The Impact of Immigration Status on Prevention, Diagnosis, and Treatment of Cardiovascular Disease

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ABSTRACT:

Background

Immigrants face challenges with healthcare access and quality due to immigration status. This barrier leads to inadequate preventative care and delay in diagnosis of cardiovascular disease. The purpose of this research paper is to review how immigration status impacts prevention, diagnosis, and treatment of cardiovascular disease in the United States.

Methods

This narrative review used PubMed with keywords such as “immigration status”, “cardiovascular diseases”, “treatment”, and “diagnosis”. Reviews and studies outside of the United States were excluded.

Results

Four studies comparing immigrant cardiovascular disease risk factor treatment and cardiovascular disease treatment to that of naturalized citizens were analyzed. A common pattern found in these articles is that immigrants had lower rates of treatment for cardiovascular disease risk factors compared to naturalized citizens. It was also determined that immigrants were more likely to receive less healthcare information from their doctors compared to naturalized citizens, often due to language barriers, leading to poor perceived quality of healthcare and lower rates of their own cardiovascular disease risk factor awareness.

Discussion

Actions should be taken to improve the quality of healthcare treatment for immigrants. Policy change to make healthcare information more accessible can help prevent cardiovascular disease.

INTRODUCTION:

Immigrants are the fastest growing group in the United States, however their health challenges are often overlooked [1]. Systematically monitoring and analyzing immigrant health patterns remains uncommon [2, 3]. Both undocumented and documented immigrants face unique barriers that decrease their health equality [4]. These can include housing, poverty, language barriers, health insurance coverage, and especially challenges with healthcare access and quality due to immigration status itself [1]. This makes immigration status, categorized as US-born citizen,

foreign-born citizen, and noncitizen, an important social determinant of health that requires more research attention [5].

Cardiovascular disease (CVD) is the leading cause of death in the United States [6]. Social and structural barriers impact prevention, diagnosis, and treatment of cardiovascular disease [7]. The barriers that immigrants face lead to inadequate preventative care, delay in diagnosis, and overall poor health outcomes [8]. Relying solely on nativity to understand immigrant cardiovascular disease health overlooks crucial factors such as education of risk factors or heart health screening rates [1]. These risk factors include hypertension, diabetes, and obesity [7]. Education and screening of these risk factors directly affects prevention of CVD [7]. Achieving cardiac health equity, the opportunity for everyone to be as healthy as possible, requires policy reform and inclusive science [7]. Therefore, there is an urgent need to learn more about cardiovascular disease in immigrants by studying the quality of treatment. This review aims to explore how immigration status impacts prevention, diagnosis, and treatment of cardiovascular disease.

METHODS:

This narrative review was conducted using PubMed to explore the impact of immigration status on treatment of cardiovascular disease. Keywords included “immigration status”, “cardiovascular diseases”, “treatment”, and “diagnosis. Reviews and studies including data from outside of the United States were excluded, while studies comparing immigrants and naturalized citizens were included.

RESULTS:

Guadamuz et al. analyzed the treatment rates of high cholesterol, hypertension, and diabetes among hispanic and latino immigrants compared to naturalized citizens [9]. It was determined that immigrants received less treatment for high cholesterol, hypertension, and diabetes (all symptoms of CVD) when compared to naturalized citizens [9]. These treatment disparities were consistent in immigrants regardless of the country of origin [9].

This pattern was also seen in the study “Citizenship Status and the Prevalence, Treatment, and Control of Cardiovascular Disease Risk Factors Among Adults in the United States, 2011-2016” [10]. This study used data from a nationally representative survey to analyze the barriers to healthcare access that immigrants face in the United States with specific relation to CVD prevention and treatment [10]. The study reported that non-citizens were more likely to report lower rates of treatment for hypercholesterolemia, hypertension, and diabetes which are risk factors of CVD when compared to US-born and foreign-born citizens [10]. It was also determined that fewer foreign-born citizens were treated with diabetes and cholesterol control compared to US-born citizens [10]. The study also reported that non-citizens were more likely to report no usual source of care compared to US-born and foreign-born citizens [10].These

disparities by citizenship status remain unchanged even if alternate clinical guidelines are used [10].

Similarly, the article by Rodríguez M. A. et al. used a national data set to study the perceived quality of care and preventative care received by latino immigrants [11]. Undocumented latinos had the lowest percentages of insurance coverage, blood pressure and cholesterol checked, and reported excellent care [11]. They also reported the highest percentage getting little to no healthcare information from their doctors [11]. Many of the participants of the study also reported that they were not able to communicate with their doctors in their preferred language which decreases their quality of care and makes it harder to understand their possible symptoms, diagnosis, or treatment [11].

Focusing more specifically on healthcare information immigrants receive from their doctors this study by Langellier B. A. et al. analyzes the association between immigration status and awareness regarding the participant's own cardiovascular disease risk factors [12]. These risk factors included diabetes, hypertension, hypercholesterolemia, and being overweight [12]. Unawareness regarding hypertension and being overweight/obese was considerably higher in English and non-English speaking immigrants compared to US born participants [12]. Furthermore, non-English speaking immigrants had a higher chance of being unaware of their own hypertension and hypercholesterolemia compared to English speaking immigrants and US born participants [12].

DISCUSSION:

The results in this review show that immigrants have lower rates of treatment for diabetes, high cholesterol, and hypertension compared to naturalized citizens [9,10]. These conditions are all risk factors of CVD [9,10]. Furthermore, immigrants also had less awareness of their own CVD risk factors when compared to US born citizens [12]. These findings show that immigrants have decreased prevention of CVD [9,12]. Lower rates for treatment of risk factors of CVD directly leads to a greater chance of getting CVD.

Awareness of own CVD risk factors was especially low in immigrants with language barriers [12]. Non-English speaking immigrants reported they are often unable to communicate with their doctors in their preferred language, making it harder to understand their own health [11]. When compared to naturalized citizens, immigrants are also more likely to get little to no healthcare information [11]. These factors decrease the quality of prevention and diagnosis of CVD. Immigrants need more information about risk factors and their own health in order to take better care of preventing CVD. Without this understanding, they are at greater risk of getting CVD.

Immigrants have low perceived quality of healthcare compared to naturalized citizens [11]. Connecting this with language barriers leads to poor treatment even after getting a cardiovascular disease. Getting the best treatment is crucial to healing as fast as possible. But that cannot happen when patients are not satisfied with their treatment and leave feeling confused. Non-citizens are

actually more likely to have no usual source of care [10]. This may be due to not having insurance coverage, as undocumented immigrants have lower amounts of insurance coverage compared to naturalized citizens [11]. Low insurance coverage makes each meeting with a doctor, especially significant. Given the barriers immigrants face to getting treatment, they should leave feeling satisfied. Immigrant health is often overlooked in research and warrants further focus. With the rise of CVD in the United States, it is important to factor immigrant health and treatment by conducting more research studies in order to get a better understanding of the full picture.

One limitation of this review is that only four studies were used. Using more articles might give a more complete picture. This is also a fairly under researched topic limiting the amount and scope of studies that can be used in this review. While future studies are needed to support and build off of the findings in this review, this review provides an introductory analysis of how immigration status affects CVD prevention, diagnosis, and treatment.

In addition to putting more focus on this topic in research, I would recommend actions be taken to increase the quality of treatment for immigrants. Some ways this can be done is to make health information more accessible. This can be through easy to read and informational pamphlets at hospitals or websites available in multiple languages. Doctors can also be encouraged to learn to speak commonly spoken languages in the US so they can make their patients feel as comfortable as possible. Creating policies to increase health insurance coverage or having free checks for risk factors of CVD can also help increase treatment rates of risk factors for immigrants.

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