

# Language Barriers and Access to Psychiatric Care: A Systematic Review

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**Objective:** The objective of this study was to synthesize the available evidence regarding the impact of patients' language proficiency on access to psychiatric care.

**Methods:** A systematic literature search of PubMed, EMBASE, Medline, and PsycINFO was performed to identify studies published between January 1950 and July 2014 that examined the impact of language proficiency on access to and utilization of psychiatric services in the general population or among patients with psychiatric disorders. The keywords were psychiatry, language, utilization, access, and mental health care. Only articles in English were included. Cross-referencing of the identified articles was also performed.

**Results:** Eighteen articles from four countries were identified, including 13 from the United States, two from Australia, two from Canada, and one from the Netherlands. These reports were generally consistent in showing a clear association between

insufficient language proficiency and underutilization of psychiatric services; 15 studies reported that limited language proficiency was significantly associated with less frequent mental health care visits. Only one article showed an inverse relationship between limited language proficiency and use of mental health services, and two articles reported no association. No published data were found on the effects of linguistic interventions on access to mental health care among people with limited language proficiency.

**Conclusions:** It is plausible that limited language proficiency is closely associated with underutilization of psychiatric services. Still, the lack of prospective interventional data clearly highlights the need for further investigations of the impact of language barriers on access to psychiatric care.

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Access to care is the first step in any medical treatment or intervention. For patients to gain access to care, proficiency in the language spoken by the providers is critically important. This is especially true for treatment of psychiatric conditions, given that clinical assessments of symptomatology heavily rely on verbal communication between patients and medical staff. Hence, limited language proficiency is likely to lead to a delay in treatment, inadequate care, and misdiagnosis (1).

As the world becomes more globalized, the number of immigrants and refugees has dramatically grown (2), resulting in the use of multiple languages within communities. For example, it was estimated that in 2010, the foreign-born population of the United States increased to 40 million, or 13% of the total population (3). Moreover, in 2011 the proportion of people with limited English proficiency reached 25.2 million, or 9% of the population (4). Given the obvious barriers they face, people who are not fluent in an official language are assumed to have difficulty gaining access to psychiatric care when necessary. These barriers include difficulty retrieving information on mental health care and on the location of hospitals or clinics, making a timely appointment, and determining affordability. On the other hand, seeking psychiatric care is subject to one's cultural

background (openness versus stigma) and social welfare system (universal versus personal insurance) as well as to the direct and indirect influence of local standards of care.

Systematic reviews of language proficiency and access to medical services in fields such as pediatrics and cancer screening have revealed that limited language proficiency is associated with less access to medical services (5,6). However, to our knowledge, there has been no systematic review of the literature on the impact of language proficiency on access to psychiatric treatment. The aim of this study was to synthesize the current evidence on how language acts as a barrier to psychiatric contact and how interventions to address language barriers affect treatment outcomes.

## METHODS

A systematic literature search was performed to identify longitudinal or cross-sectional studies published from January 1950 to July 2014 that examined impact or relevance of language proficiency on access to treatment of psychiatric disorders in the general population as well as among patients with psychiatric disorders. To that end, PubMed, EMBASE, Medline, and

PsycINFO were searched by using the following search terms: language AND psychiatry OR mental health care AND utilization OR access. Only peer-reviewed articles in English that assessed language skills of the sample in a systematic manner were included. Cross-referencing of the identified articles was performed to search for as many pertinent articles as possible. Two authors undertook the search independently and assessed the eligibility of articles; any discrepancies were resolved through discussion.

## RESULTS

An initial search identified 758 articles, and eight additional articles were found through cross-referencing. From these articles, 18 studies were found to be eligible; 13 were conducted in the United States (Table 1), two in Australia, two in Canada, and one in the Netherlands (Table 2). [A flowchart illustrating the results of the search is available as an online supplement to this article.] The articles were sorted into the following six categories according to the populations studied: the general population in the United States ( $N=9$ ), patients with psychiatric disorders in the United States ( $N=5$ ), patients with psychiatric disorders in Australia ( $N=2$ ), the general population in Canada ( $N=1$ ), patients with psychiatric disorders in Canada ( $N=1$ ), and patients with psychiatric disorders in the Netherlands ( $N=1$ ).

### General Population in the United States

Pumariega and colleagues (7) examined utilization of mental health services as well as associated sociodemographic and cultural characteristics, including language fluency, among 2,528 junior and senior high school students in Texas. They found that Hispanic youths who reported speaking English well had a greater lifetime number of counseling visits for emotional or behavioral problems compared with Hispanic youths who did not report speaking English well (2.3 versus 1.4, respectively). However, Hispanic youths who reported reading and writing English well did not have more lifetime counseling visits for emotional or behavioral problems compared with Hispanic youths who did not report reading and writing English well.

Abe-Kim and others (8) examined rates of mental health-related service use with data derived from the National Latino and Asian American Study (NLAAS). The NLAAS was the first national epidemiological household survey of Asian Americans in the United States and was conducted in 2002 and 2003. It found that U.S.-born Asian Americans ( $N=454$ ) demonstrated higher rates of service use (6.2%) compared with their immigrant counterparts ( $N=1,639$ ) (2.2%). However, the rate of service use was not associated with good English proficiency. Using the same database, Alegria and colleagues (9) examined the rates and correlates of mental health service use for the previous year in a national sample of Latinos ( $N=2,554$ ). In contrast to the study by Abe-Kim and others, Alegria and colleagues found that Latinos who spoke primarily Spanish reported less frequent use of services overall compared with Latinos who

spoke primarily English (9.1% versus 14.7%). Latinos who spoke primarily Spanish also reported less frequent use of specialty services compared with Latinos who spoke primarily English (3.9% versus 7.2%).

Kang and colleagues (10) used the NLAAS data and a logistic regression model to examine predictors of lifetime mental health service use in relation to English proficiency among Asian Americans ( $N=2,095$ ). They found that respondents with better English proficiency were more likely to use at least one mental health service in their lifetime (odds ratio [OR]=1.15, 95% confidence interval [CI]=1.03–1.28). Using the same database, Fortuna and others (11) identified factors associated with any mental health service use in the past 12 months among immigrants who experienced political violence. Good English proficiency was associated with an increased likelihood of using mental health services (OR=19.63, CI=4.10–93.98).

Sentell and colleagues (12) investigated language barriers to psychiatric treatment among ethnic groups by using the data from the California Health Interview Survey (CHIS). The CHIS was a population-based, telephone survey of non-institutionalized adults in California that used random digit dialing to generate telephone numbers. This survey captured the language needs of the predominant immigrant groups by conducting interviews in English, Spanish, Vietnamese, Mandarin, Cantonese, and Korean. In this analysis, participants were divided into three groups by language status: no English ( $N=2,750$ ), bilingual ( $N=9,243$ ), and English only ( $N=29,991$ ). The investigators found that individuals who spoke no English had lower odds of receiving needed services compared with individuals who spoke English only (OR=.28, CI=.17–.48). Furthermore, Asian/Pacific Islanders and Latinos who spoke no English had significantly lower odds of receiving services compared with Asian/Pacific Islanders (OR=15, CI=.30–.81) and Latinos (OR=.19, CI=.09–.39) who spoke English only.

Sorkin and colleagues (13) used the CHIS data set to examine factors associated with use of mental health services in a population-based sample that included six Asian subgroups (Chinese, Filipinos, South Asians, Japanese, Koreans, and Vietnamese). They found no significant association between language proficiency and visits to a mental health care professional in this population (OR=.62, CI=.27–1.42).

Only one study has investigated the impact of one's parents' English fluency on access to psychiatric care. To investigate differences among ethnic groups in health care utilization, Coker and others (14) analyzed data from a cross-sectional study of 5,147 fifth graders and their parents in three metropolitan areas from 2004 to 2006. They compared health care utilization among children whose parents had limited English proficiency and children whose parents were fluent in English. Having parents with limited English proficiency was associated with less frequent utilization of mental health care (OR=.5, CI=.3–.6).

### Patients With Psychiatric Disorders in the United States

Three reports analyzed data about subgroups of psychiatric patients in the NLAAS. Le Meyer and others (15) examined

**TABLE 1. Studies from the United States related to language barriers and access to care**

Study	Setting or data source	Sample	Main findings
Pumariega et al., 1998 (7)	School-based study of the mental health of a triethnic sample of junior and senior high school students in Texas	Hispanics (N=1,696), non-Hispanic whites (N=527), African Americans (N=97)	Hispanic youths who reported speaking English well had a greater lifetime number of counseling visits compared with those who did not (2.3 vs. 1.4, $p<.01$ )
Abe-Kim et al., 2007 (8)	National Latino and Asian American Study (NLAAS)	Chinese (N=600), Filipinos (N=508), Vietnamese (N=520), other Asian Americans (N=467)	U.S.-born Asian Americans demonstrated higher rates of service use compared with their immigrant counterparts (6.2% vs. 2.2%); years in the United States and good English proficiency (EP) were not associated with service use
Alegria et al., 2007 (9)	NLAAS	U.S. and foreign-born Latinos, including Spanish speakers (N=1,348), bilinguals (N=332), English speakers (N=874)	Compared with U.S.-born Latinos and Latinos who spoke primarily English, foreign-born Latinos and Latinos who spoke primarily Spanish reported using less services overall (14.7% vs. 9.1%) and less specialty services (7.2% vs. 3.9%)
Sentell et al., 2007 (12)	2001 California Health Interview Survey (CHIS)	English only (N=29,991), bilingual (N=9,243), no English (N=2,750)	Non-English-speaking individuals had lower odds of receiving needed services compared with those who spoke only English (OR=.28, CI=.17-.48)
Fortuna et al., 2008 (11)	NLAAS	Immigrant Latinos (N=1,630)	Good (vs. poor) EP (OR=19.6, CI=4.10-93.98) among those with a history of political violence was associated with an increased likelihood of using mental health services
Le Meyer et al., 2009 (15)	NLAAS	U.S.-born (N=127) and foreign-born (N=241) Asian Americans with a psychiatric disorder	U.S.-born patients had almost twice the rate of mental health services as immigrants (40% vs. 23%)
Coker et al., 2009 (14)	Healthy Passages (Alabama, California, and Texas)	Parents with good EP (N=3,693) or limited EP (LEP) (N=1,423)	Good EP was associated with lesser frequency of mental health care utilization among children (OR=.5, CI=.3-.6)
Bauer et al., 2010 (16)	NLAAS	Individuals with a lifetime mental disorder, including Latinos with LEP (N=342), Latinos with EP (N=439), Asian Americans with LEP (N=123), Asian Americans with EP (N=243)	Significantly fewer individuals with LEP accessed services in their lifetime (Latinos: LEP, 42.8% versus EP, 54.2%; Asians: LEP, 32.9% versus EP, 53.9%)
Kang et al., 2010 (10)	NLAAS	Vietnamese (N=520), Filipinos (N=508), Chinese (N=600), other Asians (N=467)	Respondents with EP were more likely than respondents with LEP to use at least one mental health service once in their lifetime (OR=1.15, CI=1.03-1.28)
Kim et al., 2011 (17)	National Latino and Asian American Study	Immigrants with psychiatric disorders, including Latinos (N=249) and Asians (N=123)	LEP significantly decreased the odds of using mental health services in the total immigrant group (OR=.30, CI=.14-.64) and the Latino group (OR=.20, CI=.07-.58) but not among Asians
Sorkin et al., 2011 (13)	2007 CHIS	Asian immigrants (Filipinos [N=258], Koreans [N=288], Japanese [N=268], Chinese [N=496], Vietnamese [N=175], and South Asians [N=87]) and non-Hispanic whites (N=19,098)	Asian immigrants with EP were more likely to report a visit to a mental health care professional (OR=.62, CI=.27-1.42) compared with non-Hispanic whites
Aratani et al., 2012 (18)	California Department of Mental Health's Consumer and Services Information System	Mental health services users under age 25, including non-English speakers (N=23,231) and English speakers (N=36,573)	Non-English speakers were 55% less likely than English speakers to continue community-based mental health visits (OR=.45, CI=.43-.48)
Keyes et al., 2012 (19)	National Epidemiologic Survey on Alcohol and Related Conditions	Spanish-speaking (N=851), middle-low English-speaking (N=875), middle-high English-speaking (N=715), and English-speaking (N=951) Latinos	Individuals reporting strong vs. weak Latino ethnic identity (OR=.62, CI=.42-.92) and those reporting mostly or completely Spanish language/Latino social preference (vs. mostly English language/other social preference) (OR=.68, CI=.50-.94) were less likely to utilize services

127 U.S.-born and 241 foreign-born Asian Americans with psychiatric disorders; the rate of mental health service use by the U.S.-born participants was almost twice that of immigrant Asian Americans (40% versus 23%, respectively). Among Asian Americans with limited English proficiency, use of alternative services was negatively associated with the use of mental health services ( $OR \leq .001$ ), whereas among Asian Americans with good English proficiency, use of alternative services was associated with a greater likelihood of using mental health services ( $OR=25.58$ ). Bauer and colleagues (16) analyzed the NLAAS data to assess the impact of English proficiency on access to, and quality of, mental health care among community-dwelling individuals with a diagnosis of psychiatric disorders, including 342 Latinos and 123 Asians with limited English proficiency and 439 Latinos and 243 Asians who were proficient in English. Significantly fewer individuals with limited English proficiency accessed services in their lifetime compared with individuals who were proficient in English (Latinos, 42.8% versus 54.2%, respectively; Asians, 32.9% versus 53.9%, respectively). Receipt of minimally adequate care did not significantly differ among individuals who had limited English proficiency or who were proficient in English (Latinos, 18.2% versus 21.3%, respectively; Asians, 9.8% versus 18.6%).

Finally, Kim and others (17) examined the effect of English fluency on mental health service use in Latino ( $N=249$ ) and Asian ( $N=123$ ) immigrant adults with a mood, anxiety, or substance use disorder. Limited English proficiency significantly decreased the odds of using mental health services in the total immigrant group ( $OR=.30$ ,  $CI=.14-.64$ ) as well as among Latinos ( $OR=.20$ ,  $CI=.07-.58$ ), but not among Asians.

Aratani and Cooper (18) used administrative data from users under age 25 of California's county mental health services to examine how English fluency affected continuation of services among non-English speakers ( $N=23,231$ ) and English speakers ( $N=36,573$ ). The results demonstrated that non-English speakers were 55% less likely than English speakers to continue community-based mental health visits ( $OR=.45$ ,  $CI=.43-.48$ ). Using the data from two waves of the National Epidemiologic Survey on Alcohol and Related Conditions, Keyes and colleagues (19) investigated mental health service use among U.S. Latinos who were diagnosed as having mood, anxiety, and substance use disorders, particularly the relationship between service use and participants' linguistic and social preferences. Individuals who reported strong Latino ethnic identity and a preference for interactions that are conducted mostly or completely in Spanish or for social relationships that mostly or completely involve Latinos were less likely than persons without such linguistic and social preferences to utilize mental health services ( $OR=.62$ ,  $CI=.42-.92$ , and  $OR=.68$ ,  $CI=.42-.92$ , respectively, after adjustment for disease severity, time spent in the United States, and age at immigration).

#### **Patients With Psychiatric Disorders in Australia**

Stuart and others (20) explored the relationship between English proficiency and mental health service utilization by using data from all mental health services in the state of Victoria.

Poor English speakers underutilized specialist outpatient services: only 21% of patients with poor English proficiency and 31% of patients with everyday English proficiency received psychotherapy, compared with 53% of fluent and 61% of native English speakers. There was a marked preference for bilingual general practitioners, with 80% of patients with limited English proficiency consulting general practitioners who spoke their native language.

Steel and others (21) examined use of community- and hospital-based mental health services among patients from non-English-speaking ( $N=66$ ) and English-speaking ( $N=80$ ) backgrounds in Greater Western Sydney, New South Wales. They compared how long it took for the two groups to obtain services for the first time and the pathways they followed to obtain services. In this study, paradoxically, patients with poor English fluency obtained mental health services in a shorter time (median=3.5 months) compared with the overall sample (median=6.3 months). However, there was no difference in the total number of professional consultations by level of English fluency, and indeed poor English fluency was associated with a lower likelihood of consulting an allied health professional.

#### **General Population in Canada**

Chen and others (22) examined the characteristics associated with mental health visits to general practitioners and psychiatrists by recent Chinese immigrants in British Columbia, using three linked immigration and health administrative databases. Among men, the ability to communicate in English was associated with a slightly higher rate of mental health visits (relative risk=1.10, versus inability to communicate in English), but among women, being able to communicate in English was associated with a lower rate of psychiatric visits among women (relative risk=.72, versus inability to communicate in English). Using the data from the Canadian Community Health Survey, Chen and colleagues (23) identified differences in mental health service use among immigrant Chinese residents of British Columbia ( $N=879$ ). Chinese immigrants who were proficient in English were more likely than those who were not proficient in English to have a mental health consultation, after the analyses adjusted for depression ( $OR=1.52$ ,  $CI=.14-16.97$ ).

#### **Patients With Psychiatric Disorders in the Netherlands**

Using the data derived from the Second National Survey of General Practice carried out in 2001–2003 in the Netherlands, Koopmans and others (24) compared access to ambulatory mental health care among Turkish ( $N=397$ ), Moroccan ( $N=364$ ), Surinamese ( $N=292$ ), and Antillean ( $N=252$ ) immigrants and members of the native Dutch population ( $N=7,772$ ). They found that all non-Dutch groups were clearly less likely to use outpatient mental health care services compared with their native counterparts, with the Moroccan group having the lowest likelihood, followed by Turks, Surinamese, and Antilleans (logit coefficients=−.980, −.745, −.675, and −.572, respectively). Acculturation predicted utilization but did not explain all

**TABLE 2. Studies from Australia, Canada, and the Netherlands related to language barriers and access to care**

Study	Setting or data source	Sample	Main findings
Stuart et al., 1996 (20)	All mental health services in Victoria, Australia	Inpatients (N=1,849), outpatients (N=3,987)	Poor English speakers underutilized specialist outpatient services; only 21% of patients with poor English proficiency (EP) and 31% of those with everyday English proficiency received psychotherapy, compared with 53% of fluent and 61% of native English speakers
Steel et al., 2006 (21)	2 geographical catchment regions of Greater Western Sydney, New South Wales, Australia	Patients who made their first lifetime contact with mental health services, including English-speaking (N=80), Arabic (N=25), Chinese (N=27), and Vietnamese (N=14) patients	Patients with limited English fluency had a shorter median time to obtain mental health services (3.5 months) compared with the overall sample (6.3 months); English fluency was not associated with delays in receiving public mental health care
Chen et al., 2008 (23)	Canadian Community Health Survey, cycle 1.1	Immigrant Chinese (N=879), Canadian-born Chinese (N=205), immigrant non-Chinese (N=3,439), Canadian-born non-Chinese (N=13,779)	Chinese immigrants with good EP were more likely than Chinese immigrants with LEP to have mental health consultations (OR=1.52, CI=.14–16.97)
Chen et al., 2009 (22)	Linked immigration and health administrative database, British Columbia, Canada	Total sample (N=100,773; N=48,877 males, N=51,896 females); English speaking: males, 56%, and females, 46%	Ability versus inability to communicate in English was associated with slightly higher rates of mental health visits among men (relative risk=1.10) but not among women
Koopmans et al., 2013 (24)	Dutch National Survey of General Practice	Dutch (N=7,772), Moroccans (N=364), Turkish (N=397), Antilleans (N=252), Surinamese (N=292)	All non-Dutch groups were clearly less likely to use outpatient mental health care services than their native counterparts, with the Moroccan group having the lowest likelihood, followed by Turks, Surinamese, and Antilleans (logit coefficients=−.980, −.745, −.675, and −.572, respectively)

ethnic-related differences; for example, proficiency in Dutch did not explain ethnic-related differences in use of services.

## DISCUSSION

Eighteen articles from the United States, Australia, Canada, and the Netherlands that investigated the impact of language proficiency on access to psychiatric services were identified through a systematic literature search. These articles were generally consistent in showing a clear association between limited language proficiency and underutilization of psychiatric services, irrespective of where the research was conducted. However, cross-sectional studies dominate this field, and prospective data on how to enhance access to care with linguistic interventions are scarce. In fact, to our knowledge, only three prospective studies have investigated the effect of language programs on the access to mental health services; however, these studies did not meet our inclusion criteria because they did not assess the language proficiency of participants in a systematic manner (25–27). Thus the literature search clearly underscores the paucity of data related to the association between language proficiency and access

to mental health services, especially data about interventions to counteract this ubiquitous problem, which is likely to delay appropriate treatment for those in serious need of help.

Unfortunately, thus far the scarcity of data on this subject seems to gather little public attention, which may suggest that people who are fluent in their official language (a majority in the society) may not be aware of the problem. However, this issue is expected to become a major public concern as the world's population becomes increasingly fluid (2). Epidemiological data have clearly shown that immigrants and refugees are more likely than members of the general population to experience psychiatric disorders (28,29), in part, at least, because of the stressful, potentially stigmatizing, and traumatic situations they face in their home countries, as well as in the countries where they have relocated.

Language is a clear barrier in seeking and delivering appropriate treatment among immigrants and refugees; language proficiency is especially important in psychiatric care because determination of psychiatric diagnoses significantly depends on verbal communication between patients and professionals. The fact that the associations between access to psychiatric care and ethnic background were not always consistent in the literature



may suggest that language proficiency plays a greater role in access than does ethnic background.

The three prospective studies that were not included in this review are important, nonetheless, given their clinical relevance (25–27). For example, Snowden and colleagues (25) evaluated the impact of the threshold language policy on use of public mental health services by Vietnamese, Cantonese, Hmong, and Cambodian speakers with limited English proficiency in California. The threshold language policy was implemented in California and other states in accordance with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, and nation of origin. Under this policy, when the percentage of county residents with limited English proficiency reaches a designated level, the county is required to provide language assistance for persons with limited English proficiency at no cost to facilitate equal access to services. As a result of the implementation of this policy, the use of mental health services among adults ages 19–64 years in 11 California counties doubled from 1998 to 2001 (from 8.8% to 17.3%). However, the impact of the program compared with programs in eight control counties did not persist beyond three years.

Also, in Canada and Australia, patients who do not speak the official language are provided medical interpretation services at no cost (30). However, in the real world, the cost of interpretation services has put a significant burden on hospitals as well as on society as a whole (31). This fact may limit the quality and quantity of such services, which could further hinder medical access for many patients with suboptimal language proficiency. Because of the limited timely access to interpretation services in general practice clinics, family members who are fluent in the language of their host country often serve as translators in the real world. However, psychological stress associated with translation, possibilities of false translation, and protection of personal information, even among family members, may need to be acknowledged as serious drawbacks of this practice.

Given the scarcity of prospective studies on the access to mental health services among people with limited language proficiency, further studies of linguistic intervention programs that enhance access to psychiatric care among people with limited language proficiency are especially warranted. Moreover, a search system for locating doctors who can provide multilingual services would enhance access to psychiatric care among people with limited language proficiency. In addition, the availability of remote interpretation services, using teleconferencing, may reduce a psychological barrier against utilization of mental health care among people who are not fluent in the primary languages spoken in the host country.

One of the major limitations of the included studies should be acknowledged—although only articles that assessed language skills of the subjects in a systematic manner were included, language proficiency was not thoroughly evaluated even in those reports. In most cases, language proficiency was evaluated simply with a self-rated scale or a simple question such as, “How well do you speak English?” In fact, participants

were generally categorized into merely two or three groups in terms of language fluency (for example, good or poor). However, language proficiency, preferably, would be evaluated from multiple domains, including speaking, writing, reading, and listening comprehension, to reflect ability in the real world. A more thorough scale for the assessment of language proficiency would be useful for future investigations.

There were several other limitations to this review. First, the articles that were identified came from only four Western countries. Moreover, several articles have been derived from the same data sets (8–11,15–17). Similar findings were observed in other geographical regions in Europe and North America (32–34); however, these articles did not quantitatively assess the language ability of the participants and were, therefore, excluded in this systematic review. For example, a number of articles identified through the initial literature search evaluated immigrants’ help-seeking behaviors but failed to evaluate language proficiency in a quantitative fashion (33–40). In addition, because we included only studies in English, countries or regions of target were very limited. It is possible that articles with a focus on language issues are likely published in the official languages of the country of origin.

Second, language proficiency is expected to have an impact on a variety of aspects of patient care, including time elapsed before making an appointment, quality of care provided, and affordability. Although we focused on access to psychiatric care in this review, further investigations are clearly needed to elucidate any potential associations between language fluency and those other important aspects of care. Third, access to psychiatric care is very likely influenced by a variety of factors, including social and economic backgrounds. Although the impact of language fluency on access to psychiatric care seems to be a robust finding, the effects of other potential factors on access to psychiatric care should also be taken into account.

## CONCLUSIONS

Restricted language proficiency was found to be closely associated with underutilization of psychiatric services. Still, the scarcity of data clearly highlights a need for further cross-sectional and prospective investigations of language barriers to access to psychiatric care in a variety of geographical regions. In light of the growing number of immigrants, this unmet need should be seriously acknowledged and approached on multiple levels, such as federal and regional jurisdictions.

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## REFERENCES

- McCracken CF, Boneham MA, Copeland JR, et al: Prevalence of dementia and depression among elderly people in black and ethnic minorities. *British Journal of Psychiatry* 171:269–273, 1997
- International Migration 2009. New York, United Nations, Department of Economic and Social Affairs, Population Division, 2009. Available at [www.un.org/esa/population/publications/2009Migration\\_Chart/itmig-wallchart09.pdf](http://www.un.org/esa/population/publications/2009Migration_Chart/itmig-wallchart09.pdf)
- Grieco E, Acosta Y, de la Cruz GP, et al: The Foreign-Born Population in the United States: 2010. Washington, DC, US Department of Commerce, 2012
- Chhandasi P, Batalova J, McHugh M: Limited English Proficient Individuals in the United States: Number, Share, Growth, and Linguistic Diversity. Washington, DC, Migration Policy Institute, 2011
- Eneriz-Wiemer M, Sanders LM, Barr DA, et al: Parental limited English proficiency and health outcomes for children with special health care needs: a systematic review. *Academic Pediatrics* 14:128–136, 2014
- Lee HY, Vang S: Barriers to cancer screening in Hmong Americans: the influence of health care accessibility, culture, and cancer literacy. *Journal of Community Health* 35:302–314, 2010
- Pumariega AJ, Glover S, Holzer CE 3rd, et al: Administrative update: utilization of services: II. utilization of mental health services in a tri-ethnic sample of adolescents. *Community Mental Health Journal* 34:145–156, 1998
- Abe-Kim J, Takeuchi DT, Hong S, et al: Use of mental health-related services among immigrant and US-born Asian Americans: results from the National Latino and Asian American Study. *American Journal of Public Health* 97:91–98, 2007
- Alegria M, Mulvaney-Day N, Woo M, et al: Correlates of past-year mental health service use among Latinos: results from the National Latino and Asian American Study. *American Journal of Public Health* 97:76–83, 2007
- Kang SY, Howard D, Kim J, et al: English language proficiency and lifetime mental health service utilization in a national representative sample of Asian Americans in the USA. *Journal of Public Health* 32: 431–439, 2010
- Fortuna LR, Porche MV, Alegria M: Political violence, psychosocial trauma, and the context of mental health services use among immigrant Latinos in the United States. *Ethnicity and Health* 13: 435–463, 2008
- Sentell T, Shumway M, Snowden L: Access to mental health treatment by English language proficiency and race/ethnicity. *Journal of General Internal Medicine* 22(suppl 2):289–293, 2007
- Sorkin DH, Nguyen H, Ngo-Metzger Q: Assessing the mental health needs and barriers to care among a diverse sample of Asian American older adults. *Journal of General Internal Medicine* 26: 595–602, 2011
- Coker TR, Elliott MN, Kataoka S, et al: Racial/ethnic disparities in the mental health care utilization of fifth grade children. *Academic Pediatrics* 9:89–96, 2009
- Le Meyer O, Zane N, Cho YI, et al: Use of specialty mental health services by Asian Americans with psychiatric disorders. *Journal of Consulting and Clinical Psychology* 77:1000–1005, 2009
- Bauer AM, Chen CN, Alegria M: English language proficiency and mental health service use among Latino and Asian Americans with mental disorders. *Medical Care* 48:1097–1104, 2010
- Kim G, Aguado Loi CX, Chiriboga DA, et al: Limited English proficiency as a barrier to mental health service use: a study of Latino and Asian immigrants with psychiatric disorders. *Journal of Psychiatric Research* 45:104–110, 2011
- Aratani Y, Cooper JL: Racial and ethnic disparities in the continuation of community-based children's mental health services. *Journal of Behavioral Health Services and Research* 39:116–129, 2012
- Keyes KM, Martins SS, Hatzenbuehler ML, et al: Mental health service utilization for psychiatric disorders among Latinos living in the United States: the role of ethnic subgroup, ethnic identity, and language/social preferences. *Social Psychiatry and Psychiatric Epidemiology* 47:383–394, 2012
- Stuart GW, Minas IH, Klimidis S, et al: English language ability and mental health service utilisation: a census. *Australian and New Zealand Journal of Psychiatry* 30:270–277, 1996
- Steel Z, McDonald R, Silove D, et al: Pathways to the first contact with specialist mental health care. *Australian and New Zealand Journal of Psychiatry* 40:347–354, 2006
- Chen AW, Kazanjian A, Wong H: Why do Chinese Canadians not consult mental health services: health status, language or culture? *Transcultural Psychiatry* 46:623–641, 2009
- Chen AW, Kazanjian A, Wong H: Determinants of mental health consultations among recent Chinese immigrants in British Columbia, Canada: implications for mental health risk and access to services. *Journal of Immigrant and Minority Health* 10:529–540, 2008
- Koopmans GT, Uiters E, Devillé W, et al: The use of outpatient mental health care services of migrants vis-a-vis Dutch natives: equal access? *International Journal of Social Psychiatry* 59:342–350, 2013
- Snowden LR, Masland MC, Peng CJ, et al: Limited English proficient Asian Americans: threshold language policy and access to mental health treatment. *Social Science and Medicine* 72:230–237, 2011
- McClellan SR, Wu FM, Snowden LR: The impact of threshold language assistance programming on the accessibility of mental health services for persons with limited English proficiency in the Medi-Cal setting. *Medical Care* 50:554–558, 2012
- Snowden LR, McClellan SR: Spanish-language community-based mental health treatment programs, policy-required language-assistance programming, and mental health treatment access among Spanish-speaking clients. *American Journal of Public Health* 103:1628–1633, 2013
- de Jong JT, Komproe IH, Van Ommeren M, et al: Lifetime events and posttraumatic stress disorder in 4 postconflict settings. *JAMA* 286:555–562, 2001
- Ladin K, Reinhold S: Mental health of aging immigrants and native-born men across 11 European countries. *Journals of Gerontology. Series B, Psychological Sciences and Social Sciences* 68: 298–309, 2013
- Help Using TIS National Services. Canberra, Australia, Department of Immigration and Border Protection, July 2014. Available at [www.tisnational.gov.au/Non-English-speakers/Help-using-TIS-National-services](http://www.tisnational.gov.au/Non-English-speakers/Help-using-TIS-National-services). Accessed July 31, 2014
- Assessment of Cost and Benefits Associated with the Implementation of EO 13166. Washington, DC, Office of Management and Budget, 2002
- Gadalla TM: Comparison of users and non-users of mental health services among depressed women: a national study. *Women and Health* 47:1–19, 2008
- Bischoff A, Tonnerre C, Eytan A, et al: Addressing language barriers to health care, a survey of medical services in Switzerland. *Sozial- und Präventivmedizin* 44:248–256, 1999
- Liu CH, Ingleby D, Meeuwesen L: Barriers to health care for Chinese in the Netherlands. *International Journal of Family Medicine*, 2011 (doi 10.1155/2011/635853)

35. Li HZ, Browne AJ: Defining mental illness and accessing mental health services: perspectives of Asian Canadians. *Canadian Journal of Community Mental Health* 19:143–159, 2000
36. Fenta H, Hyman I, Noh S: Mental health service utilization by Ethiopian immigrants and refugees in Toronto. *Journal of Nervous and Mental Disease* 194:925–934, 2006
37. Kirmayer LJ, Weinfeld M, Burgos G, et al: Use of health care services for psychological distress by immigrants in an urban multicultural milieu. *Canadian Journal of Psychiatry* 52:295–304, 2007
38. Reitmanova S, Gustafson DL: Primary mental health care information and services for St John's visible minority immigrants: gaps and opportunities. *Issues in Mental Health Nursing* 30:615–623, 2009
39. Archie S, Akhtar-Danesh N, Norman R, et al: Ethnic diversity and pathways to care for a first episode of psychosis in Ontario. *Schizophrenia Bulletin* 36:688–701, 2010
40. Langille D, Rainham D, Kisely S: Is francophone language status associated with differences in the health services use of rural Nova Scotians? *Canadian Journal of Public Health* 103:65–68, 2012

## APA Seeks Editor-in-Chief for *Psychiatric Services*

The American Psychiatric Association (APA) is seeking applicants for the position of Editor of *Psychiatric Services*, APA's monthly mental health services research and policy journal. The current Editor concludes his final term on December 31, 2016.

The Editor appoints and works with a 12-member Editorial Board, the Managing Editor, and the Publisher in preparing and implementing policy, content directions, and procedures for the journal.

The Editor is responsible for

- screening proposed author submissions and deciding on their appropriateness for the journal
- planning and implementing special content, such as series and special sections and issues related to science and policy affecting the field
- meeting with APA senior staff and other leaders in the field to determine directions and trends in science and policy and develop and solicit content to address these issues
- reviewing changes and advances in scientific and medical journal publishing and new technologies.

Other responsibilities include overseeing and ensuring the rigorous and equitable peer review of all manuscripts—selecting reviewers for all submissions, monitoring modifications of revised and resubmitted manuscripts, and making disposition decisions—in a process that is facilitated by an online manuscript tracking system and peer review assistants on the journal's staff.

The position of Editor is a part-time position (20%–30%). Most work is done via the Internet and telephone.

Applicants must be APA members who have knowledge of and experience in the field of mental health services research and in established and emerging evidence-based practices for people with serious mental illness.

Applications are due by September 30, 2015. Candidates should submit their curriculum vitae and a cover letter outlining their qualifications by e-mail to [PSEditorSearch@psych.org](mailto:PSEditorSearch@psych.org). For further information, please contact Rebecca Rinehart, Publisher: [rrinehart@psych.org](mailto:rrinehart@psych.org), 703-907-7876.