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Home Health Care to Asian Americans: a Systematic Review

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Abstract

Objective Despite being the fastest growing minority group in the USA, Asian Americans are among the least studied ones, particularly in the home and community-based services settings. This study aimed to review and synthesize extant evidence on Asian American's access, utilization, and outcomes of home health care.

Methods This is a systematic review study. A comprehensive literature search was conducted in PubMed and CINAHL as well as hand search. Each study was screened, reviewed, and evaluated for quality by at least two reviewers independently.

Results Twelve articles were determined eligible and included for review. Asian Americans were less likely to be discharged to home health care following hospitalization. At admission to home health care, Asian Americans had a high rate of inappropriate medication issues (28%) and they also had poorer functional status compared to White Americans. Asian Americans were also reported with less improvement in functional status at the end of home health care; however, there were some inconsistencies in the evidence on Asian Americans' utilization of formal/skilled home health care. Quality evaluation indicated that findings from some studies were limited by small sample size, single site/home health agency, analytic approaches, and other methodologic limitations.

Conclusions Asian Americans often experience inequities in home health care access, utilization, and outcomes. Multilevel factors may contribute to such inequities, including structural racism. Robust research using population-based data and advanced methodology is needed to better understand home health care to Asian Americans.

Keywords Home health care · Disparities · Asian Americans · Elderly · Race · Ethnicity

Introduction

Home health care (HHC) has become the most frequently used form of home and community-based services to millions of Americans preferring "Age in Place" [1]. This preference of "Age in Place" has been further enhanced by the COVID-19 pandemic [2]. Home health care offers the services of treating and managing acute and chronic, age-related, and rehabilitative conditions at home and holds multiple advantages over hospital care and other institutional care (e.g., nursing homes), such as being more comfortable, convenient, and low cost [3]. As the aging population in the USA continues to grow, the need for HHC is expected to not only increase in size and complexity but also in diversity. Data shows that the US demographic profile is changing with substantial increases in racial/ethnic minorities, such as Asian Americans [4]. According to Centers for Medicare and Medicaid Services (CMS) reports, in 2020 approximately 5 million Medicare beneficiaries received HHC, of which about 2.2% were Asian Americans, a disproportionately lower rate compared to the overall population of Asian Asians in the USA, which was 5.7% in 2019 [5].

Indeed, Asian Americans are the fastest-growing minority group in the USA [6]. According to the classification by the US Census Bureau, Asian Americans are "a person having origins in any of the original people of the far East, Southeast Asian, or the Indian Subcontinent" [7]. The Asian population in the USA reached 22.4 million in 2019, an increase of 88.2% from 11.9 million in 2000, and is estimated to quadruple by 2060 [8]. Despite these facts, Asian Americans are one of the least studied groups in health and healthcare research.

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Meanwhile, evidence, though limited, is merging to show that Asian Americans are not “model minorities.” They experience disparities in health and health care as other racial/ethnic minority groups do. Researchers have reported lack and/or limited access to health care services among Asian Americans due to various reasons, including financial challenges, physical barriers (e.g., transportation, inflexible working hours), and language barriers [9, 10]. In a study of home health care, Casado and Lee found that 6 out of 10 Korean Americans did not use home health care despite their eligibility [11]. Furthermore, in studies comparing formal/paid and informal/unpaid home health care between Asian elders and White elders, it reported that Asian Americans often used more informal/unpaid care from families, relatives, and friends and less formal care from skilled providers (e.g., nurses, therapists) and home health aides than their White counterparts, particularly among Asian Americans living in communities with higher proportion (>25%) of Asian Americans [12, 13].

Clearly, it is necessary and important to gain more understanding of health services to Asian Americans in different care settings, including home health care. This is also in alignment with the National Institutes of Health’s research priorities of reducing disparities among racial/ethnic minorities [14]. However, to the best of our knowledge, no literature review is available to illustrate home health care to Asian Americans. The purpose of this study therefore is to review and critically synthesize evidence on Asian Americans’ access, use and outcomes of home health care. Findings from this study will be informative to develop culturally and linguistically tailored home health care to community-dwelling Asian Americans.

Methods

Data Sources and Literature Searches

With assistance from a librarian who has intensive expertise in health and health-care related literature search, the research team conducted a comprehensive search of relevant literature in two electronic databases, PubMed and CINAHL. The literature search focused on studies of home health care to Asian Americans that were published in English. Our literature search was not limited to a specific time period. Various search terms were used with appropriate combinations to find relevant articles. Search terms, as key words or major subject terms, used for home health care were “home health,” “home healthcare,” “home care,” and “home care services.” Search terms reflecting Asian Americans or Asian subgroups ranged from general terms of “Asian Americans” and “Asians,” specific terms indicating the most common subgroups of Asian American, such as “Chinese,” “Indian,” “Korean,” and “Filipinos,” to terms reflecting different regions of Asia, such as “East Asia,” “South Asia,” and “Southeast Asia.” Our search in these two databases resulted in 474 articles, of which 396 articles were processed for screening after removing 78 duplicates.

Study Selection and Screening

Two rounds of screening were conducted to identify eligible articles for this review by four reviewers (CM, MR, RL, EB). In both rounds of screening, each article was reviewed independently by at least two reviewers. The articles which were included in this review had to be an original research study centered on home health care among Asians in the USA. In other words, articles were excluded if they were reviews, editorials, commentaries, opinion pieces, study protocols, policy documents, conference abstracts, and dissertation/thesis. After applying these inclusion and exclusion criteria, 12 articles were determined to be eligible for inclusion in this review. During the screening process, a group discussion approach was used to resolve any discrepancies. The entire screening process is illustrated in Fig. 1.

Quality Appraisal of Reviewed Studies

Preceding a quality appraisal of each reviewed study, we first extracted key information from each article. Extracted information included: study design, research setting, study

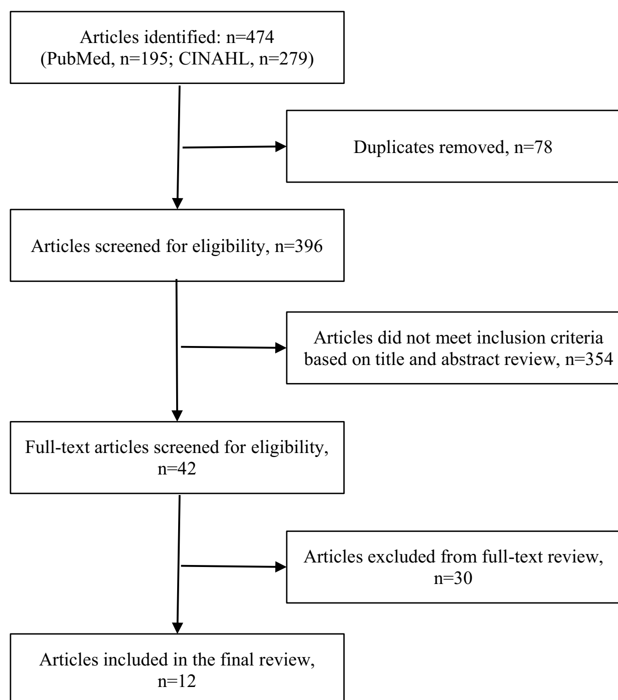

Fig. 1 Article screening and selection process

populations, sampling and sample size, outcome measures, and findings about home health care among Asian Americans. Authors, journal, and year of publication were also noted. We (CM, MR, EB) then conducted a quality assessment of each study using a quality evaluation tool that was adapted from a checklist developed by the Agency of Healthcare Research and Quality. The adapted checklist included four sections which assessed description and reporting/writing of the studies, as well as their external and internal validities with 32 questions in total. Each research article was assessed independently by two reviewers, while discrepancies were discussed together during team meetings.

Results

Table 1 presents characteristics of reviewed studies, including study settings, population and sample size, data sources, and the study periods. Out of the 12 reviewed studies, two (17%) were conducted nationwide [12, 15], and 7 (58%) were single-site study in one agency, city or a state [13, 16–21]. The rest of the articles (*n*=3, 25%) were conducted regionally in area overlapping multiple city/states [11, 22, 23]. As for study population, three (25%) articles focused on and included only Asian-American patients receiving HHC [17, 18, 22] or their caregivers (*n*=1, 8.3%) [11], and the remaining 9 studies included both Asian Americans and participants of other racial/ethnic groups [12, 13, 15, 16, 19–21, 23]. It should be noted that in one study (8.3%), Asian Americans (i.e., Chinese Americans) were identified by their speaking language at home rather than their reported race/ethnicity [19]. When considering the study population from the lens of admission resources (e.g., hospital, community) prior home health care, three (25%) studies particularly focused on patients admitted to home health agencies for post-acute care following hospital discharge [15, 16, 19] including one (8.3%) study of patients initially hospitalized for total knee or hip arthroplasty procedures [15]. The other 9 (75%) studies included HHC patients without specifying admission sources [11–13, 17, 18, 20–23], of which one included those with dementia [20] and another one only included those with diabetes, hypertension, or cardiovascular disease [17].

Table 1 also shows the total sample size and number of Asian Americans of each reviewed study. The sample size ranged from 82 to 90,221 participants across the 12 studies and the number of Asian Americans in these studies ranged from 82 to 2,218. All studies were conducted within the past three decades with 8 (67%) conducted since 2010. Various data sources were used across studies, including 6 (50%) of the articles used Outcome and Assessment Information Set and/or other claim and administrative records [16, 19–23], 4 (33%) articles conducted patient interviews and surveys [11, 12, 17, 18]. The other two (17%) articles used data provided from specific projects conducted by either the HHA or Agency for Healthcare Research [13, 15].

The research design and findings related to home health care to Asian Americans from the reviewed articles are presented in Table 2. All 12 articles used an observational research design, including 8 cross-sectional studies [11–13, 15, 17–19, 22] and four retrospective cohort studies [16, 20, 21, 23]. It should be noted that three of the 12 studies did not explicitly state their research design but indicated the use of existing data (secondary data analysis) [12, 13, 23].

Studied outcomes in these 12 articles can be categorized into four types, HHC outcomes (e.g., rehospitalization, ADL improvement) [16, 19–21, 23], HHC use (e.g., admission to HHC following hospitalization, type of HHC services received) [12, 13, 15, 16, 22, 23], HHC services quality (i.e., unmet needs) [11], and patient health and medical-related conditions at admission to HHC [17, 18, 22].

In studies examined ADLs and/or IADLs, researchers consistently found that Asian Americans achieved less improvement in ADLs at the end of home health care [16, 20]. In another study, the researchers reported more IADL dependencies among Asian Americans than White Americans when being discharged from home health care to the community [23]. Findings from other studies also showed that admission to nursing homes following HHC increased 4% from 2007 to 2012 among Asian Americans; however, the average length of homestay before nursing home admission increased by 8 months from 2007 to 2012 and patients had more chronic conditions and functional disabilities when admitted to nursing homes following HHC in more recently years [21]. In a study of language barriers among patients receiving HHC following hospitalization, researchers reported that Chinese and Korean Americans with limited English proficiency had hospital readmission rates of 15.6% and 16.6% respectively from HHC [19].

In studies of HHC use, when looking at discharge to home health care versus to other post-acute facilities following hospitalization for total knee replacement surgery, Asian patients had significantly lower odds of being discharged to HHC compared to White patients [15]. During an HHC episode, Asian Americans had the lowest proportion (5.8%) of home health care (both paid/formal and non-paid/informal) use in general compared to Hispanics (10.9%), African Americans (13.6%), and White patients (8.7%); they also used less paid/formal home care and more unpaid/informal care than their White peers [12]. Of the different types of HHC services, Asian Americans received fewer therapy visits than non-Hispanic White [16, 23] and Asian Americans living in Asian communities were more likely to use unpaid/informal home care than Asians in non-Asian communities [12]. It was also reported that Asian Americans received fewer therapy visits and more visits from home health aides or social workers than Non-Hispanic Whites [16, 23]. However,

Table 1 Characteristics of reviewed studies

Year, authors	Study setting/site	Study population	Sample size	Study period	Data source
2022, Squires et al.	One urban, not-for-profit home health agency	Post-hospitalization patients in HHC	90,221 (English: 68,118; Spanish: 18,188; Chinese: 1,758; Korean: 350; Russian: 1,807)	2010–2015	OASIS, agency's human resources, administrative data
2020, Reynolds and Fisher	Nationwide	Older adults in HHC following hospitalization for total hip and knee arthroplasty	Total knee arthroplasty: 2009: 71,992 (Asians: 349), 2010: 82,643 (390); 2011: 87,632 (488), 2012: 82,868 (472); Total hip arthroplasty: 2009: 31,049 (Asians: 116), 2010: 34,705 (132), 2011: 37,576 (115), 2012: 37,307 (156)	2009–2012	National Inpatient Sample of Healthcare Cost and Utilization Project
2020, Wang et al.	One non-profit HHA	Medicare beneficiaries in HHC	4783 (Non-Hispanic whites: 4,159; African-Americans: 489; Hispanics: 77; Others: 58)	2017 (1 year)	OASIS, billing records
2018, Chase et al.	One urban, non-for-profit home health agency	Older patients in HHC for post-acute care	20,674 (Asian: 1,505; African-American: 3,337; Hispanic: 3,132; Non-Hispanic white: 12,700)	2013–2014	Administrative and medication records, OASIS, Prospective Payment System
2015, Young et al.	NY state	Patients receiving HHC for at >= 2 months prior nursing home admission	7544 (Whites: 4,750; Asians: 272; African-Americans: 1,224; Hispanics/Latinos: 746; Others: 129)	Jan. 2007–Dec.2012	OASIS, Minimum Data Set
2014, Hu et al.	NYC	Older, Chinese Americans using HHC	82 Chinese Americans	June 2010–July 2011	Patient interviews
2012, Casado and Lee	Baltimore-Washington metropolitan area	Caregivers of frail, older Korean Americans	146 (Korean=139, English=7)	Feb. 2009–May 2010	Telephone interviews
2012, Hu et al.	NYC/Certified non-profit HHA	Chinese Americans in NYC receiving HHC	82 (Cantonese: 39, Mandarin: 16, Taishan: 12, Fuzhou: 8)	June 2010–July 2011	Patient interviews, chart review
2010, Kirby and Lau	National	Elderly patients receiving HHC	23,792 (Whites: 17,118; African-Americans: 3,035; Hispanics: 3,019; Asians: 620)	2000–2006	Medical Expenditure Panel Survey, US Decennial Census
2003, Peng et al.	Northeastern urban area	Elderly patients receiving HHC	7,394 (Asians: 222, African-Americans: 1,305; Hispanics: 781; Whites: 5,086)	1999–2000	OASIS
2002, McCormick et al.	King County, WA	Elderly Japanese Americans and Caucasians receiving Long Term Care	2598 (Japanese Americans: 1,244, Caucasian Americans: 1,354)	1995 (1 year)	Nikkei Long term care and Adult Changes in Thought projects
2001, Lee and Peng	Northeast	Elderly patients receiving HHC due to diabetes, hypertension, or cerebrovascular disease	2,888 (Asian Pacific Islanders: 408; whites: 2,480)	1999 (1 year)	OASIS, administrative records

HHC, home health care; *HHA*, home health agency; *NYC*, New York City; OASIS, Outcome and Assessment Information Set; *WA*, Washington state

Table 2 Summary of findings from reviewed studies

Year, authors	Study design	Outcomes studied	Main findings
2022, Squires et al.	Retrospective cross-sectional study	HHC outcome/rehospitalization	Post-acute HHC hospital readmission rates: with limited English proficiency: Chinese,15.6%; Korean, 16.6%; English proficient patients, 18.5%.
2020, Wang et al.	Retrospective cohort study	HHC outcome/ADL improvement	Dementia improvement rates: Asian Americans, β=1.47, 95% CI: 0.81, 2.13, p<0.001, the least improved; African Americans, β = 1.08, 95% CI: 0.81, 1.35, p<0.001; Hispanics, β = 0.92, 95% CI: 0.38, 1.47, p = 0.001.
2018, Chase et al.	Retrospective cohort	HHC outcome/ADLs HHC use/therapy visits	ADL improvement rates: Asian Americans, b=−0.31; African Americans, b=−0.21; Hispanics, b=−0.24; p<0.001. Therapy visitation rates: Asian Americans, 8.91, SD=7.12; African Americans, 8.74, SD=6.75; Hispanics, 8.67, SD=6.37; White Americans, 9.81, SD=7.98.
2015, Young et al.	Retrospective cohort	HHC outcome/HHC discharge to nursing homes	Asian Americans: nursing home admission rates, increased by 4%; stay at home rates: increased by 8 months (2007, 17 months, 2012, 25 months).
2014, Hu et al.	Descriptive cross-sectional study	Patient health and medical related conditions at admission to HHC/medication issues	HHC admission diagnosis rates: Asian elderly: hypertension, 12.2%; diabetes, 11%; Chronic obstructive pulmonary disease and heart failure, 2.3%. HHC PIMs rates: stimulant laxatives, 42.9%; medications with orthostatic side effects and medications with high dose of ferrous sulfate, 14.3%.
2012, Casado and Lee	Cross-sectional survey study	HHC services quality/unmet needs	6 out of 10 Korean Americans were not using home-care services due to access barriers. Access barriers rates in HHC: Korean-Americans: unmet needs, 40.5%; knowledge related, 86.3%; value/personal, 13.7%; system-related, 19.5%.
2012, Hu et al.	Retrospective cross-sectional study	Patient health and medical related conditions at admission to HHC/medication issues	HHC admission assessment: Chinese Americans: medications per patient, 9.66 (SD=4.02); PIM, 28%; prescribed medication after PIM, 3.72%. Prescribed medications rate: more MDs, r=0.311, P=0.005; Age rate: more PIMs and MDs.
2010, Kirby and Lau	Retrospective cross-sectional study (not explicitly stated by authors)	HHC use/formal vs. informal	HHC use rates: Non-Hispanic Asians, 5.8%; Hispanics, 10.9%; African Americans, 13.6%; Whites, 8.7%. Informal HHC use rates: Non-Hispanic Asians, 4% (OR: 3.29, 95% CI: 1.45, 7.48); Non-Hispanic whites, 1.6%. Formal HHC use rates: Non-Hispanic Asians, 2.3%.

Table 2 (continued)

Year, authors	Study design	Outcomes studied	Main findings
2003, Peng et al.	Retrospective cohort study (not explicitly stated by authors)	HHC use/outcomes (type of HHC services)	Hispanic and Asian home health recipients were at greater risk for having more IADL dependencies at discharge to self-care or community care, compared with White home health recipients. Asian (OR: 0.63; p <0.05; 95% CI: 0.41–0.95) HHC recipients were less likely to report depressive symptomatology at discharge compared with White. HHC services receival rates: Asian: HHA, 5 2%; skilled nursing, 97.8%; occupational therapy, 11.5%; physical therapy, 63.9%.
2002, McCormick et al.	Retrospective cross-sectional study (not explicitly stated by authors)	HHC use/client intent to use HHC	Hypothetical HHC use rate: Japanese Americans, 39%; Caucasians, 42%. Hypothetical HHC use rate: after hip fracture: Japanese Americans, 81%; Caucasians, 72%.
2001, Lee and Peng	Retrospective cross-sectional study	HHC use/amount of HHC used and patient health and medical related conditions at admission to HHC/ ADLs and IADLs	API elders received significantly more home health services than White elders ($t = 7.56$, $p < .001$) across the primary diagnosis with diabetes, hypertension, or cerebrovascular disease (CVD). For patients with a primary diagnosis of CVD, API elders received a greater number of skilled nursing visits as well ($t = 2.16$, $p < .05$). API elders in the sample entered home health care with more ADL ($t = 4.16$, $p < .001$) and IADL dependencies ($t = 4.55$, $p < .001$).

ADL, activities of daily living; *API*, Asian Pacific Islanders; *IADL*, instrumental activities of daily living; *PIM*, potentially inappropriate medication

in a study by Lee and Peng, the researcher found Asian/Pacific Islanders with primary diagnoses of diabetes, hypertension, or cerebrovascular disease for HHC received more home health services than White elders and among those with cerebrovascular disease, Asian/Pacific Islanders received more skilled nursing visits [22]. At the same time, the researchers also reported that Asian/Pacific Islanders in their study had more ADL and IADL dependencies when entering HHC than their White peers.

One study examined the quality of HHC from the perspective of unmet care needs [11]. Findings from this study showed that about 4 out of 10 Korean Americans were not using HHC due to knowledge and system-related barriers. The most commonly reported knowledge-related barrier was lack of knowledge about home health care, which was reported among 71% of Korean American participants. Other reported knowledge-related barriers of unmet needs included do not know how to find the services or cannot find the services (16%), patient refusal (8%), do not want to ask for help (4%), and do not want people to come in (2%). Among reported system-related barriers, language and/cultural barriers were the most common one (12%).

Patient health and medical-related conditions at admission to HHC were the focus of research in three studies. Two of them found Chinese Americans commonly experienced potentially inappropriate medications at admission to HHC (28%) and this issue was more common in HHC than hospital care [17, 18]. The third study reported Asian/Pacific Islanders had poorer functional status when admitted to HHC, compared White Americans [22].

Study Quality

While reviewed studies were well structured and written by including key information in general, there are a few issues worth noticing. More or less there is a lack or limited information on the reliability and validity of key variables in reviewed studies, partially due to the use of existing/secondary administrative and assessment data in the vast majority of studies (n=9). In some studies, findings related to Asian Americans were obtained from descriptive and/or binary analysis only, which may affect the internal validity to the study. In addition, all studies used convenience sampling and most studies were conducted within one single agency or locally/regionally, which limits generalizability of the findings.

Discussion

Our study reviewed and synthesized extant evidence on home health care to Asian Americans, the fastest growing and a least studied population in the USA. While evidence on this topic is limited, this review found that Asian Americans experienced limited and delayed access to home health care; and once admitted to HHC, they also more likely to receive less amount of home health care, and experience poorer outcomes. This review further found that factors leading to disparities in HHC to Asian Americans can be multifaceted and multilevel and may include culture and language-related factors as well as structural reasons.

The challenges Asian Americans face regarding access to home health care are reflected in two aspects: limited access and delayed access. In the study by Reynolds & Fisher, it reported that Asian Americans had less chance of being discharged to home with home health care and more chance of being discharged to home without home health care, compared to White Americans [15]. In other research, researchers reported Asian Americans had more severe/worse health conditions when being referred and admitted to home health care, which reflects the lack of timely access to and thus unmet needs of home health care among Asian Americans [11, 22].

Challenges and disparities also exist among Asian Americans that have been admitted and receiving home health care. In this review, we found that Asian Americans often received less skilled home health care. Skilled home health care is the type of home health care that is provided by a healthcare professional (e.g., nurses and therapists). The reduction of such care is more likely to be related to fewer visits from occupational and/or physical therapists [12]. The reduced visits of skilled home health care can result in poorer health outcomes among Asian home health care recipients. Indeed, several studies reported that Asian Americans achieved less improvement in ADLs and IADLs [16, 20, 23]. In addition to less home health care received during an episode, delayed referral and admission to home health care as aforementioned may also contribute to poorer outcomes at home health care discharge.

It should be noted that while most studies indicated less formal/paid home health care during a home health episode, there is one study that reported that Asian Americans and Pacific Islanders with certain conditions received more paid home health care, compared to White Americans [22]. In this study, the researchers grouped Asia American and Pacific Islanders into one category in analysis. When it is possible that disparities in home health care services between Asian Americans and their White counterparts may not exist, it is more likely that this finding is due to the fact that Asian Americans are more likely to experience delay home health admission that results in more severe/worse health condition and thus higher care needs [22].

One interesting but not surprising finding is the use of paid/formal home health care vs. unpaid/informal care by family caregivers. In one of the reviewed studies, the researchers found that Asian elders use the least home health care among four racial and ethnic groups (White, Black, Hispanic, and Asians), and more care by caregivers and less care by formal/paid health care providers when receiving

home health care [10]. Partially, this may be explained by the emphasis of family caregiving in the Asian Cultural (or "filial piety") [24, 25]. However, it is also possible that structural disparities in availability of HHC may be another reason for limited use of home health care among Asian elders. Because Kirby & Lau also found in their study that living in Asian communities (at least 25% community members are Asians) was associated with more use of unpaid/informal care [12]. Language barrier can be another possible reason in Asian Americans' preference of using more unpaid/informal care. People who do not speak or are with limited English proficiency often need to depend on family members and/or friends for health care encounters [26].

The language barrier situation also applies to the finding of less therapy care and more care from social workers or home health aides [12]. In previous research, it has been reported that home health care recipients with limited English proficiency received less skilled home health visits and more visits from home health aides [10]. Other researchers have reported that receiving language concordant visits from skilled home health care providers is not common for most patients given that only a small proportion of skilled home health care providers are bilingual or multilingual and timely and quality language services are extremely hard to get [19, 26]. At the same time, home health aides, who are often people from racial/ethnic minorities and share the same cultural and language background with their home health care client [27], are more likely to provide language and culture concordant care. Home health care recipients and their families thus may prefer to use more care from home health aides.

While there are not many studies examining the reasons for Asian Americans' underutilization and poor outcomes of HHC, a couple of studies discussed potential factors contributing to this phenomenon. Among discussed factors, lack of awareness /knowledge of available services and cultural/language barrier were highlighted by researchers, in addition to financial challenges and physical limitations [9, 16]. In addition, as aforementioned, structural disparities in geographic distribution of HHC resources across communities can be a barrier of access to and use of home health care.

This literature review has some limitations. Despite use of a thorough search strategy for literature search in two databases, PubMed and CINAHL, which are two comprehensive and most relevant databases to our research topic, it is possible we might have missed some eligible studies. Second, we considered conducting a meta-analysis; however, due to the incompleteness of required statistics for such an analysis and diverse outcomes studied across a small number of articles (12 in total), we therefore provided a thorough critique and synthesis of identified articles. Third, we included both studies of specific Asian American subgroups, e.g., Chinese Americans, and those considered Asian Americans as one group. The latter counts for most of the studies. While our findings may be limited on distinguishing the differences in home health care between Asian subgroups, however, given the scarcity of evidence on HHC to Asian Americans, this review still provides some valuable insights into health care issues among Asian Americans in the home health care setting. Future studies should consider examining Asian subgroups separately as merging evidence suggesting heterogeneity among subgroups of Asian Americans [28].

Findings from this study have several implications. The review results suggest the existence of structural disparities in the sense of allocation and thus availability of home health resources as Asian Americans in Asian communities used more unpaid/informal care than peer Asians in non-Asian communities. Future policy efforts are needed to ensure better distribution of home and community-based services for better access to such care. This review also highlights the urgency in making quality language services available in a timely manner to Asian Americans in home health care delivery so as to improve their access to and use of home health care, which in turn will lead to improved outcomes. Policymakers should consider requiring each home health agency to document preferred language for communication of each patient as well as resources in language services (e.g., medical interpreter training and certification programs). Home health providers, particularly care coordinators should always preview patient language preference upon receiving patient referral for home health care.

The finding of significant lack of awareness/knowledge of the availability of home health care among Asian Americans underscores the imperative of programs to help this population with navigating through the home and community-based services. Last but not least, given the limited extant studies, of which many is not focused on home health care and/or Asian Americans, and methodological limitations in those reviewed studies, more research with rigor research design and data analysis is needed, such as research using national home health care data and propensity score methods to generate comparable groups for robust scientific findings. Other quality of care measures and outcomes should also be studied.

In summary, despite the limited extant evidence, our review suggested potential disparities Asian Americans experience in terms of access to, use, and health outcomes of home health care, which are contributable to multifaceted and multilevel factors, such as structural disparities, language barriers, and unfamiliarity with the home health care system. Urgent and significant commitment and efforts in policymaking, clinical practice, and research are needed to improve home health care to Asian Americans.

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Declarations

Conflict of Interest The authors declare no competing interests.

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