social sciences

MDPI

Article

Preventive Healthcare Utilization among Asian Americans in the U.S.: Testing the Institute of Medicine's Model of Access to Healthcare

Siryung Lee [1], Hyunwoo Yoon [2,*], Soondool Chung [1], Yuri Jang [1,3] and Mitra Naseh [4]

[1] Department of Social Welfare, Ewha Womans University, Seoul 03760, Republic of Korea; slee12@ewha.ac.kr (S.L.); sdchung@ewha.ac.kr (S.C.); yurij@usc.edu (Y.J.)
[2] Department of Social Welfare, Institute of Social Welfare, Kongju National University, Gongju-si 32588, Republic of Korea
[3] Suzanne Dworak-Peck School of Social Work, University of Southern California, Los Angeles, CA 90007, USA
[4] Brown School, Washington University in St. Louis, St. Louis, MO 63130, USA; naseh@wustl.edu
* Correspondence: yoon1@kongju.ac.kr

Abstract: The current research, guided by the intersectionality theory and the Institute of Medicine's healthcare access model, explored the determinants of preventive care utilization within the Asian American community. Analyzing data from the Asian American Quality of Life Survey (with a sample size of 2535), logistic regression models were employed, incorporating various factors: demographic variables, immigration-related variables, health and access, and patient–provider relationship. Results revealed that longer stays in the U.S., having health insurance coverage, having a usual source of care, and higher satisfaction levels with prior healthcare services were associated with increased odds of utilizing preventive healthcare. These findings contribute to our comprehension of preventive care utilization among Asian Americans and offer practical insights for targeted interventions in social work and public health and strategic healthcare planning.

Keywords: Asian Americans; preventive healthcare; usual source of care; patient–provider relationship

check for updates

Citation: Lee, Siryung, Hyunwoo Yoon, Soondool Chung, Yuri Jang, and Mitra Naseh. 2024. Preventive Healthcare Utilization among Asian Americans in the U.S.: Testing the Institute of Medicine's Model of Access to Healthcare. *Social Sciences* 13: 338. https://doi.org/10.3390/socsci13070338

Academic Editor: Nigel Parton

Received: 1 May 2024
Revised: 19 June 2024
Accepted: 24 June 2024
Published: 26 June 2024

Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

According to the Centers for Disease Control and Prevention (2020), preventive care refers to medical services that aim to prevent illnesses, detect health issues at an early stage, and promote overall health and well-being. They include a variety of screenings, vaccinations, counseling, and routine check-ups designed to prevent or catch diseases early when they are easier to treat. Preventive care is an essential component of comprehensive healthcare. The benefits of preventive care utilization have been well-documented, including the early detection of disease, the effective management of disease, reduced mortality and morbidity, and cost savings in healthcare (Emery and Zheng 2018; Loftus et al. 2018; Maciosek et al. 2006; Yan et al. 2022). However, only 4% of total national health expenditures was spent for preventive care in the U.S., and approximately 28% of the U.S. population lacks preventive care utilization (Lambrew 2007; Lines et al. 2014; O'Connor et al. 2023; Yagi et al. 2022). Disparities in the use of preventive care are more pronounced in racial and ethnic minority communities (Mitchell et al. 2022; U.S. Department of Health and Human Services 2012). Studies have consistently reported a lower rate of preventive care utilization among African American, Asian American, and Hispanic individuals compared to non-Hispanic White individuals in the U.S. (Bustamante et al. 2010; Gornick 2000; Mitchell et al. 2022; Park et al. 2019; Sanchez 2007). In particular, although increased access to preventive care has become available with the Affordable Care Act, such an improvement was not observed among Asian Americans (Agirdas and Holding 2018). The limited utilization of preventive care among Asian Americans presents a significant public health concern for several reasons. First, Asian Americans constitute one of the fastest-growing

segments of the U.S. population (Brennan et al. 2023; Hoeffel et al. 2012; Pew Research Center 2012). Second, this group encounters distinct challenges linked to immigration, such as language and cultural barriers (Barnes et al. 2008; Shelley et al. 2011). Therefore, addressing the barriers to preventive care within the Asian American population is crucial for promoting their overall health and well-being.

Intersectionality theory, developed by Crenshaw (1989), provides a valuable framework for the current study. Intersectionality emphasizes that individuals experience multiple, overlapping forms of disadvantages based on their intersecting social identities, such as race, ethnicity, immigration status, and language proficiency (Cho et al. 2013). In particular, intersectionality theory helps to highlight barriers to healthcare access, identify at-risk groups, and design targeted interventions to address specific health and healthcare challenges faced by these marginalized groups. Given that Asian Americans face various linguistic, cultural, economic, and immigration-related barriers to healthcare access (Derose et al. 2007; Hacker et al. 2015; Ngo-Metzger et al. 2004), a consideration of intersecting barriers to preventive healthcare among Asian Americans is imperative to identify and respond to their unique needs and challenges.

The current research was also guided by the Institute of Medicine's (IOM) model of access to health services (Cooper et al. 2002), which has been widely used in health services research with diverse populations. The IOM's model includes three primary types of barriers to healthcare: personal/cultural, financial, and structural barriers. Demographic and background characteristics (e.g., age, gender, marital status, and education) usually serve as personal barriers that underlie the propensity for the use of healthcare services. The model also emphasizes the cultural diversity and life circumstances unique to the racial and ethnic minority population. For Asian Americans, immigration-related factors (e.g., length of stay in the US, English proficiency, and acculturation) play an important role. Financial barriers address restriction of access by inhibiting the ability of patients to pay for needed medical services (e.g., health care insurance and reimbursement levels), and structural barriers are impediments of the physical environment directly related to medical care (e.g., transportation, usual source of care, and availability of primary care physicians within the community). In addition, as a key contributor to healthcare use, the IOM's model focuses on the patient–provider relationship, which is often compromised when dealing with racial and ethnic minority populations (Spooner et al. 2016). Research consistently shows that racial/ethnic minorities experience lower levels of perceived trust in medical providers, effective communication, and overall fairness and respect in healthcare settings than non-Hispanic White individuals (Mitchell et al. 2022; Spooner et al. 2016; U.S. Department of Health and Human Services 2012). These findings underscore the importance of the patient–provider relationship, including satisfaction with previous healthcare experiences and communication issues in healthcare settings, as contributing factors to disparities in preventive care utilization.

In summary, this study aims to investigate the utilization of preventive care and the factors influencing it among various ethnic groups within the Asian American population aged 18 and above. Drawing from the existing literature on healthcare utilization among ethnic minorities and the Institute of Medicine's (IOM) model of health services, the research will focus on demographic factors (age, gender, ethnicity, marital status, and education), immigration-related factors (length of stay in the US, English proficiency, and acculturation), health- and access-related variables (self-rated health, health insurance coverage, transportation, and usual source of care), and aspects of the patient–provider relationship (satisfaction with previous healthcare experiences and communication challenges in healthcare settings).

2. Methods

2.1. Data Set

Data for this study were obtained from the Asian American Quality of Life (AAQoL) survey, which targeted Asian American residents in Austin, Texas. Approval for the sur-

vey was granted by the university's institutional review board (IRB), and the consenting process adhered to IRB guidelines. Given that a significant portion of Asian Americans are foreign-born immigrants who encounter cultural and language barriers in accessing healthcare services, it is notable that national surveys often exclude non-English speakers. Moreover, studies based on national surveys tend to present Asian Americans in a positive light regarding their health and healthcare access. To ensure inclusivity, we employed culturally and linguistically sensitive methodologies. The survey questionnaire, spanning 10 pages, was crafted to accommodate the cultural and linguistic diversity within the Asian American population. Initially developed in English, the questionnaire underwent translation into multiple languages, including Chinese (both traditional and simplified characters), Korean, Vietnamese, Hindi, Gujarati, and Tagalog. Professional translators and graduate-level bilingual researchers conducted the initial translations, followed by validation from bilingual volunteers for each language version. Pilot testing of each language version involved 3–5 community members proficient in the target language, with their feedback incorporated into the final questionnaire. Additionally, a robust partnership between the research team and key individuals and organizations within ethnic communities facilitated community member participation in the survey.

The survey used a non-probability sampling technique and targeted self-identified Asian Americans aged 18 years or older residing in the Austin area. The research team arranged survey sessions at various sites across the city, including churches, temples, grocery markets, small group meetings, and cultural events, totaling 76 sessions. Additionally, the project was promoted through media and ethnic community channels, actively seeking referrals from individuals, groups, and organizations. Surveys were self-administered using a paper and pencil format, with bilingual research assistants available at each site for recruitment and assistance. It typically took participants about 20 min to complete the 10-page questionnaire, and they received $10 as compensation for their participation. A total of 2614 individuals completed the survey, with nearly half (48.5%) using non-English questionnaires, indicating the effectiveness of our culturally and linguistically sensitive approach in including traditionally underrepresented individuals. After excluding cases with more than 10% missing responses on relevant variables (n = 79), the final sample size was 2535. Additional details on survey procedures and sample characteristics can be found elsewhere (The City of Austin n.d.).

2.2. Measures

2.2.1. Outcome Variable

Preventive healthcare service utilization was assessed by asking whether participants had visited medical clinics for a routine checkup within the previous 12 months. Participant responses were coded as either 'no' (0) or 'yes' (1).

2.2.2. Demographic Variables

Background information comprised several variables: age (coded as 0 for 18–39 years, 1 for 40–59 years, and 2 for 60 years and above), gender (coded as 0 for male and 1 for female), ethnicity (coded as 0 for Chinese, 1 for Asian Indian, 2 for Korean, 3 for Vietnamese, 4 for Filipino, and 5 for Other Asian), marital status (coded as 0 for married and 1 for not married), and education (coded as 0 for 12 years or more and 1 for less than 12 years).

2.2.3. Immigration-Related Variables

The duration of residence in the U.S. was categorized into two groups: 0 for individuals who had lived in the U.S. for 10 years or more, and 1 for those who had lived in the U.S. for less than 10 years. This categorization aligns with theimmigration literature, which often considers the 10th year as a milestone for adaptation (Beiser and Edwards 1994).

English proficiency was evaluated by asking respondents to rate their proficiency in spoken English, with response options ranging from 'not at all' to 'very well'. Following U.S. census guidelines, individuals who reported speaking English less than 'very well'

were classified as having limited English proficiency, denoted by 1, whereas those who reported speaking English 'very well' were considered English-proficient, denoted by 0.

Acculturation was measured by asking respondents to assess their familiarity with mainstream American culture and customs using a 4-point scale. Responses were then dichotomized into two categories: 0 for those reporting very low or low familiarity, and 1 for those reporting high or very high familiarity.

2.2.4. Health and Access Variables

Respondents were prompted to evaluate their current health status using a 5-point scale. Responses were then dichotomized into 'excellent/very good/good' (0) and 'fair/poor' (1).

Regarding health insurance coverage, participants were asked whether they possessed insurance that covered the expenses of any medical visit. Responses were coded as 'no' (0) or 'yes' (1).

Transportation needs were gauged through a single inquiry asking respondents if they required assistance for transportation to their medical appointments. . Responses were coded as 'yes' (0) or 'no' (1).

Usual source of care was assessed by a question, "Is there a medical place that you usually go to when you get sick?" Responses were coded as 'no' (0) or 'yes' (1).

2.3. Patient–Provider Relationship

Participants were asked to indicate their level of satisfaction with prior healthcare services in the past 12 months on a 4-point scale, and responses were dichotomized (0 = very low/low, 1 = high/very high). Participants were also asked whether they had encountered a situation in which they could not understand what a doctor/nurse said. Responses were coded as 'no' (0) or 'yes' (1).

2.4. Analytic Strategy

Descriptive and bivariate analyses were carried out to comprehend the sample characteristics and the relationships among study variables. Logistic regression models were employed to assess preventive care utilization, incorporating demographic factors, immigration-related variables, health and access indicators, and aspects of the patient–provider relationship. All statistical analyses were conducted using IBM SPSS Statistics 27.

3. Results

3.1. Descriptive Characteristics of the Sample

Table 1 summarizes descriptive characteristics of the overall sample. The mean age was 42.6 years (SD = 16.9), with a range from 18 to 98. About half of the participants were aged 18–39, and about 20% were aged 60 or older. More than half (54.9%) were female. The sample included Chinese (24.2%), Asian Indians (22.2%), Koreans (18.2%), Vietnamese (19.6%), Filipinos (10.2%), and individuals from other Asian ethnic groups (5.6%). More than 67% of the sample reported that they had visited medical clinics for a routine check-up in the past 12 months.

Table 1. Descriptive characteristics of the sample (N = 2535).

Variables	%
Demographic variables	
Age	
18−39	48.9
40−59	31.2
60+	19.9
Gender	
Male	45.1
Female	54.9

Table 1. *Cont.*

Variables	%
Ethnicity	
Chinese	24.2
Asian Indian	22.2
Korean	18.2
Vietnamese	19.6
Filipino	10.2
Other Asian	5.6
Marital status	
Married	66.4
Not married	33.6
Education	
≥12 years	81.4
<12 years	18.6
Immigration-related variables	
Time in the U.S.	
≥10 years	58.2
<10 years	41.8
English proficiency	
Proficient	37.9
Limited	62.1
Acculturation	
Low	32.5
High	67.5
Health and access variables	
Self-rated health	
Excellent/very good/good	89.6
Fair/poor	10.4
Health insurance coverage	
No	14.9
Yes	85.1
Transportation needs	
Yes	20.2
No	79.8
Usual source of care	
No	38.1
Yes	61.9
Patient–provider relationship	
Satisfaction with prior healthcare services	
Low	10.4
High	89.6
Communication problems in healthcare settings	
No	71.5
Yes	28.5
Outcome variables	
Preventive care utilization	
No	32.4
Yes	67.6

3.2. Logistic Regression Models of Preventive Care Utilization

Before proceeding to analyze multivariate models, we examined bivariate correlations among the study variables. The variables showed correlations consistent with expectations, and no issues of collinearity were detected. The strongest correlation was observed between limited English proficiency and acculturation ($r = -0.49$, $p < 0.001$).

The logistic regression models examining preventive care utilization yielded several noteworthy findings, as summarized in Table 2. Relative to the young adult group (aged 18–39), both the middle-aged (40–59) and older adult (60 years and older) groups displayed lower odds of utilizing preventive care services. Conversely, higher odds were

evident among females and married individuals. Additionally, in comparison to the Chinese group, Korean individuals exhibited higher odds of utilizing preventive care services. Conversely, Vietnamese Americans displayed reduced odds.

Table 2. Logistic regression model of preventive care utilization.

Variables	OR (95% CI)
Demographic variables	
Age (ref: 18−39)	
40−59	0.54 (0.32, 0.90) *
60+	0.53 (0.33, 0.87) *
Gender (ref: Male)	
Female	1.78 (1.33, 2.39) ***
Ethnicity (ref: Chinese)	
Asian Indian	0.98 (0.52, 1.86)
Korean	2.41 (1.21, 4.84) *
Vietnamese	0.51 (0.27, 0.96) *
Filipino	1.29 (0.66, 2.53)
Other Asian	1.24 (0.59, 2.60)
Marital status (ref: Married)	
Not married	0.66 (0.47, 0.92) *
Education (ref: ≥12 years)	
<12 years	1.36 (0.88, 2.11)
Immigration-related variables	
Time in the U.S. (ref: ≥10 years)	
<10 years	0.67 (0.47, 0.95) *
English proficiency (ref: Proficient)	
Limited	1.06 (0.71, 1.56)
Acculturation (ref: Low)	
High	1.04 (0.82, 1.31)
Health and access variables	
Self-rated health (ref: Excellent/very good/good)	
Fair/poor	1.17 (0.70, 21.95)
Health insurance coverage (ref: No)	
Yes	2.69 (1.79, 4.05) ***
Transportation needs (ref: Yes)	
No	0.83 (0.57, 1.20)
Usual source of care (ref: No)	
Yes	2.98 (2.20, 4.03) ***
Patient–provider relationship	
Satisfaction with prior healthcare services (ref: Low)	
High	1.29 (1.04, 1.59) *
Communication problems in healthcare settings (ref: No)	
Yes	0.74 (0.52, 1.04)
Summary statistic	−2 Log likelihood = 1166.8 $\chi^2(19) = 211.3$ ***

* $p < 0.05$, *** $p < 0.001$.

Among immigration-related variables, individuals who had lived in the U.S. for fewer than 10 years exhibited reduced odds of utilizing preventive care services. In terms of health and access variables, having health insurance was associated with a 2.69 times increase in the odds of utilizing preventive care services (95% CI = 1.79–4.05, $p < 0.001$). Similarly, having a usual source of care was linked to a 2.98 times increase in the odds of utilizing preventive care services (95% CI = 2.20–4.03, $p < 0.001$). Regarding the patient–provider relationship, individuals reporting higher levels of satisfaction with prior healthcare services were 1.29 times more likely to utilize preventive care compared to their counterparts.

4. Discussion

a. Interpretation and Implications

In response to the acknowledged imperative to mitigate health disparities in the utilization of preventive care among racial and ethnic populations, the current study aimed to identify predictors of preventive healthcare utilization in Asian Americans. This was achieved by employing the intersectionality theory and the Institute of Medicine (IOM) model of access to health services (Cooper et al. 2002) as a framework for analysis.

Descriptive analyses unveiled vulnerabilities in preventive healthcare utilization among Asian Americans. Approximately 67% of survey participants utilized preventive healthcare services (represented by routine checkups here). These findings align with data indicating that approximately 68% of Asian American adults in California have reported having a routine checkup within the past year (California Health Interview Survey (CHIS) (2023)). However, rates of those using preventive healthcare services in the current study are lower than the reported 72% for all Americans based on data from the Medical Expenditure Panel Survey (Lines et al. 2014). This finding is consistent with existing research indicating that Asian Americans experienced the largest proportional reductions in their rates of use for various preventive healthcare services compared to other racial and ethnic minority groups including African Americans and Hispanics (Alba et al. 2024). Moreover, about 15% of Asian Americans in the current study lacked health insurance coverage, a proportion higher than the reported 10% for the U.S. population according to data from the 2019 National Health Interview Survey (Cohen et al. 2016). This study result also aligns with the finding that the Asian American group had higher uninsured rates than other minority groups such as African Americans and Hispanics (U.S. Census Bureau 2023). Additionally, a significant portion (38.1%) of the current sample lacked a usual source of care, markedly higher than the 7% reported for a national sample of non-Hispanic White adults (McMenamin et al. 2020). While caution should be exercised in directly comparing rates across different studies due to methodological heterogeneity, these findings align with the previous literature indicating that Asian Americans face disparities in health insurance coverage and access to healthcare services, positioning them as a disadvantaged minority group in the U.S. (Brown et al. 2000; Escarce 2007; McMenamin et al. 2020).

In the multivariate analyses, disparities in the utilization of preventive care were evident across Asian American subgroups. Vietnamese Americans, compared to Chinese Americans, exhibited lower rates of preventive care utilization. This finding aligns with previous literature indicating variations in preventive healthcare services utilization among Asian American subgroups (Park et al. 2019). These disparities suggest that a one-size-fits-all approach to healthcare is insufficient to meet the unique needs of all Asian American subgroups. Consequently, our results highlight the necessity for developing tailored public health intervention programs designed specifically for Asian American subgroups to enhance their utilization of preventive services.

As variables specific to the experiences of immigrants, the length of stay in the United States, English proficiency, and acculturation were considered. The use of preventive healthcare was only found to be promoted among those who had lived in the U.S. for a longer time ($\geq$10 years). This finding is in line with literature showing that years of residence in the U.S. are more prominent predictor of service use than the level of English language proficiency and of acculturation (Luo and Wu 2016). The time spent in the U.S. seemed to improve the knowledge of healthcare systems in mainstream society and local resources (e.g., interpretation and transportation services), facilitating the use of preventive health services. Given these findings, it becomes evident that newly arrived immigrants are particularly vulnerable due to their limited knowledge of the healthcare system and available resources. Thus, such vulnerabilities seen in newly arrived immigrants should be taken into consideration in developing and implementing targeted interventions and health planning to improve the use of preventive healthcare. The practical implications of these findings are also significant for social workers. Considering that social workers are in a unique position to play a crucial role in the process of adapting to immigrant life among

newly arrived immigrants, they can offer integrated support that addresses not only social services such as housing, employment, and language training but also the healthcare needs of newly arrived immigrants.

Not surprisingly, health insurance emerged as a significant factor influencing preventive healthcare utilization among Asian Americans. Those with health insurance coverage had 2.69 times higher odds of utilizing preventive healthcare compared to those without coverage. The Patient Protection and Affordable Care Act (ACA) has been instrumental in extending health insurance coverage through federal and state marketplaces, as well as Medicaid expansion. While the ACA has provided millions of Americans with health insurance coverage, including many preventive services at no cost, Asian Ameri-cans still encounter numerous challenges and barriers in accessing and utilizing the ser-vices and benefits offered by the ACA. For instance, there remains a shortage of linguistically appropriate resources (such as factsheets, webinars, videos, and a workforce proficient in multiple languages) available to many limited-English-proficiency, uninsured, immigrant, and low-income Asian American communities (National Council of Asian Pacific Islander Physicians 2015). The findings of this study emphasize the urgent need for comprehensive efforts to educate Asian Americans about their healthcare reform benefits and coverage. This may include training community health workers (CHWs) who are proficient in Asian languages and familiar with the cultural contexts of Asian American communities to assist community members with health insurance enrollment and preventive care utilization.

The significant contribution of a usual source of care to predicting the use of preventive healthcare services is worthy of attention. After controlling for several demographic and immigration-related variables and health insurance coverage, those who had a usual source of care exhibited 2.98 times greater odds of using preventive healthcare than those who had not. The concept and efficacy of the medical home, also known as usual source of care, has been extensively discussed in the health services and medical literature. Having a usual source of care offers several benefits within the healthcare system. It ensures timely access to medical care, promotes the continuity of care, facilitates the early identification of special healthcare needs, and enhances the quality of care received, ultimately leading to improved health outcomes (Blewett et al. 2008; Damiano et al. 2006). Certainly, alongside significant efforts to extend health insurance coverage, the concept of a usual source of care has garnered considerable attention as a strategy to enhance access to quality preventive care. For example, a large number of uninsured individuals have a regular relationship with healthcare providers or health service facilities as a usual source of care (Vega et al. 2018), and those who have a usual source of care are more likely to use preventive healthcare (Isehunwa et al. 2017; Lin et al. 2019). In addition, when directly compared with health insurance status, a usual source of care has been found to be a stronger predictor of preventive care use (Misra et al. 2018). Several state health reform proposals promote having a usual source of care as part of their reform initiatives to focus on preventive primary care (Blewett et al. 2008). In addition, the U.S. Preventive Services Task Force has created an interactive website (https://epss.ahrq.gov/ePSS/about.jsp; accessed on 1 May 2024) to assist primary care clinicians who play a role as a usual source of care to identify the screening, counseling, and preventive care services that are appropriate for their patients (U.S. Preventive Services Task Force n.d.). Thus, improving access to a usual source of care may be not only an important step but also an achievable strategy through local and national initiatives in improving preventive healthcare utilization.

As an endeavor to explore the critical contributors of preventive healthcare use guided by the IOM's model, the patient–provider relationship variables were included in this study. The level of satisfaction with prior healthcare services was significantly associated with the use of preventive healthcare, but no association was found for communication problems in healthcare settings. It is notable that effective communication between the provider and the patient is integral to healthcare (Spooner et al. 2016); however, higher levels of patient satisfaction have been shown to be more important in the use of preventive healthcare. For Asian Americans in particular, the use of preventive healthcare depends on healthcare providers' comprehensive

attention to patients' social, economic, cultural, and psychological vulnerabilities rather than focusing on communication only (Lucas et al. 2008). The findings underscore the importance of enhancing the capability of healthcare providers and organizations to effectively understand and respond to the cultural and linguistic needs presented by patients.

Intersectionality theory also provides rationales for discussing the findings and implications of this study. For instance, according to our results, for newly arrived Asian immigrants, intersecting identities such as ethnic minority status and immigration can compound their vulnerabilities and barriers to accessing preventive healthcare. Legal and policy obstacles frequently prevent new immigrants, particularly those from ethnic minority backgrounds, from accessing public health benefits and programs. For instance, policies that deny public health insurance options significantly limit their ability to receive preventive care. Additionally, the five-year waiting period for lawful permanent residents (i.e., green card holders) before they can access federal healthcare benefits, including Medicaid, further restricts healthcare access for new immigrants (Kaiser Family Foundation 2022). These policies create significant obstacles for newly arrived immigrants seeking necessary health services.

On the other hand, new immigrants from ethnic minority backgrounds often hold distinct cultural beliefs about health and healthcare that can influence their acceptance and utilization of preventive healthcare services. For instance, certain cultures may prioritize acute care over preventive measures or follow alternative health practices that do not align with conventional preventive healthcare approaches (Spector 2017). Moreover, in the context of access to health insurance, intersecting identities of being from an ethnic minority group, having limited English proficiency, and possibly belonging to a lower-income community may create compounded barriers to accessing preventive healthcare. Further detailed research on these topics is warranted in future studies. In conclusion, intersectionality theory underscores the importance of enhancing the capability of healthcare providers and organizations to effectively understand and respond to the multiple, intersecting identities of their patients.

This study also underscores the importance of recognizing the role of social workers in healthcare settings for Asian American communities. Prior research has highlighted the necessity for healthcare service delivery to transition from hospitals to community-based settings (Ross and de Saxe Zerden 2020). Moreover, collaborative interprofessional teams, typically comprising a physician, registered nurse, and social worker, have demonstrated superior outcomes in preventive healthcare services compared to independent physician practices (Fowler et al. 2020; Fraher et al. 2018). In addition, the study highlights the social worker's role of advocacy in improving healthcare access for Asian American communities, emphasizing the need for culturally competent health education and services (Wong et al. 2005). Thus, healthcare policies should incorporate initiatives aimed at enhancing cultural competency training among social workers in healthcare settings. This training would enable them to gain a deeper understanding of the unique health needs of Asian Americans. Consequently, it would empower them to effectively deliver health interventions; facilitate communication among interdisciplinary teams, Asian American patients, and their families; and link patients and their families to community resources.

b. Limitations of the Study and Suggestions for Future Studies

Several limitations of the present study should be acknowledged. The utilization of a cross-sectional design and purposive sampling implies the need for caution when generalizing the findings and drawing causal inferences. The nature of the samples limits the conclusiveness of the findings, and further investigation is warranted. Future studies should strive to include more representative samples and employ a longitudinal design to comprehensively assess factors influencing preventive healthcare utilization within a multicultural context.

While we defined a routine checkup as the utilization of preventive healthcare services, future studies should consider incorporating other preventive services recommended by the U.S. Preventive Services Task Force (e.g., flu vaccination, cholesterol screening, blood pressure checkup, pap test, mammogram, and colorectal cancer screening). This could

better assess the overall preventive healthcare behaviors and needs of Asian Americans, identify specific gaps in service utilization, and develop targeted interventions to improve preventive care uptake across diverse groups.

Additionally, exploring variables such as cultural beliefs about preventive healthcare, interpersonal networks and support, and health behaviors could provide valuable insights. System-level variables, such as the availability of healthcare providers offering culturally and linguistically appropriate services in the local area, should also be taken into account when assessing individuals' utilization of preventive health services. In particular, since exploring interaction effects based upon the intersectionality theory can provide insights into the complex relationships in preventive care utilization among different factors, future study should consider interaction effects to uncover more nuanced findings.

While the current study sheds light on public health policies and programs targeting Asian Americans as a whole, it is important to acknowledge the diverse nature of Asian American populations. Future research should delve deeper into within-group variations within the Asian American community. This approach would allow for a more nuanced understanding of the specific needs, challenges, and health disparities experienced by different ethnic subgroups within the broader Asian American population. By considering these variations, policymakers and public health practitioners can develop more tailored and effective interventions to address the unique health concerns of each subgroup. That is, by understanding how key factors vary across different Asian ethnicities, policymakers and healthcare providers can better allocate resources and design interventions that effectively target the specific challenges and barriers to preventive care faced by each group. This targeted approach ultimately enhances the accessibility and relevance of preventive healthcare services for diverse Asian American communities.

Lastly, considering that the receipt of preventive services has been linked to reductions in morbidity and mortality across various health domains such as cancer, chronic diseases, and infectious diseases (U.S. Department of Health and Human Services 2012; Sanchez 2007), it is imperative for future research to investigate how the utilization of preventive care impacts other health outcomes over time. Longitudinal studies can provide valuable insights into the long-term effects of preventive healthcare interventions on overall health and well-being within the Asian American population. By examining the relationships between preventive care utilization and a broader range of health outcomes longitudinally, researchers can better understand the comprehensive benefits of preventive services and inform more targeted and effective public health interventions.

5. Conclusions

The findings of the study indicated that extended durations of stay in the U.S. and having health insurance coverage, a regular source of healthcare, and higher satisfaction with previous healthcare services were linked to a greater likelihood of using preventive healthcare services. Despite these limitations, the study's findings contribute significantly to our comprehension of the factors influencing the utilization of preventive care, offering valuable insights for the development of effective social work and public health interventions. Although the study focuses specifically on Asian Americans, its approach and findings have broader implications for reducing health disparities and ensuring access to appropriate preventive health services for other racial and ethnic minority populations as well. Our approach effectively identified subgroups at greatest risk, and the identified in-dividual- and patient–provider-related factors can be used for targeted interventions and strategic health planning for racial/ethnic minorities in the U.S.

Author Contributions: Conceptualization, S.L., H.Y., S.C. and Y.J.; methodology, S.L. and H.Y.; validation, S.L. and H.Y..; formal analysis, S.L.; investigation, S.L. and H.Y.; resources, S.L. and H.Y.; data curation, S.L. and H.Y.; writing—original draft preparation, S.L. and H.Y.; writing—review and editing, S.L., H.Y., S.C., Y.J. and M.N. All authors have read and agreed to the published version of the manuscript.

Funding: The support for data collection was provided by the City of Austin's Asian American Quality of Life initiative. This study was supported by the National Research Foundation of Korea (NRF-2020S1A5C2A03092919).

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board of the University of Texas in Austin (protocol code 2015-05-0015 and 05/15/2015).

Informed Consent Statement: Informed consent was waived since the data does not contain personally identifiable information.

Data Availability Statement: The data presented in this study are openly available in the City of Austin webpage (http://austintexas.gov/department/documents-3, accessed on 1 April 2024).

Conflicts of Interest: The authors declare no conflict of interest.

References

Agirdas, Cagdas, and Jordan G. Holding. 2018. Effects of the ACA on preventive care disparities. *Applied Health Economics and Health Policy* 16: 859–69. [CrossRef] [PubMed]

Alba, Christopher, Zhaonian Zheng, and Rishi K. Wadhera. 2024. Changes in health care access and preventive health screenings by race and ethnicity. *JAMA Health Forum* 5: e235058. [CrossRef] [PubMed]

Barnes, Patricia M., Patricia F. Adams, and Eve Powell-Griner. 2008. Health Characteristics of the Asian Adult Population, United States, 2004–2006. National Center for Health Statistics (U.S.), Division of Health Interview Statistics. Available online: https://stacks.cdc.gov/view/cdc/13210 (accessed on 11 August 2023).

Beiser, Morton, and R. Gary Edwards. 1994. Mental health of immigrants and refugees. *New Direction for Mental Health Service* 61: 73–86. [CrossRef]

Blewett, Lynn A., Pamela Jo Johnson, Brian Lee, and Peter B. Scal. 2008. When a usual source of care and usual provider matter: Adult prevention and screening services. *Journal of General Internal Medicine* 23: 1354–60. [CrossRef] [PubMed]

Brennan, Meghan B., Tze-Woei Tan, Marcos C. Schechter, and Maya Fayfman. 2023. Using the National Institute on Minority Health and Health Disparities (NIMHD) framework to better understand disparities in major amputations. In *Seminars in Vascular Surgery*. Philadelphia: WB Saunders.

Brown, E. Richard, Victoria D. Ojeda, Roberta Wyn, and Rebecca Levan. 2000. *Racial and Ethnic Disparities in Access to Health Insurance and Health Care*. Los Angeles: UCLA Center for Health Policy Research and the Henry J. Kaiser Family Foundation.

Bustamante, Arturo Vargas, Jie Chen, Hector P. Rodriguez, John A. Rizzo, and Alexander N. Ortega. 2010. Use of preventive care services among Latino subgroups. *American Journal of Preventive Medicine* 38: 610–19. [CrossRef] [PubMed]

California Health Interview Survey (CHIS). 2023. AskCHIS. UCLA Center for Health Policy Research. Available online: https://healthpolicy.ucla.edu (accessed on 1 April 2024).

Centers for Disease Control and Prevention. 2020. Preventive Care. Available online: https://www.cdc.gov/preventive-care (accessed on 1 April 2024).

Cho, Sumi, Kimberlé Williams Crenshaw, and Leslie McCall. 2013. Toward a field of intersectionality studies: Theory, applications, and praxis. *Signs: Journal of Women in Culture and Society* 38: 785–810. [CrossRef]

Cohen, Robin A., Michael E. Martinez, and Emily P. Zammitti. 2016. Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, January–March 2020. National Center for Health Statistics. Available online: https://www.cdc.gov/nchs/data/nhis/earlyrelease/Quarterly_Estimates_2020_Q11-508.pdf (accessed on 1 April 2024).

Cooper, Lisa A., Martha N. Hill, and Neil R. Powe. 2002. Designing and evaluating interventions to eliminate racial and ethnic disparities in health care. *Journal of General Internal Medicine* 17: 477–86. [CrossRef] [PubMed]

Crenshaw, Kimberlé. 1989. Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics. *University of Chicago Legal Forum* 1989: 139–67.

Damiano, Peter C., Elizabeth T. Momany, Margaret C. Tyler, Andrew J. Penziner, and Jeffrey G. Lobas. 2006. Cost of outpatient medical care for children and youth with special health care needs: Investigating the impact of the medical home. *Pediatrics* 118: e1187–94. [CrossRef]

Derose, Kathryn Pitkin, José J. Escarce, and Nicole Lurie. 2007. Immigrants and health care: Sources of vulnerability. *Health Affairs* 26: 1258–68. [CrossRef]

Emery, J. C. Herbert, and Xiaoli Zheng. 2018. Would better access to preventive care reduce use of acute care? Evidence from a large-scale not-for-profit intervention in Alberta. *Canadian Public Policy* 44: 13–24. [CrossRef]

Escarce, José J. 2007. Racial and Ethnic Disparities in Access to and Quality of Health Care. Available online: www.rwjf.org/content/dam/farm/reports/issue_briefs/2007/rwjf17860/subassets/rwjf17860_1 (accessed on 1 April 2024).

Fowler, Terri, David Garr, Natalie Di Pietro Mager, and Joan Stanley. 2020. Enhancing primary care and preventive services through Interprofessional practice and education. *Israel Journal of Health Policy Research* 9: 1–5. [CrossRef] [PubMed]

Fraher, Erin P., Erica Lynn Richman, Lisa de Saxe Zerden, and Brianna Lombardi. 2018. Social work student and practitioner roles in integrated care settings. *American Journal of Preventive Medicine* 54: S281–89. [CrossRef] [PubMed]

Gornick, Marian E. 2000. Disparities in Medicare services: Potential causes, plausible explanations, and recommendations. *Health Care Financing Review* 21: 23–43. [PubMed]
Hacker, Karen, Maria Anies, Barbara L. Folb, and Leah Zallman. 2015. Barriers to health care for undocumented immigrants: A literature review. *Risk Management and Healthcare Policy* 8: 175–83. [CrossRef] [PubMed]
Hoeffel, Elizabeth M., Sonya Rastogi, Myoung Ouk Kim, and Hasan Shahid. 2012. The Asian Population: 2010. US Department of Commerce, Economics and Statistics Administration, US Census Bureau. Available online: https://www.census.gov/history/pdf/2010asian-122016.pdf (accessed on 1 April 2024).
Isehunwa, Oluwaseyi O., Erik L. Carlton, Yang Wang, Yu Jiang, Satish Kedia, Cyril F. Chang, Daniel Fijabi, and Soumitra S. Bhuyan. 2017. Access to employee wellness programs and use of preventive care services among US adults. *American Journal of Preventive Medicine* 53: 854–65. [CrossRef] [PubMed]
Kaiser Family Foundation. 2022. Health Coverage and Care for Immigrants. Available online: https://www.kff.org/medicaid/issue-brief/health-coverage-and-care-for-immigrants/ (accessed on 1 April 2024).
Lambrew, Jeanne M. 2007. *A Wellness Trust to Prioritize Disease Prevention*. Washington, DC: Brookings Institution Press, vol. 234.
Lin, Szu-Hsuan, Omolola E. Adepoju, Bita A. Kash, Bethany DeSalvo, and Darcy K. McMaughan. 2019. Psychological distress and the use of clinical preventive services by community-dwelling older adults. *Journal of Applied Gerontology* 38: 599–616. [CrossRef]
Lines, Lisa M., Matthew Urato, Michael T. Halpern, and Sujha Subramanian. 2014. Insurance Coverage and Preventive Care among Adults. National Center for Biotechnology Information. Available online: https://www.ncbi.nlm.nih.gov/books/NBK532434/ (accessed on 1 April 2024).
Loftus, John, Elizabeth M. Allen, Kathleen Thiede Call, and Susan A. Everson-Rose. 2018. Rural-urban differences in access to preventive health care among publicly insured Minnesotans. *The Journal of Rural Health* 34: s48–s55. [CrossRef] [PubMed]
Lucas, Todd, Georgia Michalopoulou, Pamela Falzarano, Shanti Menon, and Windy Cunningham. 2008. Healthcare provider cultural competency: Development and initial validation of a patient report measure. *Health Psychology* 27: 185. [CrossRef]
Luo, Huabin, and Bei Wu. 2016. Acculturation and dental service use among Asian immigrants in the U.S. *American Journal of Preventive Medicine* 51: 939–46. [CrossRef]
Maciosek, Michael V., Ashley B. Coffield, Nichol M. Edwards, Thomas J. Flottemesch, Michael J. Goodman, and Leif I. Solberg. 2006. Priorities among effective clinical preventive services: Results of a systematic review and analysis. *American Journal of Preventive Medicine* 31: 52–61. [CrossRef] [PubMed]
McMenamin, Sara B., Nadereh Pourat, Richard Lee, and Nancy Breen. 2020. The importance of health insurance in addressing Asian American disparities in utilization of clinical preventive services: 12-year pooled data from California. *Health Equity* 4: 292–303. [CrossRef] [PubMed]
Misra, Arpit, Jennifer T. Lloyd, Larisa M. Strawbridge, and Suzanne G. Wensky. 2018. Use of welcome to medicare visits among older adults following the Affordable Care Act. *American Journal of Preventive Medicine* 54: 37–43. [CrossRef] [PubMed]
Mitchell, Edith, Olatunji B. Alese, Clayton Yates, Brian M. Rivers, William Blackstock, Lisa Newman, Melissa Davis, Goldie Byrd, and Adalynn E. Harris. 2022. Cancer healthcare disparities among African Americans in the United States. *Journal of the National Medical Association* 114: 236–50. [CrossRef] [PubMed]
National Council of Asian Pacific Islander Physicians. 2015. The impact of the Affordable Care Act on Asian Indian, Chinese, Filipino, Korean, Pakistani, & Vietnamese Americans. Available online: https://www.searac.org/wp-content/uploads/2018/04/2015_ACA_policy_brief_v13_final.pdf (accessed on 1 April 2024).
Ngo-Metzger, Quyen, Anna TR Legedza, and Russell S. Phillips. 2004. Asian Americans' reports of their health care experiences: Results of a national survey. *Journal of General Internal Medicine* 19: 111–19. [CrossRef]
O'Connor, Elizabeth, Michelle Henninger, Leslie A. Perdue, Erin L. Coppola, Rachel Thomas, and Bradley N. Gaynes. 2023. *Screening for depression, anxiety, and suicide risk in adults: A systematic evidence review for the US preventive services task force*; Rockville: Agency for Healthcare Research and Quality (US), Report No.: 22-05295-EF-1.
Park, Sungchul, Jie Chen, Grace X. Ma, and Alexander N. Ortega. 2019. Utilization of essential preventive health services among Asians after the implementation of the preventive services provisions of the Affordable Care Act. *Preventive Medicine Reports* 16: 101008. [CrossRef] [PubMed]
Pew Research Center. 2012. The Rise of Asian Americans. Available online: https://www.pewresearch.org/social-trends/2012/06/19/the-rise-of-asian-americans/ (accessed on 1 April 2024).
Ross, Abigail M., and Lisa de Saxe Zerden. 2020. Prevention, health promotion, and social work: Aligning health and human service systems through a workforce for health. *American Journal of Public Health* 110: S186–90. [CrossRef]
Sanchez, E. 2007. *Preventive Care: A National Profile on Use, Disparities, and Health Benefits*. Washington, DC: Partnership for Prevention.
Shelley, Donna, Stefanie Russell, Nina S. Parikh, and Marianne Fahs. 2011. Ethnic disparities in self-reported oral health status and access to care among older adults in NYC. *Journal of Urban Health* 88: 651–62. [CrossRef]
Spector, Rachel E. 2017. *Cultural Diversity in Health and Illness*, 9th ed. London: Pearson.
Spooner, Kiara K., Jason L. Salemi, Hamisu M. Salihu, and Roger J. Zoorob. 2016. Disparities in perceived patient–provider communication quality in the United States: Trends and correlates. *Patient Education and Counseling* 99: 844–54. [CrossRef]
The City of Austin. n.d. Asian American Quality of Life. Available online: http://austintexas.gov/department/documents-3 (accessed on 1 April 2024).

U.S. Census Bureau. 2023. Health Insurance Coverage in the United States: 2022. Available online: https://www.census.gov/library/publications/2023/demo/p60-281.html (accessed on 1 April 2024).
U.S. Department of Health and Human Services. 2012. National Healthcare Disparities Report, 2012. AHRQ Publication. Available online: https://archive.ahrq.gov/research/findings/nhqrdr/nhdr11/key.html (accessed on 1 April 2024).
U.S. Preventive Services Task Force. n.d. Prevention Task Force. Available online: https://epss.ahrq.gov/ePSS/about.jsp (accessed on 1 April 2024).
Vega, Alma, Thalia Porteny, and Emma Aguila. 2018. The Role of clinics in determining older recent immigrants' use of health services. *Journal of Immigrant and Minority Health* 20: 1468–75. [CrossRef]
Wong, Sabrina T., Grace J. Yoo, and Anita L. Stewart. 2005. The changing meaning of family support among older Chinese and Korean immigrants. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 60: S3–S10. [CrossRef] [PubMed]
Yagi, Brian F., Jamie E. Luster, Aaron M. Scherer, Madeline R. Farron, Judith E. Smith, and Renuka Tipirneni. 2022. Association of health insurance literacy with health care utilization: A systematic review. *Journal of General Internal Medicine* 37: 1–15.
Yan, Alice F., Zhuo Chen, Yang Wang, Jennifer A. Campbell, Qian-Li Xue, Michelle Y. Williams, Lance S. Weinhardt, and Leonard E. Eged. 2022. Effectiveness of social needs screening and interventions in clinical settings on utilization, cost, and clinical outcomes: A systematic review. *Health Equity* 6: 454–75. [CrossRef] [PubMed]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.