

Special Issue: Race and Mental Health Among Older Adults: Invited Article

Mental Health of Asian American Older Adults: Contemporary Issues and Future Directions

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Abstract

Given the increased attention to older Asian Americans due to their increasing numbers in the United States, this article aims to provide a collective appraisal of older Asian American mental health issues by reviewing trends in older Asian American mental health research over the past 2 decades. This review article provides an overview of the current state of mental health and care research on older Asian Americans and vital factors associated with older Asian American mental health and care. We also identify gaps in current research on Asian American mental health issues and propose 5 potential areas for future research into which gerontologists need to put more effort during the next decade. Ways to reduce disparities in mental health and improve the quality of mental health of older Asian Americans are also discussed.

Translational Significance: Additional studies are needed to better understand how to reduce racial and ethnic disparities in mental health and related health care among Asian Americans. Although large-scale studies have focused on the most sizeable six Asian subgroups, little is known about other Asian groups including Southeast Asians. Other gaps in knowledge about mental health disparities among Asian Americans include understanding how biological and psychological factors interact to affect the mental health of older Asians, and the lack of culturally appropriate assessment tools and interventions tailored to Asian Americans' preferences and lifestyles.

Keywords: Asian American, Health disparities, Mental health, Mental health care, Older adults

Asian Americans—defined as Americans having origins in any of the original people of the Far East, Southeast Asia, or the Indian subcontinent (U.S. Census Bureau, n.d.)—are the fastest growing population in the United States (U.S. Census Bureau, 2020) and the most heterogeneous racial and ethnic group, with more than 20 ethnic subgroups from East and Southeast Asia and the Indian subcontinent (Lopez et al., 2017). Asian American adults aged 65 and older made up 4%

of the older population in 2017 (U.S. Census Bureau), which is projected to be almost double by 2060 (Administration on Aging, 2019). Previous research has documented the intragroup diversity of older Asian Americans in terms of their ethnic background, language use, immigration history, and socioeconomic status (Kim et al., 2010; Park & Kim, 2019; Sorkin & Ngo-Metzger, 2014). Given the well-documented heterogeneous characteristics of older Asian Americans, ger-

ontology researchers need ethnic-specific knowledge about mental health and related health care.

The U.S. Surgeon General's report (U.S. Department of Health and Human Services [DHHS], 2001) first reported the best available research evidence of Asian Americans' mental health status. In a special issue of *American Psychologist*, Sue et al. (2012) provided a 10-year follow-up review to the 2001 Surgeon General's report (U.S. DHHS, 2001), offering several recommendations for future research on Asian American mental health. Given that there are only limited research reviews that solely focus on the Asian American mental health issues with a focus on older adults, this may be a good time to summarize what the field has done and where we should further explore in this area. Therefore, this review article focusing on older Asian Americans aims to (a) provide an overview of the state of older Asian Americans' mental health and mental health care, (b) identify gaps in research on Asian American mental health, and (c) suggest potential areas for future research on Asian American mental health in the next decade.

Method

To provide a comprehensive review of the state of science on older Asian American mental health issues, we searched journal articles, book chapters, and other resources on the topic by using the following online databases: PubMed, PsycINFO, and Google Scholar. Search terms such as Asian American older adult mental health, older Asian immigrant mental health, Asian American older adult depression, and older Asian American mental health care and/or utilization were used. Once a small pool of key studies was identified, their references were also used to further search for other articles that were written on this subject. English papers with full-text access were included in the review. Those focusing on the general or younger Asian American population (and not solely on older adults) or only one ethnic group from the Asian American race were excluded from the review, as this review was interested in looking at the current status and the literature available to assess the specifics of Asian American older adults' mental health and their access to care. There was no limit on publication date, as only a small number of articles were available on this subject.

The State of Older Asian American Mental Health Research

Current Status of Older Asian American Mental Health

To provide a comprehensive review of the status of older Asians' mental health, we carefully selected and reviewed broad aspects of mental health issues. These encompassed (a) psychiatric disorders listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM), such as mood disorders, anxiety disorders, and substance use disorders, (b) suicidal ideation and attempt, (c) more generalized and subjective indicators

of mental health issues such as psychological distress, (d) indicators of cognitive health, and (e) cultural syndromes.

Existing literature on mental health has suggested that older Asian Americans generally tend to demonstrate lower prevalence rates of mental health problems when compared with other racial and ethnic groups (Alegria et al., 2007; Jimenez et al., 2010; Kim et al., 2011, 2012; Kim & Choi, 2010). For example, previous research using a nationally representative sample of noninstitutionalized older adults in the United States has reported that older Asian Americans exhibit the lowest prevalence rates of mood disorder (2.3%), anxiety disorder (5.1%), and serious psychological distress (2.6%) compared with older non-Hispanic whites, African Americans, Hispanics (Kim et al., 2011, 2012). Similarly, Jimenez et al. (2010) reported that older Asian Americans had lower lifetime prevalence rates of any psychiatric disorders (14.6%) and substance use disorders (1.3%) than older non-Hispanic whites. However, it is notable that older Asians reported more self-rated cognitive impairment than non-Hispanic white counterparts in the nationally representative sample of the National Health Interview Survey (NHIS; Luo et al., 2018). Moreover, previous literature consistently reported higher risks for suicide among older Asian women compared with their counterpart in other racial groups (Bartels et al., 2002; Yang & Wonpat-Borja, 2007). For instance, Bartels et al. (2002) reported the highest rate of suicidal ideations (56.8%) among older Asian women who are primary care patients with mental disorders such as depression, anxiety, and at-risk alcohol use problems compared with older non-Hispanic whites, African Americans, and Hispanics. In addition to the higher levels of suicidal ideation, the rates of completed suicide among older Asian women are notably higher (e.g., 7.34 per 100,000 among Asian women aged between 75 and 79 years; 3.68 per 100,000 among Asian women whose ages are between 80 and 84 years; and 9.78 per 100,000 for Asian women aged older than 85 years) than age-compatible older women in other racial groups (Centers for Disease Control and Prevention, 2009). These racial/ethnic differences in the prevalence of mental health problems should be understood with careful consideration of the unique characteristics of older Asians' perception and expression of mental health issues. Embedded in collectivist culture and traditional views of body and mind as a unitary entity, older Asians tend to present and report somatic symptoms while suppressing or discounting psychological or emotional symptoms, which often makes it challenging to apply psychiatric diagnoses based on Western views (Lin & Cheung, 1999). Additionally, mental health problems are often masked as a taboo in Asian culture, because acknowledging mental illness is associated with shame, weakness, and stigmatization of individual and family (Jimenez et al., 2013; Wynaden et al., 2005). Along with the deep stigma about mental illness, several factors—a lack of health insurance, a paucity of culturally adapted treatment, and limited English proficiency (LEP)—make it hard for older Asians to seek a proper mental health service in a timely manner, which affects the prevalence of mental illness (Sorkin et al., 2011).

While comparisons with other racial and ethnic groups can provide a useful framework to understand the overall trends associated with older Asian Americans' mental health, intragroup comparisons among the diverse ethnic subgroups of Asian Americans are crucial to gain a better understanding of the mental health of this fast-growing population. Most of all, it is imperative to acknowledge that a single category of "Asian Americans" actually represents more than 20 ethnic minority subgroups with heterogeneous characteristics, including linguistic, cultural, religious, socioeconomic, and immigration-related factors, which are significant correlates of mental disorders (Islam et al., 2009; Lin & Cheung, 1999; Sorkin & Ngo-Metzger, 2014; Takeuchi et al., 2007). Unfortunately, not only have a limited number of comparative studies been conducted on the mental health of diverse ethnic groups of older Asian Americans, but there is no clear consensus about the prevalence of mental disorders among different ethnic groups of older Asians. For instance, in a study conducted by Kim et al. (2010) comparing health status including the mental health of five Asian American subgroups (Chinese, Japanese, Vietnamese, Korean, and Filipino) aged 60 and older in California, older Koreans reported the highest level of psychological distress and older Japanese reported the lowest. Meanwhile, Tan (2015) reported that older Indians reported significantly lower psychological distress compared with older groups of Chinese, Filipino, and "other" Asians (including Japanese, Korean, and Vietnamese) based on a 10-year NHIS sample. The intragroup variation in psychological distress could be attributed to diverse factors such as immigrant history, exposure to war experience, English proficiency, or socioeconomic status. For instance, older Vietnamese had lower educational achievement, household income, and poorer LEP compared with Filipinos, factors which can be associated with higher psychological distress among Vietnamese (Kim et al., 2010).

Even though depression is one of the most frequently studied mental health issues among older Asian Americans (Yoo et al., 2014), previous literature has yielded inconsistent results about the prevalence of depressive disorders within older Asian ethnic groups. For example, Hooker et al. (2019) found that older Vietnamese had a higher percentage of depressive symptoms (17.6%) than Korean (10.9%), Chinese (10.9%), and Japanese older people (6.3%) based on a sample of Medicare Advantage beneficiaries ($n = 17,957$). However, based on a regional probability sample of 407 Asian immigrant older people in the New York area, Mui and Kang (2006) found that older Japanese had the highest depression incident rate (76%), followed by older Vietnamese (64%), Indians (50%), Chinese (45.7%), Koreans (24%), and Filipinos (15.4%). Meanwhile, in a study of various older Asian ethnic groups ($n = 413$) in Houston, TX, depression prevalence rates were reported as 18.5% among older Chinese, 14% among older Vietnamese, and 6.8% among older Taiwanese (Leung et al., 2017). In summary, despite a lack

of consensus on the prevalence of depression across diverse older Asian ethnic groups, current literature suggests that depression is a common mental health concern among the ethnic groups of older Asian Americans. This variability of estimated depression prevalence rates within ethnic groups can be attributed to several factors, such as varied sample sizes in different geographic areas, the low response rate of older Asian Americans, and heterogeneous use of diagnostic and screening measurement (Kim et al., 2015; Kuo et al., 2008).

There has been a significant shortage of studies estimating prevalence rates of mental disorders among older Asian Americans, which makes it especially hard to compare them by Asian ethnic groups. For example, regarding anxiety disorders, using a nationally representative sample of older Asian Americans (the National Latino and Asian American Study [NLAAS]), Kim and Choi (2010) reported that the 12-month prevalence rates for DSM-IV anxiety disorders were 6% among a combined group of older Asian Americans ($n = 256$, comprises Vietnamese, Filipino, Chinese, Japanese, Korean, Asian Indian, and other). More specifically, in this study, 12-month prevalence rates were reported as 2.2% for posttraumatic stress disorder, 1.5% for social phobia, 1.8% for a panic attack, 1.2% for panic disorder, 0.6% for generalized anxiety disorder, and 0.4% for agoraphobia with and without panic disorder among older Asian Americans (Kim & Choi, 2010). Using the same NLAAS data set, Jimenez et al. (2010) compared the prevalence rates of anxiety disorders by nativity (foreign-born vs. U.S.-born) of older Asian Americans. They revealed that older Asian immigrants had significantly higher 12-month prevalence rates of any anxiety disorders (8.5%), as well as higher lifetime prevalence of generalized anxiety disorder (4.7%), compared with the U.S.-born older Asians (1.7% and 0.3%, respectively). Potential factors contributing to this higher risk of anxiety disorders among older Asian immigrants than U.S.-born could be (a) more social isolation and less health care access due to a lack of English language and cultural proficiency among older immigrants and (b) disjunction between preimmigration expectations and after-migration status (Jimenez et al., 2010; Leu et al., 2008). Notably, the prevalence of other psychiatric disorders (e.g., psychotic disorders, neurodegenerative disorders, and personality disorders) among Asian American older adults is poorly understood due to insufficient research in this realm. Thus, more research is required (a) to obtain an accurate understanding of the prevalence rates of psychiatric disorders and (b) to compare ethnic differences in late-life mental health among the diverse ethnic groups of older Asian Americans.

Cultural syndromes (or culture-bound syndromes) are critical but often overlooked constructs that provide a more accurate understanding of older Asian Americans' mental health. Cultural syndromes have been defined as psychiatric symptom clusters more likely to express or be confined to specific cultures (Ventriglio et al., 2016). As

conceptualizations and symptom presentations of mental disorders are deeply rooted in the unique cultural heritage of diverse ethnic or cultural groups (American Psychiatric Association, 2000), several studies have reported culture-specific syndromes commonly present in certain Asian ethnic groups, such as Dhat syndrome (South Asians), Khyâl cap (Cambodians), Shenjing Shuairuo (Chinese), Taijin-Kyofusho (Japanese), and Hwabyung (Korean; American Psychiatric Association, 2000, 2013; Yeh et al., 2014). For example, Dhat syndrome is diagnosed as semen-loss anxiety in Indian subcontinent countries (Sumathipala et al., 2004); Khyâl cap is considered an anxiety disorder related to the disturbance of “inner wind” and blood among Cambodians (Hofmann & Hinton, 2014); Shenjing Shuairuo (the Chinese term for neurasthenia) is a depressive-like syndrome that is characterized by somatic and psychological complaints in China (Chang et al., 2005); Taijin-Kyofusho is a form of social anxiety described as the fear of interpersonal relationships involving excessive fear of offending others (Essau et al., 2012); and lastly, Hwabyung is a cluster of physical illness (fatigue, heart palpitation, or indigestion) and emotional problems (anxiety or depression) among Koreans (J. Lee et al., 2014).

Notably, these Asian culture-bound syndromes often reflect how shared cultural norms across Asian ethnic groups—emotional suppression and somatization, the notion of strong mind and body connection, and interdependence (Yeh et al., 2014)—are represented as unique symptoms. Especially, some culture-bound syndromes are frequently displayed among older Asian Americans. For example, prevalence rates of Hwabyung were estimated to be between 4% and 12% among middle-aged or older immigrant Korean Americans (Lin, 1983; Min et al., 1990). Also, older Korean women are more susceptible to these symptoms than men (Lee & Lee, 2008; Pang, 1990). Older Asian Americans experiencing these culture-bound syndromes can often be misdiagnosed without adequate consideration of cultural factors. While culture-bound syndromes are described in the DSM-V as an appendix, among clinicians, there is still insufficient public awareness and education about them (Leong & Lau, 2001). Thus, more exploration of culture-bound syndromes and their epidemiology is required for an in-depth understanding of older Asians’ mental health and more culturally competent mental health care.

Current Status of Older Asian American Mental Health Care Service Use

Numerous research studies have consistently documented that older Asian Americans tend to underutilize mental health services for psychological and cognitive disorders, when compared with other racial and ethnic groups such as non-Hispanic whites, African Americans, and Hispanics (Cho et al., 2014; H. B. Lee et al., 2014; Sorkin et al., 2011). However, only a few studies examined interethnic

variations in mental health service utilization among different older Asian American subgroups. For instance, Sorkin et al. (2011) found that older Filipinos and Koreans were less likely to see a primary health care provider or use medications for their mental health issues compared with their non-Hispanic white counterparts. Other studies have found that Vietnamese older adults were more likely to use mental health care compared with other Asian ethnic groups, such as Chinese and Filipinos (Cho et al., 2014; Nguyen & Lee, 2012).

To fully understand the various challenges faced by older Asian Americans in using mental health services, multiple barriers have been identified. Language has been one of the most formidable obstacles for this group. According to the Center for American Progress (2014), 35% of Asian Americans reported LEP, indicating that they spoke English “less than very well.” LEP is a significant barrier for older Asian Americans in accessing mental health care as they are most likely to experience language difficulties due to immigrant status, cultural background, and role disruptions (Chung et al., 2018; Kim & Keefe, 2010; H. B. Lee et al., 2014; Nguyen, 2012a; Tsoh et al., 2016). Besides, findings suggest that older Asian Americans with LEP are more likely to have inadequate health literacy, and the combination of these two communication barriers may prevent these Asian American older people from seeking mental health services (Yoo et al., 2014). Moreover, there is a notable shortage of language-concordant interpreters and service providers available to work with older Asian Americans and help meet their needs for mental health services (Chao et al., 2020; Yoo et al., 2014). The availability of client-clinician language-concordant therapy is essential for older Asian Americans to seek mental health treatments. For instance, Chow et al. (2000) found that in California, centers with bilingual staff increased the utilization of Alzheimer’s disease management by Asian, Filipino, and Pacific Islander older adults.

The majority of older Asian Americans were born outside the United States and are unfamiliar with the U.S. health care systems (Sorkin & Ngo-Metzger, 2014). In general, U.S.-born Asians Americans are more likely to use mental health services than those who are foreign-born (Abe-Kim et al., 2007; Cho et al., 2014). In addition, empirical findings have demonstrated the association between lower acculturation by the mainstream culture and decreased utilization of mental health services among older Asian Americans (Chu & Sue, 2011; Nguyen, 2011; Sorkin & Ngo-Metzger, 2014; Trinh & Ahmed, 2009). Cultural barriers such as stigma, shame, and embarrassment, and family role change are associated with lower health-seeking behaviors among older Asian Americans (Jang et al., 2007, 2009; Jimenez et al., 2013; Nguyen, 2011; Yoo et al., 2014). Nguyen (2012b) also found that older Chinese, Filipino, and Vietnamese adults sought primary care physicians for their mental health needs rather than seeing a behavioral specialist or clinician. Instead of communicating their

mental health needs to a specialist, older Asian Americans (Jimenez et al., 2012), such as older Cambodian refugees (Weisman et al., 2005), are more likely to complain about somatic symptoms to their physicians in the face of possible psychological disorders. With their reluctance to discuss their mental health issues with a clinician, older Asian Americans unintentionally prolong the process of seeking professional therapy.

Factors Associated With Older Asian American Mental Health and Care

National Institute on Aging health disparities research framework

The National Institute on Aging (NIA) health disparities research framework proposed by Hill et al. (2015) is a multilevel model designed to assess population health differences using the life course perspective. It includes fundamental variables such as ethnicity, gender, age, race, disability status, and sexual and gender identities that are considered critical across all levels and analyses. Another level encompasses four major level factors including environmental, sociocultural, behavioral, and biological. Each level emphasizes specific areas: environmental (geographic, social, and economic factors, health care), sociocultural (cultural, social, and psychological factors), behavioral (coping factors, psychological risk and resilience, and health behaviors), and biological (physiological indicators, genetic stability, and cellular function and communication). The purposes of the model were (a) to provide a systematic and organized structure to accommodate the myriad factors that could influence the population's health and (b) to provide a comprehensive resource for aging researchers to assess the appropriate variables for effective analyses (Hill et al., 2015).

Fundamental factors

Similarly, when examining factors associated with older Asian Americans' mental health and care, research often includes fundamental factors such as race and ethnicity (Alegría et al., 2007; Bartels et al., 2002; Cho et al., 2014; Jimenez et al., 2010, 2013; Kim et al., 2010, 2011, 2012; H. B. Lee et al., 2014; Luo et al., 2018; Sorkin et al., 2009, 2011; Tan, 2015), gender (Bartels et al., 2002; Park et al., 2014; Yang & Wonpat-Borja, 2007), and age (Nguyen, 2011). Generally, an Asian American identity was often associated with a lower prevalence of mental health problems (Alegría et al., 2007; Jimenez et al., 2010; Kim et al., 2011, 2012; Kim & Choi, 2010) and underutilization of mental health services (Cho et al., 2014; Jimenez et al., 2013; H. B. Lee et al., 2014; Sorkin et al., 2011). Moreover, studies have found that compared with non-Hispanic whites, older Asian Americans experience greater shame and embarrassment relating to mental disorder and have more difficulty in seeking out mental health services (Jimenez et al., 2013) despite suffering more from psychological distress

and having a higher prevalence of both serious mental illness (Sorkin et al., 2009) and cognitive problems (Luo et al., 2018). Additionally, age was found to be a significant factor in predicting older Asian Americans' mental health care, as older adults aged 65 and older were less likely than middle-aged adults between the ages of 50 and 64 years to recognize their need for psychological services (Nguyen, 2011). Research also has reported higher suicide rates for older Asian American women (Bartels et al., 2002; Yang & Wonpat-Borja, 2007).

However, contrary to the NIA research model suggestions, most research studies on older Asian American mental health did not include essential variables such as disability status and sexual identity that had been proposed as essential to health disparities research conducted with any population. Given the mixed findings of studies over the past decade, it is important to continue to include the suggested analytic recommendations for health disparities research to understand how these associated variables influence the overall mental health and access to care of older Asian Americans. As the published NIA research framework is relatively new to researchers, it will be helpful for research literature to encourage researchers to implement it, utilizing its organized, strategic design to address the variables of interest.

Levels of analyses

Beyond the fundamental factors that were suggested for inclusion in any health disparities research as they are essential to all levels of analysis, the NIA framework also emphasized the importance of identifying additional factors to derive more effective causal relationships among variables and to provide an organizational structure for tracking progress and research gaps in research for that specific population. Among the existing literature on Asian American older adults' mental health and care, environmental factors such as marital status (Hong, 2018; Leung et al., 2017), length of stay in the United States (Jang et al., 2007), and English proficiency (Chung et al., 2018; Kim & Keefe, 2010; H. B. Lee et al., 2014; Nguyen, 2012a; Tsoh et al., 2016; Yoo et al., 2014), sociocultural factors such as acculturation (Hong, 2018; Iwamasa & Hillard, 1999; Mui & Kang, 2006; Nagata et al., 2015; Yoo et al., 2014) and family stress (Jang et al., 2009; Nguyen, 2011; Park et al., 2014; Yoo et al., 2014), and behavioral factors such as social support (Hong, 2018; Mui & Kang, 2006; Yoo et al., 2014), discrimination (Iwamasa & Hillard, 1999; Nagata et al., 2015; Yoo et al., 2014), health status (Leung et al., 2017; Mui & Kang, 2006), and health beliefs and behaviors (Jimenez et al., 2012, 2013; Kim & Choi, 2010; Nguyen, 2012b; Weisman et al., 2005) were most likely to be studied. However, to date and to our best knowledge, there was no literature examining biological factors relating to older Asian Americans' mental health.

More specifically, environmental factors such as higher education (having at least a high school education) and

being married uniquely predicted lower rates of depression in older Asian Americans (Leung et al., 2017). Older Korean Americans who were not married were also more likely to use mental health services (Hong, 2018). Additionally, a longer length of stay in the United States was correlated with fewer depressive symptoms (Mui & Kang, 2006), and poorer English proficiency was associated with a greater perceived need for mental health services among Asian American older adults (Nguyen, 2011).

In terms of sociocultural factors, lower levels of acculturation (Mui & Kang, 2006) and greater family conflict (Park et al., 2014) significantly explicated less depression among older Asian Americans. Likewise, in older Filipino Americans, higher levels of acculturation were related to greater utilization of behavioral services (Hong, 2018). Lastly, in regards to behavioral factors, lower levels of perceived social support, poorer self-rated health, and more stressful life events (Mui & Kang, 2006; Yoo et al., 2014), higher levels of chronic pain (Leung et al., 2017), and greater social desirability (Kim & Choi, 2010) were all linked to higher levels of depression in older Asian Americans. Particularly, in older Korean Americans, lower levels of neighborhood support and greater perceived safety predicted more mental health service utilization, whereas, in older Vietnamese Americans, more conflicts in the neighborhood and lower levels of perceived safety projected better use of psychological services (Hong, 2018).

Overall, research suggests that given the diverse number of factors that play into older Asian Americans' mental health and care and the mixed results we see in each Asian subgroup, more research is needed on this topic to get a clearer picture of what factors contribute to the psychological well-being of older Asian Americans and thus promote the use of mental health services. Although there might be a greater pool of studies available when exploring general variables correlated with older Asian Americans' psychological well-being and mental health care, there were a limited number of studies studying these factors specifically in older Asian Americans. As older Asian Americans face additional discrimination and challenges as older adults in addition to being part of a racial group that experiences more challenges (e.g., immigration and acculturation) compared with non-Hispanic whites (Iwamasa & Hillard, 1999; Nagata et al., 2015), it was important for this review to primarily concentrate on the studies that exclusively investigated variables related to older Asian Americans' mental health and care. Clinically, the findings suggest that those who work with older Asian Americans should take into consideration various factors (e.g., with a biopsychosocial approach) that may influence one's mental health and care, instead of solely focusing on their race and/or ethnicity. It will also be essential for clinicians to provide culturally responsive evaluation and treatment planning, as many older Asian Americans report shame and embarrassment related to seeking out mental

health services (Jimenez et al., 2013). Encouraging engagement with psychological services by familiarizing and normalizing the prospective patient population with treatment and evaluation processes, endorsing collaborative effort, and integrating culturally relevant information and assessment tools can facilitate the process of psychological treatment and improve clinical outcomes.

Gaps in Research on Older Asian American Mental Health: What We Do Not Know Yet

Our literature review has revealed several limitations and gaps in existing studies of both mental health and mental health service utilization among older Asian Americans. Overall, older Asian Americans have been significantly underrepresented in research on both mental health and mental health utilization. For instance, a large number of previous studies focused mostly on three or fewer racial and ethnic groups such as non-Hispanic whites, blacks, and Hispanics, while excluding Asian Americans and Pacific Islanders due to their small sample size (Luo et al., 2018). This limits knowledge of the status of Asian older adults' mental health and mental health service utilization in comparison with other racial and/or ethnic groups. Moreover, a large number of previous studies on these topics tended to consolidate heterogeneous Asian groups into one, which makes it difficult to investigate how specific ethnic groups differ in terms of mental health and care. This is largely attributable to the scarcity of national data sets on older Asian Americans and ethnic variations within this population. For instance, large national data sets, such as the Behavioral Risk Factors Surveillance System (Sorkin & Ngo-Metzger, 2014) and the National Health and Aging Trends Study (Kasper et al., 2019) aggregate all ethnic groups into Asian Americans while overlooking interethnic variations.

Although previous studies differentiated individual Asian ethnic groups, these investigations were more likely to focus primarily on the largest six Asian subgroups that account for approximately 85% of the Asian population: Chinese, Filipino, Asian Indian, Vietnamese, Korean, and Japanese (U.S. Census Bureau, 2012), underscoring the importance of further research on other Asian subgroups such as Southeast Asians (e.g., Cambodian, Laotian, Thais, Hmong, Burmese, and Iu Mien; Hong, 2018; Kim et al., 2010, 2015; Sorkin et al., 2011; Trinh & Ahmed, 2009; U.S. Census Bureau, 2012). For example, while the NLAAS (Alegría et al., 2004), the NHIS (Blackwell et al., 2014), and the California Health Interview Survey made significant progress in providing epidemiological information on Asian ethnic subgroups, samples from Southeast Asians were not well represented in these large representative data sets. To fully address ethnic differences in mental health and mental health service utilization among older Asian Americans, more representative data sets, and studies, including underserved Asian ethnic subgroups, are necessary.

Furthermore, given that most literature on older Asian Americans' mental health and service use has been based on a limited amount of epidemiological data, it often fails to estimate and understand the current status of the prevalence rates of mental disorders and access to mental health care among older Asian Americans. Also, it is notable that due to a lack of available nationally representative data sets for older Asian Americans, researchers have often used a convenient sample of certain U.S. Asian groups residing in metropolitan areas (Leung et al., 2017; Mui & Kang, 2006). These sampling methods may have practical benefits in facilitating recruitment of and access to diverse and underrepresented ethnic groups of older Asians. However, they can also yield inconsistent or conflicting results in estimating the status of mental health and mental health service use among older Asians, which further limits generalizability.

Gaps in Research on Older Asian American Mental Health

In addition to general research limitations across older Asian Americans' mental health and service utilization described above, some research gaps should be specifically noted on the topic of Asian American mental health. First, previous research used various measures to assess older Asian Americans' mental health status, which makes it difficult to estimate and compare the prevalence of psychological disorders among different ethnic groups of older Asian Americans. More specifically, in a recent systematic review and meta-analysis on depression among Asian Americans, Kim et al. (2015) reported that measures for symptoms assessment ranged from screening measures (e.g., Center for Epidemiologic Studies Depression Scale, Beck Depression Instrument, Geriatric Depression Scale, and Patient Health Questionnaire) to standardized clinical interviews (e.g., ICD-10, DSM-IV, and Composite International Diagnostic interview). As estimates of mental disorder prevalence are largely dependent on instruments, it is crucial to use evidence-based assessment tools developed and validated for older Asian Americans for a more culturally sensitive understanding of their mental health (Kalibatseva & Leong, 2011).

Moreover, diagnostic criteria for mental disorders have been primarily based on Eurocentric mental health perspectives (Lin & Cheung, 1999). To date, very few studies of older Asians have considered the impact of unique cultural factors on the manifestation of psychological disorders. Thus, further research should incorporate the concept of cultural-bound syndromes when assessing mental health among older Asian Americans to avoid misdiagnosis or overdiagnosis (Paniagua, 2013). Lastly, studies on older Asian American mental health are still at a very initial stage. There is a paucity of information about the prevalence of various psychiatric disorders (e.g., schizophrenia and other psychotic disorders, personality disorders, and

neurodegenerative disorders) specific to the diverse ethnic groups of older Asians in the United States, which may underscore the need for an accurate understanding of the mental health status and needs of this underrepresented population.

Gaps in Research on Older Asian American Mental Health Care

Significant research gaps also exist in the study of mental health utilization among older Asian Americans. Although culturally sensitive mental health care for the general Asian American population has been found to be more effective when compared with that available for African Americans, Latinos, or Native Americans (Huey et al., 2014), there is a shortage of culturally and linguistically appropriate interventions/therapies for various older Asian Americans. Limited findings suggested that culturally adapted treatments, such as Problem Solving Therapy (Chu et al., 2012), Culturally Sensitive Collaborative Treatment (Yeung et al., 2010), and Cognitive Behavioral Therapy (Dai et al., 1999), have yielded promising outcomes with depressed older Chinese adults. However, culturally appropriate interventions for other older Asian Americans, especially for South or Southeast Asian groups, are almost nonexistent. Additionally, culturally and linguistically appropriate tools take extensive effort to develop because direct translations of them do not capture the essential contextual contents of these interventions (Nishita & Browne, 2013).

In addition to the lack of culturally sensitive mental health care services, effective implementation of high-quality therapy requires competent health care providers with extensive training concerning older adults and racial/ethnic minority groups. However, culturally tailored evidence-based treatments for minorities, especially for older Asian Americans, are at an early stage, with many questions regarding their feasibility remaining to be answered (Huey et al., 2014). At the same time, training for linguistic and culturally concordant clinicians and gerontologists is in high demand so they can work to address the mental health needs of diverse older Asian American populations. With only limited pilots of culturally tailored programs and a shortage of competent clinicians to assess the outcomes of and satisfaction with the mental health care currently provided to the older Asian Americans, the effectiveness of mental health interventions remains unclear (Fuentes & Aranda, 2012).

Gaps in Research on Factors Associated With Older Asian American Mental Health and Care

Despite the suggestions of NIA's health disparities research framework, the majority of published social science research on the mental health and care of older Asian Americans has focused on assessing population-level

and individual social processes and behaviors (Hill et al., 2015). In other words, the integration of NIA's four major levels of analysis was limited in the literature, and some fundamental factors were less studied (e.g., disability status and sexual identity). As mentioned earlier, no study examined how biological variables were linked to older Asian American's psychological well-being and care. Most studies only centered on one major factor and included multiple specific variables associated with it (e.g., focused on the sociocultural factor by including acculturation-related and social support variables). Furthermore, few studies are available when looking at older Asian Americans, as most studies on Asian Americans often focus on general adult or younger Asian American populations. Given the unique needs and changes that occur in later life, it is important for researchers to study older Asian Americans specifically, as the potential risk factors for mental disorders among older Asian Americans can vary from those of young Asian Americans (Kim & Choi, 2010).

Directions for Future Research

While empirical research on older Asian American mental health and care has flourished in the field of gerontology, several questions remain unanswered in current literature. To address these issues in the next decade, we suggest five potential areas that require further investigation in older Asian American mental health research.

First and foremost, more efforts should be made to conduct an epidemiological study of mental disorders and mental health care that compares older Asian Americans with other racial and ethnic groups of older adults and/or subgroups of older Asian Americans. To better understand the challenges that older Asian Americans face in terms of mental health and mental health care and reduce racial and ethnic disparities in mental health, accurately estimating the state of older Asian American mental health from epidemiological evidence would be essential. The NLAAS (Alegría et al., 2004) data collected almost two decades ago are still the best available and most comprehensive representative data set focusing on mental health issues of Asian American adults, despite there being limited numbers of older Asian Americans from only four Asian subgroups (e.g., Chinese, Filipino, Vietnamese, and others) included in the data set. Therefore, collaborative efforts across diverse disciplines are required to collect large, nationally representative data sets similar to NLAAS that focus on older Asian American mental health.

Second and relatedly, given the often-neglected intragroup diversity in Asian American research, subgroup differences in older Asian American mental health and care deserve further investigation. Additionally, certain subgroups of Asian Americans that are inadequately sampled in the field of gerontology such as the Hmong, Burmese, Laotian, Iu Mien, and Pacific Islanders should be targeted for inclusion in future data collection efforts.

Third, a more integrated and comprehensive approach should be implemented to identify unexplored factors affecting older Asian American mental health and utilization. As mentioned earlier, the NIA health disparities research framework (Hill et al., 2015) provides a broad range of factors (e.g., 16 factors within four major levels) associated with health disparities. When we applied the NIA framework to discuss factors associated with older Asian American mental health, there were several unexplored factors affecting disparities that have not been well addressed in current Asian American mental health research. Biomarkers have not been extensively investigated in general health disparities research (Crimmins & Seeman, 2004; Ferraro et al., 2017) and almost none, to our best knowledge, exists for older Asian American mental health research, which is an area that deserves attention. Additionally, collaborative efforts to bridge the gap between biological and psychological factors would be desirable in the next decade of research on Asian American mental health.

The fourth area that requires more research on Asian American mental health is related to measurement issues, which is a fundamental area to be addressed in health disparities research before making comparisons across diverse groups (Kim, 2010; Kim & Park, 2017). In order to capture an accurate picture of the mental health needs of diverse Asian American older adults, researchers should focus on modifying available mental health assessment tools to be more applicable to older Asian Americans for comparative purposes and/or developing culture-specific measures to capture the mental health needs of Asian Americans subgroups.

Lastly, more innovative, culturally tailored intervention strategies should be developed to address the need for Asian American mental health and reduce barriers to mental health care utilization. When developing culturally tailored interventions for older Asian Americans, an additional yet imperative point that researchers and clinicians should keep in mind is to integrate the life course perspectives informed by developmental and structural perspectives into these interventions (Hill et al., 2015; Jones et al., 2019). This is mainly because structurally patterned exposures to risks during sensitive periods of development may influence individual health trajectories at an early stage of life (Jones et al., 2019), and thus, interventions applied in later life may not be effective. Therefore, developing effective intervention strategies for Asian Americans throughout the life course may eventually help to reduce existing racial/ethnic disparities in mental health and mental health care utilization.

Conclusions

This review highlights advances in older Asian American mental health research over the past two decades, identifies current research gaps, and offers recommendations for future research on older Asian American mental health in the next decade. While there have been significant advances in

Asian American mental health research in the field of gerontology, there is still much to be done in this area through collaborative and integrated efforts at different levels and/or across different disciplines. Gerontologists who are interested in working with older Asian Americans in the next decade should be aware that more unique and effective interventions for older Asian American mental health care will improve mental health and, eventually, the overall well-being of older Asian Americans.

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Conflict of Interest

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