The Asian Health Promoter: Preventative Care for Philadelphia's Vulnerable

I Badar, P Clark, I Stefanic, S Diana, A Chen, A Fogarty, D Odeh, J Huh

Citation

I Badar, P Clark, I Stefanic, S Diana, A Chen, A Fogarty, D Odeh, J Huh. *The Asian Health Promoter: Preventative Care for Philadelphia's Vulnerable*. The Internet Journal of Preventive Medicine. 2024 Volume 22 Number 1.

DOI: 10.5580/IJPRM.57155

Abstract

Abstract The Asian Health Promoter Program of Saint Joseph's University (SJU) Institute of Clinical Bioethics (ICB) is a preventative healthcare initiative. Modeled after the success of pre-existing ICB Health Promoter Programs, the Asian Health Promoter was designed and implemented in February 2023. Through monthly clinics and follow-up referrals, the program provides free medical resources to Philadelphia's Asian population, serving primarily documented, uninsured, and under-insured Chinese, Vietnamese, and Indonesian communities. The clinic offerings are vast, ranging from fundamental health assessments- body mass index, glucose, cholesterol, blood pressure, and pulse oximetry, dental exams, mental health screening, cancer screening, educational resources, and more. Through such services, the program contributes to the development of a more inclusive, equitable, and accessible healthcare landscape in Philadelphia. This paper provides an in depth discussion of the Asian Health Promoter's history, design, future goals, and medical, ethical, and cultural relevance.

INTRODUCTION:

The Nature of the Problem Over the past few decades, the Asian population in the United States has grown rapidly. According to the U.S. Census Bureau, the estimated number of Asians in the U.S. has increased from approximately 15 million in 2010 to 19 million in 2021 [1]. In 2017, the unauthorized immigrant population of Philadelphia was estimated to be around 50,000, constituting 7.5% of 1 the total population [1] and one-quarter of Philadelphia's foreign-born population [2]. That same year, data from The Center for Migration Studies showed that among the 10.7 million undocumented persons living in the United States, 1.7 million were Asian immigrants [3]. In 2019, the Migration Policy Institute estimated that people originally from Asia made up 28% of the total unauthorized population in Philadelphia County [4]. Undocumented immigrants are more likely to be uninsured and less likely to use health care services [5]. Efforts to bridge these disparities in the Asian population must be undertaken to create an equitable healthcare landscape for all living in the United States.

Despite the perceived success of Asian Americans, the community faces significant issues that are often overlooked due to the model minority myth. This myth assumes that Asian Americans are relatively socioeconomically successful, but fails to account for the high degree of heterogeneity within the Asian community[6.] The Asian American community is not a monolithic group. The Asian population of Philadelphia is noticeably diverse in nationality and location. From 2000 to 2016, data indicated that immigrants from Asia were one of the largest foreign born demographics in Philadelphia [7]. In 2016 alone, around 22,100 individuals immigrated from China and 13,700 from Vietnam [7]. The Pew Research Center found the Indonesian population in Philadelphia to be approximately 2,000, making Philadelphia one of the top ten metropolitan cities by Indonesian population [8]. A significant majority of people from East Asia (i.e. China and Korea) reside in lower Northeast and West Philadelphia, as well as Chinatown [7]. In 2013, the Asian American Legal Defense and Education Fund reported that 2,464 residents of Asian or Pacific Islander descent resided in Philadelphia's Chinatown, accounting for about 42% of the entire area's population [9]. Southeast Asians (i.e. from Vietnam and Cambodia) were found to mainly reside in South Philadelphia [7].

There are vast differences between the various sub-nationalities within the Asian community, and such diversity tends to be disregarded. The community is often falsely

considered as a single entity, leading to a lack of understanding of the challenges that many Asian Americans face. For example, the poverty rate among Hmong Americans (12.7%), Vietnamese Americans (10.4%), and Chinese Americans (9.7%) is relatively higher than the overall Asian American poverty rate (7.5%), suggesting the need for a more nuanced understanding of the community [1].

In addition to socioeconomic challenges, Asian Americans also face healthcare-related issues. In the city of Philadelphia, it is reported that 6.8% of the Asian American population is uninsured. Additionally, data from the U.S. Census Bureau shows that about 31% of the Asian population in the United States are less than proficient in English [1]. This could account for significant barriers to healthcare access due to a lack of medical literacy and the ability to communicate with healthcare providers. Ultimately, this language barrier leads to disparities in overall healthcare outcomes. The aforementioned high rates of uninsurance, underinsurance, and poor English proficiency among Asian populations highlight the need for targeted interventions and policies to resolve these disparities.

If current trends continue, the Asian population in the U.S. is projected to grow. This will lead to an increased demand for healthcare services and will highlight the importance of fulfilling the needs of a growing undocumented Asian population. This need is the main purpose that led to the creation of the Asian Health Promoter. The Asian Health Promoter currently serves Chinese, Vietnamese, and Indonesian populations in the Philadelphia area, with the aim of providing accessible and equitable preventative health care resources to underserved populations.

BACKGROUND: THE HISTORY OF THE HEALTH PROMOTER PROGRAM

In efforts to address the lack of adequate healthcare available to Philadelphia's growing African immigrant population, the Mercy Hospital Task Force on African Immigration was established in 2010 by the Mercy Hospital of Philadelphia and the Institute of Clinical Bioethics (ICB) of Saint Joseph's University (SJU). The mission of this Task Force was to design and implement a healthcare clinic tailored to the needs of the undocumented and uninsured African community in Philadelphia. The purpose was twofold: 1) to provide health care services to individuals who are unable to access them independently and 2) to do so in a cost-effective and culturally conscious manner. During the early development and design phase, research was conducted on three different program models: Partners in Health (PIH), Creighton University's Institute for Latin American Concern (ILAC), and a grass root's clinic orchestrated by American-based Dominican Sisters in Las Cruces de Arroyo Hondo, Dominican Republic. Collectively, each of the three programs examined contributed to the construction of a new program in Philadelphia, the Mercy Health Promoter Program. Aimed at bringing third-world healthcare solutions to the first world, this program incorporated the relevant and successful strategies of the models and adapted them to meet the unique needs of resource-poor conditions found in Philadelphia communities.

The overall objective of the Mercy Health Promoter Program was the prevention of complex diseases and management of chronic conditions through education, community engagement, and observation. Furthermore, the Mercy Task Force hoped that its' Health Promoter would serve as a paradigm for other United States hospitals and healthcare facilities to combat the challenges of reducing healthcare costs and expanding access to quality care, especially in light of immigration. The Mercy model was designed to achieve the following goals:

- Create a community based program involving a high degree of community participation
- Provide quality health care services by partnerships with other well established local organizations
- Reducethe cost of healthcare for uninsured or underinsured individuals while upholding a cost-effective approach for all partners (hospitals, health care providers, sponsors, and members of the community)
- Improve the health of the poor and marginalized groups of Philadelphia's immigrant and impoverished communities through education, increased access to primary health care services, and prevention and management of illness

In 2014, the "Mercy Health Promoter Program" became officially known as the "Health Promoter Program," and the Mercy Task Force on African Immigration was dissolved. Since this change, the Health Promoter Program has been ran and operated by The Institute of Clinical Bioethics of Saint Joseph's University. However, partnership with Mercy Hospital remains strong to this day. The Health Promoter is a cooperative and collaborative effort, consisting of community members, the Mercy Hospital administration,

Mercy health professionals, members of Saint Joseph's University Institute of Clinical Bioethics, and the city of Philadelphia. In response to the community needs discovered through the Health Promoter programs, Mercy Hospital opened a pro-bono clinic in November 2012. The Health Promoter now refers patients to the hospital clinic for free follow-up consultation when needed. At the clinic the physicians review any documentation from the Health Promoters; evaluate the patient; and prescribe diet, patient education, medications, or any other medical course of action. Social services are also available to initiate enrollment in Medical Assistance programs to provide more long-term solutions.

The Health Promoter program is also rooted in reciprocity and inclusivity. Ideally, the program generates a sense of community ownership, by encouraging the active participation of community leaders. Such leaders address the wants and needs of their communities through determining the services provided, as well as provide cultural and religious education to the ICB team and all volunteers. Through such efforts, the program simultaneously hopes to train culturally competent medical professionals and establish community trust, participation, and cooperation. In order to foresee the positive impact of the Health Promoter's cost effective mechanism to primary care delivery, communication and confidentiality is critical. To uphold the trust of the vulnerable individuals in attendance, patients are responsible for the possession and maintenance of their medical information in the form of a health screening pamphlet. This pamphlet is discussed in greater detail in the following section, which outlines the clinic's standard operations. This approach dually removed the threat of breach of confidentiality by protecting the patient's identity and places more responsibility in the hands of the patients, hoping to increase the sense of community ownership. If a patient is referred to the Mercy Hospital Clinic or one of the Federally Qualified Health Centers(FQHCs) that we are partnered with, they are to bring their pamphlet with them. From there it may be copied and included in the institutional records with the patient's consent.

The truth of the matter is that the Health Promoter program is costly and utilizes significant resources in the short-term. However, it is believed that the program will prove exponentially beneficial and cost-effective in the long-term. Success of the African Health Promoter at St. Cyprian Church inspired the implementation of several new initiatives across Philadelphia. The Institute of Clinical Bioethics now sponsors the Hispanic Health promoter at Philadelphia's Mexican and Guatemalan consulates, the Black Indigenous People of Color (BIPOC) Health Promoter at Mother of Mercy House in Kensington, and the Mobile/ Rural Health promoter that brings the program's services to impoverished regions in Pennsylvania, NewJersey, and Delaware. The aforementioned programs served as models through which the Asian Health Promoter was inspired, designed, and implemented, and through which it continues to evolve. The duration of this paper outlines the specifics of the Asian Health Promoter.

THE ASIAN HEALTH PROMOTER MODEL IN ACTION

A. Health Care Services Offered

The general clinic provides minority and immigrant communities the opportunity to have their body mass index, pulse oxygen saturation, blood pressure, blood glucose, and total blood cholesterol levels measured and evaluated. Upon entry to the clinic, each patient receives a health screening pamphlet to record said measurements. The purpose of the pamphlet is merely to allow the patient to recall and discuss their values with a physician, and it is important to note that no identifying information is collected nor recorded on this document. Monitoring the aforementioned values promotes the early detection of hallmarks of preventable chronic illnesses. Therefore, the services of the clinic are designed to prevent the development of costly medical conditions and enable community members to take control of their health, adopt healthier lifestyle practices, and postpone the advancement of illness. By informing an individual of their levels on such parameters they can adjust their dietary and exercise regimen in order for their levels to fall within the normal limits. The previously alluded to screenings provide the foundation of the general clinic and serve as the first set of stations patients attend during the Health Promoter. They are described in greater detail below.

Height, Weight, and Body Mass Index

When a patient first arrives at the Health Promoter program, they are greeted by a program coordinator and directed to the height, weight, and body mass index station. Here, the patient will receive a pamphlet in which all the clinical data collected throughout their visit will be recorded. After receiving this pamphlet, they are instructed to step on the scale and their weight is then recorded. Next, the individual's height is recorded using the stadiometer attached to the scare. Their body mass index (BMI) can then

be calculated directly using the BMI function of the scale. Calculating BMI can determine whether or not an individual's height and weight fall within a healthy ratio range, between 18.5 and 24.9 [10]. Elevated BMI levels are positively correlated with cardiac disease, diabetes, and high cholesterol, and therefore by informing an individual of their BMI, efforts to prevent the development of such conditions can be taken when necessary.

Blood Pressure and Pulse Oximetry

Utilizing an automatic blood pressure monitor, the patient's systolic and diastolic blood pressure is recorded. A healthy individual should have a blood pressure reading of approximately 120mmHg/80mmHg [11]. Obtaining blood pressure values determines if a patient is hypertensive, experiencing elevated blood pressure levels. While individuals may experience acute spikes in blood pressure during periods of stress, long term or chronic hypertensive can have severe health complications, including increased likelihood of stroke, heart attack, heart failure, aneurysm, and kidney disease [10].

Next, the patient's oxygen saturation (%) and heart rate (beats per minute is collected using the pulse oximeter. Pulse oximetry can determine if a patient is hypoxic. Pulse oximetry is a method to check if an individual is afflicted with any conditions that would lower blood oxygen levels including heart failure, pneumonia, chronic obstructive pulmonary disease, or anemia. A normal pulse saturation should fall between 95%-100%. [12]. Lastly, the heart rate value can help determine whether an individual has a heart arrhythmia. An abnormally slow heart rate, bradycardia, can be caused by heart tissue damage, myocarditis, and metabolic imbalances [13]. An abnormally fast heart rate , tachycardia, can be caused by damaged heart tissue, anemia, and an abnormal blood pressure.[14].

Blood Glucose and Cholesterol

Utilizing a 'push-button safety lancet', a disinfected finger will be pricked for blood. The tip of the glucose strip will be dipped into the blood sample and the blood glucose levels will be shown on the glucometer's display screen. Blood will be transferred to the cholesterol testing strip with a capillary tubule, and the total cholesterol levels will be shown on the CardioChek Cholesterol Analyzer's display screen. Elevated glucose or cholesterol levels in the bloodstream are indicators for many chronic diseases. Unregulated diabetes, which is a disease characterized by elevated blood glucose, can lead to the damage of the blood vessels. This increases the chances of myocardial infarction or a cerebrovascular accident [15]. The normal blood glucose levels for a non-diabetic should fall between 80-99 mg/dl when fasting [16] and 140 mg/dl following a meal [17]. Having elevated levels of low-density cholesterol in one's blood is a risk factor for myocardial infarction and cerebral vascular accident, because it leads to atherosclerosis and the narrowing of the arteries [18]. The normal total cholesterol levels in a healthy individual should fall between 125-200 mg/dl [19].

Supplemental Services

After completing the previously described stations, the patient is directed to the clinic's supplemental services. Patients will have the opportunity to complete a simple eye evaluation to determine if he or she is in need of reading glasses, and will then be able to receive a free pair of glasses of their necessary prescription. Then they can visit the Healthy Mothers station which provides materials to assist expecting mothers and adult women, including prenatal vitamins, educational resources, a "Pack n' Play", and $100 worth of infant care supplies (pacifiers, diapers, wipes, thermometer, bottle, etc). Adult and children's multivitamins are also distributed at this station. At the dental station, pre-dental or dental school students perform dental examinations and fluoride treatments under the supervision of a licensed dental clinician. If deemed appropriate, a patient can be referred to dental clinics at the University of Pennsylvania and the Temple University for annual follow up. To lessen the cost of dental care, the partnering clinics work on a sliding-scale payment system to offer patients a unique and affordable payment plan. Service will not be denied for any reason. Further, adult and children's dental kits, which include toothbrushes, toothpaste, and floss, are distributed, and pre-dental students perform educational puppet demonstrations to teach children how to properly brush their teeth.

Partnerships

The Health Promoter Programs are also in collaboration with SJU's Pharmacy, Physical Therapy, and Occupational Therapy Departments, students undergoing professional training in these areas provide services to the community under the supervision of their professors. At the pharmacy station, pharmacy students perform a drug reconciliation with the patients to determine any medications that the patients may already be prescribed. This will aid in the

patient's later discussion at the medical residents station. At the physical and occupational therapy station, patients are able to receive an overall examination. If, during the course of this evaluation, a problem is identified, the patient can be referred SJU's free physical therapy clinic. The University of Pennsylvania School of Medicine's Department of Hematology and Oncology provides breast, lung, cervical, colorectal, and prostate cancer screenings to all individuals interested. Following the screening, the individual is eligible for follow-up and treatment with the institution if necessary. Additionally, Drexel Health Outreach Partnership and Empowerment (HOPE) offers free Hepatitis C and HIV testing with follow up treatment. There is then the opportunity for the patient to receive fresh produce free of charge from Sharing Excess, an organization at SJU where surplus food is collected from local food distributors and redistributed to the community to eliminate both food scarcity and food waste. Horizon House, an organization that works with adults with behavioral health needs, provides a range of financially assisted services, including community based treatments and psychiatric rehabilitation.

Medical Residents and Mercy Ambulatory Clinic

After the patient has completed all the offered screenings described above and the information is recorded in their pamphlet, they are then encouraged to speak one on one with a medical resident about their results. During this conversation, the physician is able to explain the data to the patient and address any concerns that the patient or the physician may have. This effort takes direct action to overcome the barriers to healthcare access and health literacy that confront minority and immigrant populations due to linguistic, cultural, financial, and insurance barriers. For each Asian Health Promoter session, there are two to three medical Residents present on site, primarily employed by the Mercy and Jefferson Hospital Systems. The community benefits from having Medical Residents volunteer because they provide further insight on the data collected throughout the program, explain what the quantitative values mean in regards to overall health, and give advice on the next steps towards a healthier lifestyle. Moreover, Residents can provide further medical evaluations if a serious issue presents itself.

Following their evaluation and discussion, if a patient is in need of further healthcare, the Medical Residents fill out a MCMC/ICB Referral Form to the ambulatory clinic at Mercy Catholic Medical Center, which serves as documentation that the patient was seen at the Health Promoter. With this form, the patient can call to schedule a free appointment at the ambulatory clinic to be seen by the medical staff. During this appointment, they can obtain additional exams and procedures, most of which are free of cost or relatively low cost to the patient. These services may include chest X Ray, complete blood count (CBC) lab panel, lipid chem panel, AIC, etc. If this location is inaccessible for the patient, the Health Promoter Program works in collaboration with various FQHCs in the Pennsylvania, Delaware, and New Jersey area to ensure that a free follow up consultation is available to all attendees.

B. How it was Designed and Implemented

This initiative was first suggested by a freshman student at Saint Joseph's University, who recognized the potential for such a program to address the unmet healthcare needs of the underserved Asian population in Philadelphia's Chinatown. This suggestion created a novel goal for the Institute that aimed to bridge the cultural divide between the University and a community facing challenges in healthcare accessibility. Such obstacles are primarily due to linguistic barriers, as well as a degree of skepticism about healthcare assistance provided by individuals outside their community.

The first step of designing the program was to strengthen the Institute's understanding and knowledge of the community. The Chinatown neighborhood of Philadelphia is the center of interest for many Asian individuals. It is where classic Asian food markets and restaurants are concentrated and where different Asian financial institutions and corporations are located. Knowledge of the area and its historical and cultural significance allowed the ICB to find a place of interest to host the Asian Health Promoter that would be central to Philadelphia's Asian community. Through the support of an ICB fellow who is a engaged member of the church community, The Chinese Christian Church and Center (CCCNC), consisting of predominantly, Mandarin and Cantonese individuals, was selected to host the Asian Health Promoter program, and this was the location for the first Asian Health Promoter in February 2023. Churches are often chosen as sites to house Health Promoter programs as they provide a safe and comfortable place for minority and immigrant groups who may otherwise feel unwelcome in different sectors of society. Taking root in a trusted environment tailored specifically to the cultural, linguistic, and health needs of the Asian population was vital in

ensuring the Asian Health Promoter's success.

After selecting the location to host the clinic, assembling a team to orchestrate and facilitate the program was the next step. The team was selected personally by the Director of the ICB based upon merit and expressed interest. Given the title Program Coordinator, the selected individuals were current undergraduate and post baccalaureate students of SJU and research fellows of the ICB. Each selected coordinator was assigned a specific role and set of delegated 13 tasks they are responsible for completing in order to ensure that the clinic operations run efficiently and effectively. Amongst the coordinator team, a lead coordinator will be selected to serve as the official liaison between the Health Promoter Team and the Asian community. This role directly facilitates the day to day communication between the ICB and the church in which the promoter is held. Coordinators are responsible for advertising to, acquiring, selecting, and assigning roles to the program's undergraduate, graduate, and medical school volunteers and translators, as well as medical residents. All coordinators are in charge of maintaining supply inventory, are required to be SJU van trained and certified, and are responsible for training volunteers on the operation of each station. Experienced coordinators who have served on the project for an extended period of time are also responsible for training new leaders on the numerous factors of the coordinator role. A pivotal component of the coordinator role is outreach and advertisement. Coordinators are in regular communication with the church, community partners, and community members, so that all parties are on the same page. This includes but is not limited to medical residents, dentists, dental students, physical and occupational therapists and their students, pharmacists and pharmacy students, SJU Sharing Excess, and Drexel Hope, Penn Oncology, and Horizon House that provide various screening services.

The Asian Health Promoter had a unique development since its inception in February 2023. Three clinics were held at Chinese Christian Church and Center in Chinatown, Philadelphia in February, March, and April. The first promoter was successful in that over 80 individuals were seen in a three-hour duration. As the Health Promoter continued at the Chinese Christian Church, a significant decrease in attendance was experienced. As by the initial design of the Mercy Health Promoter programs, community ownership is an essential tenet of each program's success. The ICB team worked alongside the Chinese Christian Church and Center 14 leaders to identify a new location to best suit the needs of the Chinatown community. The program participated in the 14th Annual Philadelphia Chinatown Development Corporation Expo in June of 2023 at Chinatown's Crane Center. This event proved to be successful in seeing a large number of patients and providing opportunities for the development of new community partnerships. Through such partnerships, a permanent home for the Asian Health Promoter Program was found in St. Thomas Aquinas Catholic church in South Philadelphia. St. Thomas Aquinas Church's congregation consists mainly of Vietnamese and Indonesian parishioners, and the community of South Philadelphia includes a diverse array of Asian ethnicities. Efforts were made to modify the program to better serve the needs of the new communities, and this new partnership provides an atmosphere of trust and longevity required of preventive health care, as the Health Promoter clinic is held on a bimonthly basis.

MEDICAL ANALYSIS

As per a report by the CDC in 2022, the percentage of Asian adults of age 18 and older in fair or poor health was 10.3%. The same report mentions that percent of men age 20 and older with hypertension (with elevated blood pressures on presentation or currently taking antihypertensives) was 49.4%. The number was 43.6% in women. The leading cause of death in the Asian American population is cancer, followed by heart disease. This correlates directly to a report by the National Institute of Minority Health and Health Disparities (NIMHD) which identifies the Asian American population as the only one U.S. population with cancer as the leading cause of death. The report denotes limited English proficiency as one of the biggest reasons for the health disparity along with differing cultural beliefs. It also mentions a lack of familiarity with the American health system as a contributing factor leading to an incomplete comprehension of instructions at their doctor's office. Furthermore, it mentions that this 15 population in general has the lowest number of cancer screening rates, mainly due to a lack of understanding of the preventable nature of the condition and these patients tend to be diagnosed at a much later stage as compared to other ethnic groups.

There have also been multiple studies done to gain an insight into the health variations among different Asian American populations. One such study points to a higher risk of cardiometabolic disease such as hypertension, coronary artery disease, stroke and type 2 diabetes mellitus in patients with Asian American heritage. This also normally occurs at a lower BMI as compared to other races.

Studies have also indicated that patients that are first generation immigrants (with a longer residence in the U.S.) or people that were born in different countries and then migrated to the U.S. were associated with a higher risk of cardiometabolic diseases compared to a U.S. born caucasian population.

Another significant contributory factor to increased health issues in the Asian American population has been the prevalence of high levels of stressors. This was identified in a study done which showed a direct association between higher perceived levels of stress and a lack of social support with hypertension in patients with Chinese heritage. Some of these stressors might directly be linked to language barriers, being unaccustomed to a new culture or a new environment, or problems faced with future generations being more assimilated than their parents. For these reasons, and generalized health disparities, a health promoter program was established on an existing model specifically catering to an Asian American population.

Since its inception, the Asian Health Promoter program has grown significantly in size. Between the months of February 2023 and March 2024, the number of people seen at each health promoter grew from 80 to over 150. With the patient population doubling in size, it is clear that there was a significant need in the community that was now able to be addressed. With the growing population, there has also been an increased demand of medical residents present at these health promoters. The role played by the medical residents is one of providing health education, and interpretation of data. As mentioned earlier the medical residents provide further insight on the data collected throughout the program, explain what the quantitative values mean in regards to overall health, and give advice on the next steps towards a healthier lifestyle. The medical residents can also provide the individual guidance if there are urgent interventions that need to be taken, such as triaging in order to send to the emergency department, if required.

The Asian Health Promoter almost exclusively deals with a patient population of 18 years of age and older. Of this, 60-70% are females. At the resident's station, the most common issue encountered is elevated blood pressure and elevated cholesterol. These are typically healthy appearing adults with underlying undiagnosed hypertension. Some adults, or recent immigrants, might still be taking medications that have been prescribed by their previous physicians in another country. This, coupled with an inability to acquire insurance after immigration, usually leads to non-adherence to medications in the fear of running out, and the patients lean into a more "as needed" approach, taking their blood pressure medications when they think the need arises. Some patients might also be taking alternative medications or herbal remedies to manage their high blood pressure.

It is important at this time to ensure that cultural beliefs are not trivialized. Instead, the patients are provided with objective data regarding the risks of elevated blood pressure and strategies to decrease blood pressure including, but not limited to, adherence to a good anti-hypertensive regimen and dietary modifications. This includes adherence to the Dietary Approaches to Stop Hypertension (DASH) diet and they are provided with information regarding the same. There have, however, been instances when due to severely uncontrolled hypertension with systolic blood pressure (SBP) >200 mmHg that patients have been asked to go directly to the emergency department regardless of insurance status under the Emergency Medical Treatment and Active Labor Act (EMTALA) to prevent immediate consequences.

Dietary modification is also key for glycemic control in the patient population as a high majority of patients encountered at the health promoter events might have undiagnosed diabetes. This is assessed by point of care (POC) fingerstick testing done on the first station when patients enter. At the resident's station patients are provided with information regarding normal blood glucose levels, along with an interview is done to discuss their diets and how it might be contributing to their increased blood glucose levels. They are further provided with information regarding risks and consequences of undiagnosed diabetes mellitus. A recurring theme when asked about patient's diets has been the consumption of white rice. Patients are provided information regarding the higher incidence of diabetes with the consumption of white rice and counseled on the use of healthier alternatives for diabetes, such as the Mediterranean diet.

Some of the most important screening tools established at the health promoter programs were the stations for cancer, cardiac and rheumatological screening. The cancer screening station was set up by The University of Pennsylvania School of Medicine's Department of Hematology and Oncology. This station provides breast, lung, cervical, and colorectal cancer screenings to all individuals interested. Following the screening, the individual is eligible for follow-up and treatment with the institution if necessary. They are also given the opportunity to ask questions regarding the

prevalence of the diseases, the need for testing and ways to identify symptoms in order to aid in early diagnosis. The aim of establishing this was to decrease the higher rates of late stage cancer diagnoses in Asian Americans.

For cardiac screening, during intake, the students ask questions regarding the patient's family history, medical history and social history in order to calculate a HEART score. This data is then provided to the residents in order for them to have a conversation with the patient's to make lifestyle modifications and/or establish a primary care visit to address their high cardiac risk factors. Furthermore, recently the Asian Health Promoter program acquired two Kardia devices in order to do spot electrocardiograms on high risk patients in order to detect life-threatening arrhythmias such as atrial fibrillation.

Due to the higher prevalence of rheumatoid arthritis in the Asian American population, a station for rheumatoid arthritis screening was set up. During intake, the students ask questions to patients regarding morning stiffness, joint pain and family history of autoimmune conditions, scoring every answer between 0 (not present)- 1 (present). This score allows the residents to decide when to do a focused joint exam on patients that score higher on the survey. These patients are then referred to their primary care provider in order to test for disease markers, with an aim of eliminating the need for blood test in order to diagnose rheumatoid arthritis in high risk populations.

In the one year of the Asian Health Promoter providing health education to the Asian American population, we have already seen patients that have attended the health promoters regularly and have been able to vocalize understanding of things that were taught to them on their previous visits. They have also endorsed adherence to healthier lifestyles which has led us to believe that the health promoter model is working. However, there is much work to be done when it comes to treating vulnerable populations. This includes patients that might be uninsured or might not have the health literacy, or even be faced with language barriers. The aim of the Health Promoters is to equip the general population with the tools required to understand their diseases and for them to have open conversations with their providers at subsequent visits. We hope that this model is expanded upon with further incorporation of other disciplines, in order to provide better all-encapsulating care to patients that are high risk.

ETHICAL ANALYSIS

In the last four decades, this nation has been trying to improve the quality of our health care delivery system. Despite the efforts to increase the quality in health care, disparities continue to be prevalent and have led to unjust consequences for racial and ethnic minorities. Advances in technology and a better understanding of the disease process have greatly improved due to research in the field of medicine. This has contributed to better management of the disease process, which has in turn improved the morbidity and mortality rates of many patients and increased life expectancy in this country. Unfortunately, this effect is being seen predominantly among white Americans while other ethnic groups are still vulnerable, especially inner-city Asian populations. Even though, our health care system, in principle, is considered to be the best in the world it has its own flaws and has left millions of Americans as well as documented and undocumented individuals with inadequate health care or no access to basic health care services.

"According to U.S. Census numbers, thirty-nine percent of Philadelphia's foreign born come from Asia, making Asians the largest share of Philadelphia's immigrants. Among Philadelphia's 1.5 million population, 8% are Asians, based on the estimate report from U.S. Census Bureau released in July 2022." [31] The Asian population hails from 15 countries from China to Indonesia to Vietnam to Pakistan. They have brought with them numerous languages (Khmer, Mandarin, Tagalog and Urdu) various faiths and many different philosophies. Consequently, regional hospitals have seen an increase in undocumented patients, many uninsured or underinsured. This population has special needs which physicians and hospitals are not well-equipped to provide. The majority of this community is suffering from chronic diseases such as hypertension, diabetes, Hepatitis B and Hepatitis C, obesity, etc. As health care providers, our duty is to improve the health of the community we serve. To achieve this goal, it is important to understand the diseases prevalent in this community and to develop services tailored to meet these needs. This is certainly a medical problem, but it is also an ethical problem for all Americans. To allow race and ethnicity to play any role in providing health care to our fellow brothers and sisters goes against the basic principles of morality. It will be argued that—according to the ethical principles of respect for persons, beneficence/nonmaleficence, and justice—action must be taken immediately to address these concerns. Such action will not only save lives but will also do much to rebuild a sense of trust between the minority community and the

medical establishment.

Respect for Persons

This principle incorporates two ethical convictions: first, that persons should be treated as autonomous agents; and second, that persons with diminished autonomy are entitled to protection. The principle of respect for persons thus divides into two separate moral requirements: the requirement to acknowledge autonomy and the requirement to protect those with diminished autonomy. [32] Respect for human persons refers to the right of a person to exercise self-determination and to be treated with dignity and respect. All people deserve autonomy and to be treated with dignity and respect. Failure to provide any person with adequate health care, regardless of their race, creed, color, national origin, sexual orientation, etc., violates this basic right of respect for persons. Fear that undocumented individuals will be turned over to the U.S. Immigration and Customs Enforcement (ICE) agency if they seek medical care violates personal freedom. It subjects all undocumented persons to the most terrible form of slavery, to be constantly afraid, not knowing their condition or fate, and constantly fearing not living. This way of living does not promote human rights, it violates them.

Second, minorities in this country, especially the undocumented, are the most vulnerable people. When Asian refugees, asylees and immigrants arrive, they are often traumatized and shocked. They usually have no jobs and no financial support on which to fall back. In addition, they are in poor health, often because they have moved from town to town or from one refugee camp to another. The children may have not been in school for several years, or they may have not been to school at all. As is often the case in refugee-producing situations, women and children become the most vulnerable members of the refugee community. Statistics show that racial and ethnic minorities are generally poorer than whites and more likely to have family incomes below 200 percent of the federal poverty level. In 2002 more than half of African American, Hispanics and American Indians/Alaska Natives were poor or near-poor. Racial and ethnic minorities are more likely to be uninsured as well. [33] This vulnerability compounded with racial disparities give these individuals diminished autonomy. In 2002, an Institute of Medicine (IOM) report, which was requested by Congress, reviewed more than 100 studies that documented a wide range of disparities in the United States healthcare system. This study found that racial and ethnic minorities in the United States receive lower health care than whites, even when their insurance and income levels are the same. The IOM report made it clear that disparities between whites and minorities exist in many disease areas. [33] These disparities are even greater among the undocumented population. Giselle Corbie-Smith, MD, and her colleagues found that minorities were "more likely to believe that their physicians would not explain research fully or would treat them as part of an experiment without their consent." [34] Medical abuses have come to light through the oral tradition of minority groups and published reports. Minorities believe that their physicians cannot be trusted, that physicians sometimes use them as guinea pigs in experiments, and that they are sometimes not offered the same medical procedures that whites are offered, even though they have the same clinical symptoms. [34] This fear and mistrust among the minority population in the United States is magnified with documented and undocumented individuals.

The result is that many undocumented and even documented Asian immigrants in the Philadelphia area are not seeking medical care until they are in the last stages of their disease. The reason for this, according to those who work with this population and have gained their trust, is a mistrust of the medical establishment and a fear that if they present to an Emergency Department and are found to be undocumented that they will be turned over to the Immigration and Customs Enforcement (ICE) for deportation. Unfortunately, this has happened in several cases. Even though Catholic hospitals in the Philadelphia area will not contact ICE in these situations, there is still a great fear among this population. Because of this fear, these individuals enter the medical system only out of desperation, when they can no longer stand the pain or have collapsed in a public setting. In most cases, the disease has progressed to the extent that treatment is often futile or extremely expensive. This sense of fear among the undocumented population violates the basic principles of respect for persons. Failure of the medical establishment to give this population adequate health care or to withhold treatment that is the "standard of care" because the individual is undocumented or unable to afford said treatment is denying these individuals their basic rights of dignity and respect. The medical profession is based on treating all people with dignity and respect. Until we can show an improvement in the overall quality of care and work to aggressively promote public health interventions on such diseases as hypertension, diabetes, obesity and even HIV for minorities in general and the undocumented specifically, we will never gain the trust of the minority communities and will never close the ever-widening gap in quality of care.

The failure of the medical profession to be proactive in addressing the medical needs of this most vulnerable population is causing needless suffering and even death. This clear form of prejudice clearly violates the ethical principle of respect for persons. Minority patients' autonomy and the basic respect they deserve as human beings are being violated because they are allowed to endure pain, suffering, and even death when such hardships could be alleviated. All hospitals, and especially Catholic hospitals, governed by the Ethical and Religious Directives for Catholic Health Care Services, have a moral and ethical obligation to address the medical disparities that exist in minority communities. [35] If Catholic hospitals are committed to treating every person with dignity and respect, then the barriers to health care must be lifted to ensure this commitment, and emphasis must be placed on patient dignity and empowerment.

Beneficence/Nonmaleficence

The principle of beneficence involves the obligation to prevent, remove, or minimize harm and risk to others and to promote and enhance their good. Beneficence includes nonmaleficence, which prohibits the infliction of harm, injury, or death upon others. In medical ethics, this principle has been closely associated with the maxim primum non nocere ("Above all, do no harm"). Allowing a person to endure pain and suffering that could be managed and relieved violates the principle of beneficence, because one is not preventing harm and, therefore, not acting in the best interest of the patient. The duty to act in the patient's best interest must take preference over a physician's self-interest.

Physicians have, as moral agents, an ethical responsibility to treat their patients in a way that will maximize benefits and minimize harms. Failure to adequately assess and manage medical conditions, for whatever reason, is not in the best interest of the patient. "As of 2022, there were 45.5 million immigrants residing in the U.S., including 21.2 million noncitizen immigrants and 24.3 million naturalized citizens, who each accounted for about 7% of the total population."[36] This does not include the number of illegal immigrants spread throughout the United States. According to the Pew Research Center, "as of 2021, the nation's 10.5 million unauthorized immigrants represented about 3% of the total U.S. population and 22% of the foreign-born population. [37] "As of 2023, half (50%) of likely undocumented immigrant adults and one in five (18%) lawfully present immigrant adults report being uninsured compared 25 to less than one in ten naturalized citizen (6%) and U.S.-born citizen (8%) adults. Noncitizen immigrants are more likely to be uninsured than citizens because they have more limited access to private coverage due to working in jobs that are less likely to provide health benefits and they face eligibility restrictions for federally funded coverage options, including Medicaid, the Children's Health Insurance Program (CHIP), Affordable Care Act (ACA) Marketplace coverage, and Medicare."[36] For example, according to the Centers for Disease Control and Prevention, the percentage of undiagnosed diabetes cases in the USA between 2017-2020 was on average 3.4%. For the Asian community it was 5.4% for the Hispanic community it was 4.4%, however for the white community it was 2.7%. [38] Those who are eligible for coverage also face a range of enrollment barriers including fear, confusion about eligibility rules, and language and literacy challenges. One can assume that if the situation is as bad as it is with minority citizens, the situation with the undocumented foreign population must be even worse.

It is clear, after reviewing these statistics and identifying the biases and stereotyping that exist in the medical profession, that disparities in U.S. health care expose minority patients, especially the undocumented Asians, to unnecessary risks, including possible injury and even death. Physicians have a moral responsibility to do what is good for their patients. Should a physician be impeded in the exercise of his or her reason and free will because of prejudice or bias on the part of the medical establishment, then that physician has an ethical responsibility to overcome that impediment and do what is demanded by the basic precepts of medicine—seek the patient's good. Hospitals also have a responsibility to their communities. If hypertension, diabetes, obesity, and Hep B and Hep C are major issues in the undocumented community of people that a particular hospital serves, then it is the ethical responsibility of hospital administrators and health care professionals to formulate programs that address this immediate need. Failure to recognize prejudice and bias is a failure not only of the test of beneficence; it may also be a failure of the test of nonmaleficence.

Justice

This principle recognizes that each person should be treated fairly and equitably, and be given his or her due. The issue of medical disparities among minorities and especially among the undocumented also focuses on distributive justice: the fair, equitable, and appropriate distribution of medical resources in society. At a time when reforming healthcare in this country has become a high priority, failure to initiate preventative measures that would save medical

resources in the long-run violates the principle of distributive justice. The justice principle can be applied to the problem under discussion in two ways.

Inequality concerning adequate health care for Americans is a well-documented fact. For years this inequality was attributed to socioeconomic causes resulting in a lack of access to care. With the publication of the 2002 IOM report, however, it is apparent that subtle racial and ethnic prejudice and differences in the quality of health plans are also among the reasons why even insured members of minorities sometimes receive inferior care. Prejudice and negative racial and ethnic stereotypes may be misleading physicians and other healthcare professionals. Whether such bias is explicit or unconscious, it is a violation of the principle of justice. It has been documented that members of minority groups are not receiving the same standard of care that whites are receiving, even when they have the same symptoms. For example, "compared to other racial and ethnic groups, Asian Americans and Pacific Islanders are:

 Least likely to report having a personal doctor. In fact, 19.4% of Asian adults compared to 12.9% of whites report being without a usual source of health care. Cambodians and Vietnamese are three times more likely to skip doctor visits due to cost compared to all Asians or U.S. residents.

 Less likely to have blood pressure monitoring and pap smears. Cervical cancer screening rates are significantly lower among Asian American women in California compared to the general population. Only 60.5% of Vietnamese women reported receiving a pap test in the past three years compared to 86.2% of all women in California.

 Poorer quality care. Native Hawaiians and other Pacific Islanders report having poorer quality care. For example, they receive less prenatal care in the first trimester and have higher infant mortality than whites.

 Higher disease incidence. The incidence of breast cancer among AAPI women increased from 87.0 to 97.8 cases per 100,000 women from 1990 to 2001, a growth rate that has increased faster than any other racial/ethnic group." [39]

The principle of justice also pertains to the fair and equitable allocation of resources. If the incidence of breast cancer has increased in Asian women faster than any other racial/ethnic group, in many cases because of a lack of adequate medical treatment, then the principle of distributive justice would dictate that programs should be implemented to screen, assess and treat Asians and other minorities, especially the undocumented Asian population, not only for their benefit but also to benefit society as a whole. Failure to do so is a blatant disregard of the principle of justice.

We Americans espouse the belief that all men and women are created equal. Equality has also been a basic principle of the medical profession. If we truly believe in equality, we should insist that all men and women must receive equal medical treatment and resources. Denying certain minorities medical treatment, when whites receive them as a standard of care, is an unjust allocation of resources and violates a basic tenet of justice. Physicians and the medical profession have an ethical obligation to use available resources fairly and to distribute them equitably. Failure to do so is ethically irresponsible and morally objectionable. To compromise the basic ethical foundations upon which medicine stands is destructive not just to minority patients but to society as a whole.

To address these medical and ethical concerns, the Asian Health Promoter Program is an initiative whose foundation is based on an established program in developing nations, which has not only increased medical care in these areas but has also saved countless lives. As the undocumented population continues to increase in the United States, and health care costs continue to skyrocket, this new initiative can become a paradigm for all hospitals in the United States. Racial and ethnic disparities in health care constitute a complex issue that pertains to individuals, institutions, and society as a whole. Unless we Americans address these disparities and begin to eradicate them, we will never attain the goal of equitably providing high-quality health care in the United States. The Asian Health Promoters model will not only save valuable medical resources; it will also save precious human lives. If we do not make this a priority now, everyone will pay a price in the future.

RECOMMENDATIONS AND CONCLUSIONS

Since its inception in 2023, the Asian Health Promoter Program continues to strive towards innovation and progression. With the goal of bringing the highest quality care to Philadelphia's most vulnerable populations, the following recommendations have been determined:

1. Maintain existing community partnerships, formalize developing partnerships, and continue to seek out partnerships opportunities that will address the communities unmet needs. This includes prioritizing the partnership between the Asian Health Promoter Program and Horizon House Inc. to address the prevalent mental health and

wellness concerns within Philadelphia's Asian community.

2. Develop relationships with Asian student associations, organizations, and clubs at local Philadelphia high schools, universities, and graduate schools. A specific focus should be placed on engaging with students in the region's medical and health professional schools. The goal is to bring in medical representatives that the patients can identify with ethically and culturally, as well as overcome the language barrier.

3. Recognizing the recurring successful turn out of St. Thomas Aquinas Church's Indonesian members, the Asian Health Promoter, aims to broaden its marketing appeal to reach more communities within the church and its surrounding neighborhood, with a specific focus on the Vietnamese congregation.

4. Toenhance the smooth operation of the clinic, an identifiable marker, such as a large and brightly colored badge or t-shirt, for bilingual translators should be implemented.

5. Returning the required sample is a vital component of cancer screening and the related partnership with Penn Oncology. Bilingual translators from within the community and amongst the volunteers should be educated on the importance of this process and recruited to facilitate follow up communication to ensure it is completed. This would entail reaching out to individuals over the telephone. In order to protect the privacy of the patient, a written consent to be contacted following the clinic will be required for any contact to be made.

6. Amongst the ICB's Health Promoter Programs, the Asian Health Promoter Program at St. Thomas Aquinas Church is the most organized and coordinated. This is due largely to strong community engagement, participation, and ownership. During each clinic, members of the community volunteer as translators or work alongside the coordinators to run the event, including creating a sign in list, forming a queue, and calling up patients to begin the clinic one by one. Based on its success, the Asian Health Promoter Program will serve as the model for developing community partnerships and implementing novel Health Promoter Programs in the future.

The Asian Health Promoter Model is a micro-sized system with the ability to tackle the issues presented in the Triple Aim under the Patient Protection and Affordable Care Act (PPACA). The goal of the PPACA is to reduce medical costs, save health care resources, and most importantly provide patients access to the healthcare system prior to developing chronic or end-stage conditions so that they can live fuller, healthier lives. In the process of doing so, special attention is given to the principles of beneficence and distributive justice by highlighting the human dignity of each person no matter race, ethnicity, creed, socioeconomic status or immigration status. Our work with the Asian Health Promoter Model in collaboration with local communities with a large number of undocumented residents has the opportunity to set a precedent and offer a framework for future applications across the country and the globe. Thus, this developing nation community-based model has the ability to serve as a paradigm for other hospitals across the nation in treating some of the most vulnerable members of our society– the undocumented, while also empowering their own health and well-being

References

1. U.S. Census Bureau. "SELECTED POPULATION PROFILE IN THE UNITED STATES." American Community Survey, ACS 1-Year Estimates Selected Population Profiles, Table S0201, 2021, https://data.census.gov/table/ACSSPP1Y2021.S0201?q=S0201&t=012:031.
2. Eichel, Larry, and Thomas Ginsberg. "Unauthorized Immigrants Make up a Quarter of Philadelphia's Foreign-Born." The Pew Charitable Trusts, The Pew Charitable Trusts, 15 Feb.2017, www.pewtrusts.org/en/research-and-analysis/articles/2017/02/15/unauthorized-immigrants-in-philadelphia.
3. "Inside the Numbers: How Immigration Shapes Asian American and Pacific Islander Communities." Asian Americans Advancing Justice, Asian Americans Advancing Justice, June2019,www.advancingjustice-aajc.org/sites/default/files/2019-09/3_1153_AAJC_Immigration_Undocumented%20Immigrants.pdf.
4. "Profile of the Unauthorized Population: Philadelphia County, PA." Migrationpolicy.Org, Migration Policy Institute, 1 Apr. 2024, www.migrationpolicy.org/data/unauthorized-immigrant-population/county/42101#regionsbirth.
5. Ledford, Meredith King. "Immigrants in the U.S. Health Care System: Five Myths That Misinform the American Public." Center for American Progress, 7 June 2007,www.americanprogress.org/article/immigrants-in-the-u-s-health-care-system/.
6. Yi, Varaxy, and Samuel D. Museus. "Model Minority Myth." The Wiley Blackwell Encyclopedia of Race, Ethnicity, and Nationalism (2015): 1–2. Web.
7. "Philadelphia's Immigrants: Who They Are and How They Are Changing the City." The Pew Charitable Trusts, The Pew Charitable Trusts, 7 June 2018, www.pewtrusts.org/en/research-and-analysis/reports/2018/06/07/philadelphias-immigrants.
8. "Top 10 U.S. Metropolitan Areas by Indonesian Population, 2019." Pew Research Center, Pew Research Center, 29 Apr. 2021, www.pewresearch.org/chart/top-10-u-s-metropolitan-areas-by-indonesian-population-2019/.

9. Li, Bethany Y, et al. "Chinatown Then and Now: Gentrification in Boston, New York, and Philadelphia." Academia.Edu, Asian American Legal Defense and Education Fund, 16 Oct.2016,www.academia.edu/29201187/Gentrification_in_Bosto_NY_philadelphia_Chinatown_Then_and_Now_AALDEF_2013.
10. "About Adult BMI." Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 3 June 2022, www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/.
11. LeWine, Howard E. "New High Blood Pressure Guidelines: Think Your Blood Pressure Is Fine? Think Again." Harvard Health Blog, Harvard Health Publishing Harvard Medical School ,5 Apr. 2024, www.health.harvard.edu/blog/new-high-blood-pressure-guidelines-2017111712756.
12. "Low Blood Oxygen (Hypoxemia)." Mayo Clinic, Mayo Foundation for Medical Education and Research, 24 Mar. 2023, www.mayoclinic.org/symptoms/hypoxemia/basics/definition/sym-20050930.
13. "Bradycardia." Mayo Clinic, Mayo Foundation for Medical Education and Research, 7 May 2022, www.mayoclinic.org/diseases-conditions/bradycardia/symptoms-causes/syc-20355474.
14. "Tachycardia." Mayo Clinic, Mayo Foundation for Medical Education and Research, 15 Dec. 2023, www.mayoclinic.org/diseases-conditions/tachycardia/symptoms-causes/syc-20355127.
15. "Diabetes, Heart Disease, & Stroke ." National Institute of Diabetes and Digestive and Kidney Diseases, U.S. Department of Health and Human Services, www.niddk.nih.gov/health-information/diabetes/overview/preventing-problems/heart-disease-stroke.
16. "Diabetes." Mayo Clinic, Mayo Foundation for Medical Education and Research, 27 Mar.2024, www.mayoclinic.org/diseases-conditions/diabetes/diagnosis-treatment/drc-20371451.
17. Haldeman-Englert, Chad, et al. "Two-Hour Postprandial Glucose." University of Rochester Medical Center Health Encyclopedia, University of Rochester Medical Center , www.urmc.rochester.edu/encyclopedia/content.aspx?+contenttypeid=167&contentid=glucose_two_hour_postprand+ial.
18. Linton, MacRae F, et al. "The Role of Lipids and Lipoproteins in Atherosclerosis." Endotext, edited by Kenneth R Feingold et. al., MDText.com, Inc., 3 January 2019.
19. "Cholesterol Test." Mayo Clinic, Mayo Foundation for Medical Education and Research, 20 Feb. 2024, www.mayoclinic.org/tests-procedures/cholesterol-test/about/pac-20384601.
20. "FastStats- Health of Asian Non-Hispanic Population." National Center for Health Stastics, Centers for Disease Control and Prevention, 1 May 2024, www.cdc.gov/nchs/fastats/asian-health.htm.
21. "The Center for Asian Health Engages Communities in Research to Reduce Asian American Health Disparities." National Institute of Minority Health and Health Disparities, U.S. Department of Health and Human Services, 17 Aug. 2022, www.nimhd.nih.gov/news-events/features/training-workforce-dev/center-asian-health.html.
22. Volgman, Annabelle Santos et al. "Atherosclerotic Cardiovascular Disease in South Asians in the United States: Epidemiology, Risk Factors, and Treatments: A Scientific Statement From the American Heart Association." Circulation vol. 138,1 (2018): e1-e34.doi:10.1161/CIR.0000000000000580
23. Praveen, P A et al. "Type 2 diabetes in youth in South Asia." Current diabetes reports vol.15,2 (2015): 571. doi:10.1007/s11892-014-0571-4
24. Vikram, Naval K et al. "Non-obese (body mass index < 25 kg/m2) Asian Indians with normal waist circumference have high cardiovascular risk." Nutrition (Burbank, Los Angeles County,Calif.) vol. 19,6 (2003): 503-9. doi:10.1016/s0899-9007(02)01083-3
25. Raji, A et al. "Body fat distribution and insulin resistance in healthy Asian Indians and Caucasians." The Journal of clinical endocrinology and metabolism vol. 86,11 (2001): 5366-71. doi:10.1210/jcem.86.11.7992
26. Lee, Jiwon R et al. "Nativity and prevalence of cardiometabolic diseases among U.S. Asian immigrants." Journal of diabetes and its complications vol. 34,12 (2020): 107679.doi:10.1016/j.jdiacomp.2020.107679
27. Lu, Xiaoxiao et al. "The Association Between Perceived Stress and Hypertension Among Asian Americans: Does Social Support and Social Network Make a Difference?." Journal of community health vol. 44,3 (2019): 451-462. doi:10.1007/s10900-018-00612-7
28. Filippou, Christina D et al. "Dietary Approaches to Stop Hypertension (DASH) Diet and Blood Pressure Reduction in Adults with and without Hypertension: A Systematic Review and Meta-Analysis of Randomized Controlled Trials." Advances in nutrition (Bethesda, Md.) vol.11,5 (2020): 1150-1160. doi:10.1093/advances/nmaa041
29. Hu, Emily A et al. "White rice consumption and risk of type 2 diabetes: meta-analysis and systematic review." BMJ (Clinical research ed.) vol. 344 e1454. 15 Mar. 2012, doi:10.1136/bmj.e1454
30. Martín-Peláez, Sandra et al. "Mediterranean Diet Effects on Type 2 Diabetes Prevention, Disease Progression, and Related Mechanisms. A Review." Nutrients vol. 12,8 2236. 27 Jul. 2020, doi:10.3390/nu12082236
31. "Asian." Global Philadelphia: Meet the World Here, Global Philadelphia, 4 Mar. 2024, globalphiladelphia.org/asian.
32. National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research, U. S. Government Printing Office, Washington, D.C., 1979: B-1.
33 . Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care, Institute of Medicine, "Unequal Treatment: What Healthcare Providers Need To Know About Racial And Ethnic Disparities in Health Care," (Washington, D.C.)National Academy Press; March 2002: 1-764.
34. Corbie-Smith G., Thomas S., St. George D: Distrust, Race, And Research, Archives of Internal Medicine, November 25, 2002; 162: 2458-2463.
35. United States Conference of Bishops. Ethical and Religious Directives for Catholic Health Care Services Fourth edition. Washington, D.C. 2002.
36. KFF/LA Times Survey of Immigrants (April 10– June 12, 2023). KFF, "Key Facts in Health Coverage of Immigrants," September 17, 2023. https://www.kff.org/racialequity-and-health-policy/fact-sheet/key-facts-on-health-coverage-of-immigrants/#text=noncitizenImmigrants
37. Passel, Jeffrey & Krogstad, Jens, "What We Know About Unauthorized Immigrants Living in the U.S.," Pew Research Center, November 18, 2023. https://www.pewresearch.org/short-reads/2023/11/16/what-we-know-aboutunauthorized-immigrants-living-in-the-us#:
38. Centers for Disease Control and Prevention, "National

Diabetes Statistics Report," Table 1a. May 15, 2024.
39. Pfizer, "Health Disparities Among Asian Americans and Pacific Islanders," 2024.
38. https://www.pfizer.com/news/articles/health_disparities_among_asian_americans_and_pacific_Islanders.

Author Information

I Badar

P Clark

I Stefanic

S Diana

A Chen

A Fogarty

D Odeh

J Huh