 0-10
   b. 11-20
   c. 21-40
   d. 41-60
   e. 61 fi isaa ol

4. Hagam biyya Amerikaa kana keessa jiraatte?
   a. 0-5
   b. 6-10
   c. 11-20
   d. 21-40
   e. Waggaa 40 ol

5. Sadarkaan barnootakee inni olaanaan maali?
   a. Waayuu hin baranne
   b. Barnoota sadarkaa tokkoffaa
   c. Barnoota sadarkaa lammaffaa
   d. Koolleji hanga tokko
   e. Koolleji waggaa lamaa, dipilomaa
   f. Digirii waggaa afurii
   g. Digirii olaanaa (masters)

6. Afaan Ingiliffaa hagam qacceellotti dubbatta?
   a. Waayuu hin dubbadhu
   b. Jechoota amma tokko nan dhaga'aa nan dubbadhas
   c. Ingiliffa jireenya guyya guyyaatiif dhimma itti ba'uu nan danda'a
   d. Ingiliffa qacceellotti dhangalaasee nan dubbadha

7. Afaan Ingiliffaa hagam qacceellotti barreessita?
   a. Dubbisuu hin danda'u
   b. Jechoota muraasa nan dubbisa
   c. Ingiliffa jireenya guyya guyyaatiif dubbissee dhimma itti ba'uu nan danda'a
   d. Barreeffama Ingiliffaa guutummaatti nan hubadha

8. Kanaan dura yeroo mana yaalaa/Kilinika dhaqxe namni afaan hiikuu beekuu fi leenji isaa qabu siif dhi'aatee beektaa?
   a. Yeroo hundaa

b. Takka takka
c. Lakkii, tasa'iyyuu
d. Nabarbaachisee hin beeku

9. Kanaan dura yeroo mana yaalaa dhaqxe ogeessi fayyaa kee si hubachaa akka hin jirree sitti dhagaa'amee beektaa?
   a. Yeroo hundaa
   b. Takka takka
   c. Lakkii, tasa'iyyuu

10. Kanaan dura yeroo mana yaalaa dhaqxe, yeroo ogeessi fayyaa sitti dubbatu isa hubachaa akka hin jirre sitti dhaga'amee beektaa?
   a. Yeroo hundaa
   b. Takka takka
   c. Lakkii, tasa'iyyuu

11. Ogeessi fayyaa kee qajeelfama hubachuunsaa cimaa ta'e siif kennee beekaa?
   a. Yeroo hundaa
   b. Takka takka
   c. Lakkii, tasa'iyuu

12. Mana yaalaa/Kilinika yeroo dhaqxu geejjiba maaliitti dhimma baata?
   a. Konkolaataa mataa koottan dhima ba'a
   b. Baasii (Bus)
   c. Taaksii
   d. Nama biraatu nabuusa (maatii ykn hiriyaa)
   e. Miillaanan deemee dhaqa

13. Yeroo ammaa kana Inshuraansii fayyaa qabdaa?
   a. Eeyyee
   b. Waawuu

14. Dhukubsattee otuu hin ta'in ilaalama wagga-waggaatiif (annual checkups) kilinika dhaquuf horii ga'u waan qabdu sitti fakkaataa?
   a. Yeroo hundaa
   b. Takka takka
   c. Lakkii, tasa'iyuu

15. Imaltuu (immigrant) waan taateef eegumsa fayyaa argachuun cimaa akka ta'etti sitti dhaga'amaa?
   a. Yeroo hundaa
   b. Takka takka
   c. Lakkii, tasa'iyuu

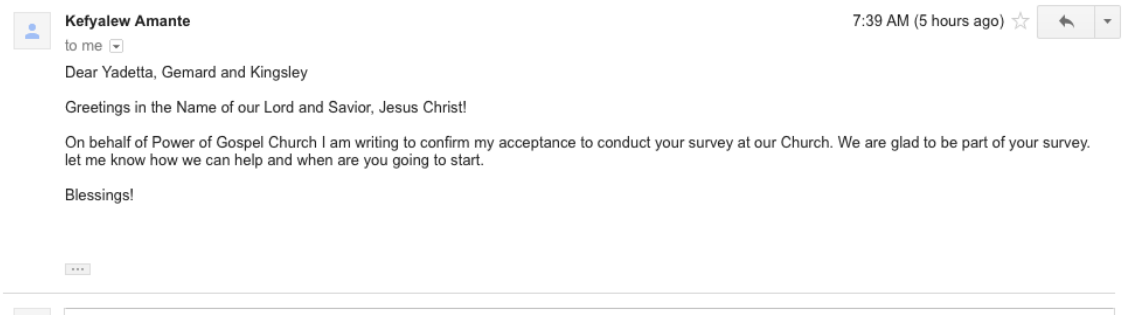
16. Ilaalama wagga-waggaatiif (annual checkups) yeroo fudhattee hin dhaqxaa?
   a. Yeroo hundaa
   b. Takka takka
   c. Lakkii, tasa'iyuu

17. Maaltuu yeroo fudhattee ilaalama wagga-waggaa (annual checkups) akka hin dhaqneef si dhowwa?
    a. Ijoollee eeguu
    b. Hojii irraa eeyyama fudhadhee dhaquuf gatii nabaasisa
    c. Hojii lama, sadii ykn sa'a dheeraa itti dabalee hojedha
    d. Yeroo fudhadhee dhaquuf waanti na ittisu hin jiru

18. Si'a meeqa waggoottan shanan darban kana keessatti mana yaalaa/Kilinika deemte beekta?
    a. 0 (duwwaa) deeme
    b. 1-2 deeme
    c. 3-5 deeme
    d. 6-10 deeme
    e. 11 fi isaa oli deeme

19. Hamma dhaqxe kana keessaa, hagamtu dhukubsattee otuu hintaane, ilaalama wagga-waaggatiif (annual checkups) daqxe?
    a. 0 (duwwaa) deeme
    b. 1-2 deeme
    c. 3-5 deeme
    d. 6 fi isaa oli deeme

Appendix C
Permission to conduct survey



Kefyalew Amante 7:39 AM (5 hours ago)

to me

Dear Yadetta, Gemard and Kingsley

Greetings in the Name of our Lord and Savior, Jesus Christ!

On behalf of Power of Gospel Church I am writing to confirm my acceptance to conduct your survey at our Church. We are glad to be part of your survey. let me know how we can help and when are you going to start.

Blessings!

Appendix D
Informed Consent Form

Dear Participant:

This research is for a Masters level research project for the Bethel University Physician Assistant Program. Our study is investigating Barriers to Preventative Healthcare in Immigrants. We hope to learn what barriers may be preventing immigrants from accessing healthcare.

You were selected as a possible participant in this study because you were born outside the United States.
If you decide to participate, participation involves completing a survey. The survey should take approximately 15 minutes to complete.

If you feel uncomfortable in any way during the survey process, you have the right to decline to answer any question with no penalty.

Facility and administrators from Bethel University will not be present during the survey. The paper copies of the surveys will be stored in a locked cabinet in the PA office at Bethel University. Survey results and statistical analysis will be stored on a secure thumb drive in a locked cabinet in the PA office for a minimum of 5 years.

Any information obtained in connection with this study that can be identified with you will remain confidential and will be disclosed only with your permission. Names will not be collected on the survey to maintain confidentiality of your answers. In any written reports or publications, no one will be identified or identifiable and only aggregate data will be presented.

Your decision whether or not to participate will not affect your future relations with Bethel University or Power of Gospel Church in any way. If you decide to participate, you are free to discontinue participation at any time without affecting such relationships.

This research project has been reviewed and approved in accordance with Bethel University's Levels of Review for Research with Humans. If you have any questions about the research and/or research participants' rights please contact Drew Gernand (Andrew-gernand@bethel.edu), Daleso Yadetta (day98722@bethel.edu), Dustin Kingsley (dwk55475@bethel.edu) or Mary Michener (mary-michener@bethel.edu).

You will be offered a copy of this form to keep.

We understand that you have an extremely busy schedule and your time is limited. Please realize that your participation is vital to the success of this research. The information that you provide is essential to the validity of this study. Thank you in advance for your participation in this study. If you have any questions, please contact Drew Gernand, Daleso Yadetta, Dustin Kingsley or Mary Michener.

Thank you again for your help.

Sincerely,

Drew Gernand, Daleso Yadetta, Dustin Kingsley

You are making a decision whether or not to participate. By taking the survey you have indicated that you have read the information provided above and have decided to participate. You may withdraw at any time without prejudice after signing this form should you choose to discontinue participation in this study.

_____ _____

Signature Date

Appendix E
Hubannoo Unka Walii Galtee

Himaatota keenyaa:
Qorannoon kun barnoota olaana mastersii kan Bethel University sagantaa physician Assistant f kan qophaa'edha. Qoranoon keenya kan inni irraatti xiyeefatuu hawaasa baqatoota keessatti waantoota eeggannoo fayyaatti gufuu ta'an irratti. Hawwin keenya waantoota tajaajila fayyaa argachuutti gufuu ta'an baruudha.

Qorannoo kana keessatti hirmaachudhaaf kan ati filatamteef ati nama USA kana alatti dhalate waan taatef.
Hirmaachuf yoo itti waliif galte hirmaanan kee gaafii fi deebi qorannoon kun gaafatu deebisu gaafata. Gaafi kana guutumaatti deebisuuf daqiiqa 15 si fudhata.

Yeroo gaaffi fi deebi kana guuttu yoo sitti hin tolu ta'e mirga gaaffi kana deebisuu dhiisu guutumaa guuttutti qabda. Deebisuu dhiisu keef adabi sirra ga'u hin jiru.

Yeroo qormaata kana deebiftu qaamni fi bulchiinsi Bethel University si biratti hin argamu. Deebin ati laattu galagalchi isaa saanduqa furtuun eegame waajjira PA Bethel University keessa ta'a.

Firii fi cuunfaan qorannoo kanaa "thumb drive" eegama ta'e saanduqa cufamaa waajjira PA keessa yoo xiqaate waggaa 5'f ta'a.

Oddeeffanoon qorannoo kana wajjin wal qabatee kuufame eenyumaa kee kan mul'isuu yoo ta'e akka icitiitti eegamaa, eeyyaama kee qofaan immoo mul'ifama. yeroo gaaffi fi deebi kana sassabnu maaqan namoota hin funaanamuu kunis icitii deebi keeti eeguf ta'e. Gabaasaf baruulee maxxanfamuu hundumaa keessaatti eenyumaan hirmaatota hundumaa icitiitti eegama. Gabaasa cuunfa walii galaatu dhiyaata.

Hirmaachu keef hirmaachu dhiisun kee kara kam iyyuu hidhata ati Bethel University ykn Waldaa Humna Wangeela wajjin qabdu hin miidhu. Hirmaachuf itti waliif galtee jalqabdee yoo gargar kutuu feete yeroo kamitti iyyuu dhaabuf mirga qabda. Kunis hariiroo kee irraatti miidha hin qabu.

Qorannoon kun gulaalame eeyyaama guutuu akka Bethel University "Levels of Review for Research with Humans" argateera. Waa'ee qorannoo kana ykn waa'ee mirga hirmaatotaa gaaffi yoo qabattee namoota maqaan isaani armaan gaditti eerame quunami. Drew Gernand (Andrew-gernand@bethel.edu), Daleso Yadetta (day98722@bethel.edu), Dustin Kingsley (dwk55475@bethel.edu) or Mary Michener (mary-michener@bethel.edu).

Galagalchi unka kanaa siif kennama.

Akka ati yeroo hin qabne yeroon kees muraasa akka ta'e ni hubanna. Fixaan ba'umsa qorannoo kanaaf hirmaanan kee baay'ee barbaachisaa akka ta'e kabajaan si beeksifna. Qorannoo kanaaf oddeeffannoon ati laattu seera qabeessumaa isaaf baay'ee barbaachisaadha. Qorannoo kana

irraatti hirmaachuu keef dursinee galata guddaa siin jenna. Gaaffi kamiin illee yoo qabaatte namoota armaan gadii quunnami.Drew Gernand, Daleso Yadetta Dustin Kingsley or Mary Michener.

Gargaarsa gootef ammas galatoomi.

Kabajaa wajjin,

Drew Gernand, Daleso Yadetta Dustin Kingsley

Amma hirmaachuu fi hirmaachu dhiisu keef murtoo godhaa jirta. Gaaffii fi deebi kana fudhachuu keen oddeeffannoo armaan oliitti siif dhiyaate dubbiftee, hubattee, itti waliif galuu keeti. Yeroo kamitti iyyuu erga mallateessite booda dhaabu yoo barbaadde jibbiinsa tokko malee qorannoo kanatti hirmaachu dhiisu dandeessa.

_____ _____

Malattoo Guyyaa

Appendix F
IRB Approval

BETHEL UNIVERSITY

Institutional Review Board
3900 Bethel Drive
PO2322
St. Paul, MN 55112

September 16, 2017

Daleso Yadetta
Bethel University
St. Paul, MN 55112

Re: Project FA-09-17 Barriers to preventive care for the immigration population

Dear Daleso,

On September 14, 2017, the Bethel University Institutional Review Board completed the review of your proposed study and approved the above referenced study.

Please note that this approval is limited to the project as described on the most recent Human Subjects Review Form, including email correspondence. Also, please be reminded that it is the responsibility of the investigator(s) to bring to the attention of the IRB any proposed changes in the project or activity plans, and to report to the IRB any unanticipated problems that may affect the welfare of human subjects. Last, the approval is valid until September 15, 2018.

Sincerely,

Peter Jankowski, Ph.D.
Chair, Bethel University IRB