Impact of Patient Language Proficiency and Interpreter Service Use on the Quality of Psychiatric Care: A Systematic Review

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Objective: **This literature review examined the effects of patients' limited English proficiency and use of professional and ad hoc interpreters on the quality of psychiatric care.** ***Methods:*** **PubMed, PsycINFO, and CINAHL (Cumulative Index to Nursing and Allied Health Literature) were systematically searched for English-language publications from inception of each database to April 2009. Reference lists were reviewed, and expert sources were consulted. Among the 321 articles identified, 26 met inclusion criteria: peer-reviewed articles reporting primary data on clinical care for psychiatric disorders among patients with limited proficiency in English or in the provider's language.** ***Results:*** **Evaluation in a patient's nonprimary language can lead to incomplete or distorted mental status assessment. Although both untrained and trained interpreters may make errors, untrained interpreters' errors may have greater clinical impact, compromising diagnostic accuracy and clinicians' detection of disordered thought or delusional content. Use of professional interpreters may improve disclosure in patient-provider communications, referral to specialty care, and patient satisfaction.** ***Conclusions:*** **Little systematic research has addressed the impact of language proficiency or interpreter use on the quality of psychiatric care in contemporary U.S. settings. Findings are insufficient to inform evidence-based guidelines for improving quality of care among patients with limited English proficiency. Clinicians should be aware of the ways in which quality of care can be compromised when they evaluate patients in a nonprimary language or use an interpreter. Given U.S. demographic trends, future research should help guide practice and policy by addressing deficits in the evidence base. (*Psychiatric Services* 61:765–773, 2010)**

The expanding population of individuals with limited English proficiency in the United States presents a challenge to the health care system, given the national shortage of bilingual providers (1). Lack of English proficiency represents a serious barrier to communicating effectively in health care settings, providing high-quality care, and addressing health care disparities. Limited English proficiency is associated with poor access to medical care (2–6); lower-quality care, including more invasive management and excess hospitalizations, medical errors, and drug complications (7–11); and poor satisfaction with care (7,12). Use of untrained interpreters may compound problems as a result of interpretation errors and the tendency among interpreters not to translate sensitive material (7). Individuals with limited proficiency may have worse access to psychiatric care (13), although findings are inconsistent (14,15).

For a variety of reasons language proficiency may have a greater impact on the quality of psychiatric care than on the quality of medical care. Psychiatric evaluation hinges on obtaining a thorough history because many key symptoms are not associated with directly observable behaviors or signs of morbidity, and they can be elicited only via self-report. Laboratory and radiological testing are of limited utility, typically helpful only to rule out organic contributors. Language barriers may interfere with conducting a thorough mental status examination, which may mask disorders of speech and language (for example, aphasias and neologisms), thought process (for example, flight of ideas, disorganization, and tangentiality), thought content (for example, grandiosity, delusions, obsessions, and magical thinking), and perceptions (for example, hallucinations). Finally, language barriers may hinder the identification of important factors influencing the process of care, including stigma, shame, patients' explanatory models of illness, their acceptance of the diagnosis and treatment, and development of a therapeutic patient-provider alliance.

Even though there are numerous theoretical reasons to surmise that

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language proficiency may influence psychiatric care, little research has explored this phenomenon. This article reports results of a systematic literature review that was conducted to describe the effects of limited English proficiency and interpreter service use on the quality of care for psychiatric disorders.

Methods

PubMed, PsycINFO, and CINAHL (Cumulative Index to Nursing and Allied Health Literature) were searched to identify all articles in English published from inception of each database to April 7, 2009, that examined the effects of language proficiency or interpreter use on psychiatric care. A total of 321 articles were identified as a result of the searches, reviews of reference lists of included articles, and consultation with expert sources. Of these, 26 met inclusion criteria: peer-reviewed articles that reported primary data on the assessment or treatment of psychiatric disorders among patients with limited proficiency in English or in the providers' language. [The systematic search methods are described in more detail in an online supplement to this article at ps.psychiatryonline.org.]

Results

Results from 12 reports of cases (16–27) are summarized in a second online supplement at ps.psychiatryonline.org.

Results from 14 empirical studies are organized according to the effects of language proficiency and interpreter use on three outcomes: psychiatric assessment and diagnosis (most studies), treatment, and patient-provider interaction. Table 1 shows the studies chronologically. When possible, results are presented separately for patients seen with or without interpreters or by bilingual providers; however, some studies provided insufficient information, and not all of these categories are represented in the literature. Ad hoc interpreters included anyone facilitating translation who was not trained in medical interpreting, such as bilingual hospital staff; friends or family, including minors; and other patients.

Psychiatric assessment and diagnosis

Four small-scale studies demonstrated that psychiatric assessment may be compromised among patients who are seen without interpreters (28–31). In South Africa, clinicians interviewing Xhosa-speaking inpatients without interpreters tended to use closed-ended questions and elicit brief replies, subsequently concluding that patients lacked intellectual capacity or that they had impoverished thoughts (31).

Studies of standardized evaluations of Spanish-speaking inpatients with schizophrenia that were conducted both in English (without interpreters) and in Spanish reported contradictory findings in overall scores on the Brief Psychiatric Rating Scale (BPRS) (28–30). Marcos and colleagues (28) found higher BPRS scores among patients assessed in English than among those assessed in Spanish, whereas Price and Cuellar (30) reported lower scores among those assessed in English. Several factors may have contributed to this discrepancy. Patients' responses to some questions differed in each language—for example, they endorsed symptoms in English but denied them in Spanish (29). Patients spoke in the present tense more often in English than in Spanish, suggesting current rather than past symptoms (29). In the study by Marcos and colleagues (28,29), psychiatrists viewed recordings of evaluations conducted without an interpreter; patients were Spanish speaking but conversant in English. Evaluations conducted in each language were evaluated by psychiatrists who spoke the same language (English or Spanish). Thus the effects of rater and patient language were confounded. Higher scores were given to patients assessed in English (by English-speaking psychiatrists) than those assessed in Spanish (by Spanish-speaking psychiatrists) on the subscales anxiety, tension, mannerisms and posturing, somatic concern, emotional withdrawal, depressive mood, and hostility. Scores on these subscales may have been influenced by characteristics of speech, such as fluency, rate, and productivity (28,29). In Price and Cuellar's study (30), patients were rated in both languages by bilingual raters who may have attributed speech disturbances in English to challenges of communicating in a second language rather than to psychopathology. However, because detailed BPRS score profiles were not reported, it is not possible to compare the total scores between the two studies or to determine which subscales were elevated.

In Germany, Turkish and German psychotic patients were interviewed with the Schedules for the Clinical Assessment in Neuropsychiatry (SCAN) by a monolingual German-speaking psychiatric trainee without an interpreter and by a bilingual psychiatric trainee (32). The trainees disagreed on the diagnosis for 4% of German patients and 19% of Turkish patients. The relative percentages of disagreement were similar for Turkish patients with "good" and "bad" German proficiency; however, the method of assessing proficiency was not described. The authors speculated that diagnostic uncertainty may be more closely linked to patients' level of acculturation than to their language proficiency. Alternately, psychometric properties of the Turkish and German versions of the SCAN may differ, accounting for some observed differences.

Taken together, these studies suggest that psychiatric assessments conducted in a nonnative language may be less reliable, although the effect on overall impressions of psychopathology may vary according to symptom type (28,30,32).

Seven of the 14 empirical studies addressed the effects of interpreters on psychiatric assessment and diagnosis. In two studies, researchers audiotaped evaluations of patients in which ad hoc interpreters were used (33,34). Errors in interpretation resulted from interpreters' inadequate language proficiency; their lack of psychiatric knowledge, which led to normalization of patients' disordered thought process; interjection of their attitudes or editorializing comments; and their providing answers for patients without first interpreting the question for them (33,34). [Table A2 in the second online supplement to this article, avail-

Table 1

Summary of empirical studies on the effects of language proficiency and interpreter use on psychiatric assessment and diagnosis, treatment, and patient-provider interaction

Study, year, and setting	N and sample	Interpreter type	Methods	Results	Comments
Marcos et al., 1973, New York inpatient (28)	10 Spanish-speaking patients with schizophrenia who were conversant in English	None	Closed-circuit television recordings of standardized evaluations in Spanish and English rated by Spanish- or English-speaking psychiatrists	Patients received higher psychopathology ratings in English than in Spanish (BPRS[a] scores of 93 and 65); BPRS scales affected most by language were depressed mood, anxiety, tension, hostility, emotional withdrawal, and somatic concern, with patients scoring higher (greater severity) in English than in Spanish	Interview language and rating psychiatrists' language were confounded
Marcos et al., 1973, New York inpatient (29)	Same as above	None	Same as above	Patients gave short replies (6 words or fewer) significantly more often and spoke more slowly in English than in Spanish. Their responses contained more speech disturbances (such as grammatical problems, repetition, and stuttering); patients gave different responses to the same question in English and Spanish interviews; patients spoke in the present tense more often in English than in Spanish; patients appeared more uncooperative and guarded when evaluated in English compared with Spanish	
Price, 1975, Australia, setting not specified (34)	Unspecified number of Hindustani-speaking patients evaluated by 1 of 3 psychiatrists	Ad hoc; 2 hospital orderlies with different levels of experience and 1 educated man with schizophrenia in remission	Audiotapes of evaluations	Errors in interpretations of patients' utterances were twice as common as errors in interpretations of psychiatrists' utterances; omissions were likely to occur when patients provided long or rambling answers; more interpreting errors were made of utterances by acutely psychotic patients than of those by patients without active thought disorders; the orderlies had lower English proficiency and made more interpreting errors than the patient-interpreter; the experienced orderly made errors of addition (interjecting phrases) that appeared to be related to his prior experience with history taking, whereas the less experienced orderly distorted questions into leading questions	2 psychiatrists were bilingual
Marcos, 1979, New York, setting not specified (33)	8 Chinese-speaking or Spanish-speaking patients	Ad hoc; psychiatric nurse, nurse's aid, patients' relatives	Audiotaped encounters	Errors in interpretation were related to inadequate language proficiency of interpreters, interpreters' attempts to "normalize" disordered thought process, minimization or amplification of pathology by relatives, or interpreters' responding to questions without asking the patient	
Kline et al., 1980, Los Angeles, outpatient (41)	61 Spanish-speaking patients (21 with limited English proficiency and 40 with some English proficiency) and 16 psychiatric residents	Either no interpreter or professional interpreters (training not specified)	Questionnaires assessing effectiveness of communication at psychotherapy intake appointments from patient and provider perspectives	Patient sample: compared with patients seen without interpreters, those seen with interpreters felt more helped (76% versus 40%) and gained more self-understanding (90% versus 53%); most patients seen with interpreters wanted return visits (76%). Resident sample: few psychiatric residents believed that patients seen with interpreters were helped (0%) or wanted to return to the clinic (31%); only 1 resident (6%) felt comfortable providing ongoing care to patients who need interpreters	Patients were selected by surname; their English proficiency was not assessed; use of an interpreter was based on patient request, which may have contributed to favorable ratings of interpreter-assisted evaluations

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Study, year, and setting	N and sample	Interpreter type	Methods	Results	Comments
Price and Cuellar, 1981, San Antonio, inpatient (30)	32 bilingual Mexican-American patients with schizophrenia (31 were native Spanish speakers)	None	Videotaped standardized psychiatric evaluations conducted in both English and Spanish and rated by bilingual master's-level mental health professionals	Patients were assessed as having greater psychopathology on the BPRS[a] during Spanish-language interviews than during English-language interviews; patients showed greater self-disclosure during interviews in Spanish; verbal fluency in English predicted the difference between languages in assessed psychopathology	
Dodd, 1984, Saudi Arabia, primary care (38)	Unspecified number of patients treated by 10 Arabic-speaking physicians or 10 non–Arabic-speaking physicians	Professional and ad hoc (bilingual nurses)	Retrospective medical record review determining the number of new *ICD* diagnoses of mental disorders and "signs, symptoms, and ill-defined conditions"	Arabic-speaking and non–Arabic speaking physicians diagnosed similar proportions of patients as having mental disorders and similar proportions as having "signs, symptoms, and ill-defined conditions"	Patients' language proficiency was not specified
Farooq et al., 1997, United Kingdom, setting not specified (35)	20 patients (10 English proficient; 7 Mirpuri speaking and 3 Punjabi speaking with limited English proficiency)	Professional	Audiotaped encounters of patients interviewed via checklists by a bilingual psychiatrist and an English-speaking psychiatrist via an interpreter	Common interpretation errors included omission, conceptual substitutions, condensations, miscommunication because of interpreter's lack of language skills and subtle changes in phrasing; no significant differences between the psychiatrists on scoring of mental status items	Interpreter was not blinded to study aims; bilingual psychiatrist conducted interviews and coded transcripts
Haasen et al., 2000, Germany, inpatient (32)	150 patients with psychotic symptoms (100 Turkish patients with good or bad German proficiency and 50 German patients)	None	Comparison of clinical diagnoses with diagnoses from structured interviews conducted by 2 psychiatric residents (1 bilingual in Turkish and German; 1 monolingual German speaking)	Low agreement between clinical and both residents' research diagnoses for Turkish but not German patients and lower agreement between research diagnoses for Turkish than for German patients; diagnostic disagreement occurred for 4% of German patients and 19% of Turkish patients; Turkish patients' level of proficiency in German did not affect the rate of diagnostic disagreement	Method of determining patients' German proficiency was not described; method of determining clinical diagnoses (including use of interpreters) was not specified; it was not specified whether the standardized instrument has been validated in German and Turkish
Drennan and Swartz, 2002, South Africa, inpatient (31)	Unspecified number of Xhosa-speaking patients	Professional, ad hoc (for example, bilingual nurses and staff), and no interpreter	Mixed-methods qualitative study using retrospective chart review, semistructured interviews with interpreters and staff, and notes from direct observation of encounters	When language abilities were not accounted for, clinicians were likely to conclude that intellectual impairment or thought disorders (for example, impoverished thought) were present; interpreters offered opinions on patients' intelligence and motivation; reasons patients refused interpreters included pride in their English-speaking abilities, paranoia about the interpreter, and wanting to eliminate third-party interference	
Eytan et al., 2002, Switzerland, primary care (36)	319 asylum seekers entering Switzerland from Kosovo	Professional, ad hoc (family and friends), and no interpreter (when patients were bilingual or when an inter-	Review of standard health-screening questionnaires administered to asylum seekers by nurses	For 84% of evaluations without interpreters, nurses rated communication as "poor" or "fair," compared with 72% of evaluations with an ad hoc interpreter; ratings of "good" were given in 94% of evaluations with professional interpreters; use of professional interpreters was associated with increased disclosure of traumatic events (77% of patients with professional interpreters, 46% with ad	Because professional interpreter use was associated with greater disclosure of trauma and symptoms, it may be an important pathway to referral for psychiatric care; it is unclear why the authors chose to con-

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Study, year, and setting	N and sample	Interpreter type	Methods	Results	Comments
		preter was needed but not available)		hoc interpreters, and 55% without interpreters) and of psychological symptoms (33%, 14%, and 12%, respectively) but not of physical symptoms (25%, 22%, and 14%, respectively); use of professional interpreters was also associated with greater referral for psychiatric care (15%, 3%, and 4%, respectively); when age, gender, severity of symptoms, and prior trauma exposure were controlled for in multivariate analyses, effects of professional interpreter use on referral were no longer significant	trol for these variables rather than assess whether these variables mediated the effects of professional interpreters on referral rates
Bischoff et al., 2003, Switzerland, primary care (37)	723 asylum seekers entering Switzerland, primarily from Balkan states	Professional, ad hoc (family and friends), and no interpreter when patients and providers shared a common language or when an interpreter was needed but not available)	Review of standard health-screening questionnaires administered to asylum seekers by nurses	Lack of any interpreter was associated with low reporting of physical and psychological symptoms (18% and 18%, respectively); use of professional interpreters led to higher reports of both types of symptoms (25% and 32%, respectively); use of ad hoc interpreters led to higher reports of physical symptoms (26%) and low reports of psychological symptoms (16%); when nurses believed communication was good (versus poor), patients reported more physical symptoms (OR=2.1, 95% CI=1.2–3.6), psychological symptoms (OR=3.7, 95% CI= 1.5–4.8), and exposure to trauma (OR= 4.7, 95% CI 3.0–7.5); referral for psychological care but not general medical care was more likely when language concordance was adequate (bilingual provider or professional interpreter) than when there was no concordance (OR= 3.2, 95% CI=1.2–8.6); partial concordance (ad hoc interpreter or nurse with some language skills) did not improve referral rate compared with no concordance (OR=1.6, 95% CI=.5–4.9)	Sample included participants in the study by Eytan et al. (36)
Zayas et al., 2007, United States, outpatient (40)	98 Latino patients (with good or limited English proficiency or bilingual) evaluated by 16 Latino or 33 non-Latino clinicians of various backgrounds	Ad hoc (2 bilingual mental health professionals: 1 untrained and 1 with some training in interpreting); interpretation was in person for 6 English-speaking clinicians or by viewing videotapes of interviews conducted by 65 Spanish-speaking clinicians	Comparison of 71 encounters with interpreters and 27 without interpreters; a questionnaire assessed the clinicians' experience of the interpreting process	Clinicians believed they were getting accurate translations and reported that use of the interpreter improved their confidence in the diagnosis; clinicians believed that the presence of the interpreter led to assessments of equal or greater severity of psychopathology and impairment of functioning than in assessments they would have done had no interpreter been present	In 65 of 71 encounters in which effects of interpreters were were assessed, the clinician was Spanish speaking and the interpreter was not present during the encounter; these encounters differed from those between English-speaking clinicians and patients with limited English proficiency seen with in-person interpreters; assessments by Spanish-speaking clinicians who conducted the interviews were not compared with assessments by English-speaking clinicians who viewed

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Study, year, and setting	N and sample	Interpreter type	Methods	Results	Comments
					videotapes; the accuracy of interpretation was not directly assessed to validate clinicians' assessments
Gilmer et al., 2009, San Diego, outpatient (39)	7,874 patients with schizophrenia (5,695 English-proficient non-Latino whites, 1,196 English-proficient Latinos, 523 Latinos with limited English proficiency, 298 English-proficient Asians, and 162 Asians with limited English proficiency)	Unknown	Review of administrative data, including antipsychotic prescription renewal rate and hospitalization rate	Among Latinos, limited English proficiency was associated with greater medication adherence (41% versus 36% of English-proficient Latinos) and with less excess prescription filling (15% versus 20%); among Asians, limited English proficiency was associated with lower medication adherence (40% versus 45% of English-proficient Asians) and less excess prescription filling (13% versus 17%) and greater nonadherence (29% versus 22%); when analyses controlled for adherence, limited English proficiency was associated with lower hospitalization rates	Language in which care was provided was used as a proxy for English proficiency

[a] Brief Psychiatric Rating Scale

able at ps.psychiatryonline.org, categorizes types of errors with illustrative examples.] Interpreters with less English proficiency made more errors (34). A hospital orderly with no interpreter training but some experience made more addition errors (that is, interjecting phrases), whereas a less experienced orderly made more distortions of clinicians' questions (34). Interpretation errors were twice as likely to occur when patients spoke than when physicians spoke and were more likely with acutely psychotic patients than with nonpsychotic patients (34). Similarly, when patients provided lengthy or convoluted replies, omissions were especially likely. Interpreters may have difficulty registering and remembering a patient's statement if they cannot discern its meaning (34). Similarly, in South Africa, both ad hoc interpreters (for example, bilingual nurses) and professional interpreters failed to translate psychotic patients' actual statements (31). Bilingual nurses were less likely than professional interpreters to report that they could not follow the patient; instead they asserted their opinion that the patient was psychotic. Clinicians, however, preferred working with these nurses over professional interpreters who withheld judgments (31).

In England evaluations of patients with good or limited English proficiency were audiotaped and transcribed; the patients underwent two evaluations—one by an English-speaking psychiatrist with a professional interpreter and one by a bilingual psychiatrist (35). The professional interpreter made errors, including omissions, condensations, conceptual substitutions, and miscommunications that were attributed to the interpreter's inadequate language skills. Nevertheless, both psychiatrists generated similar overall checklist ratings of patients' mental state. Methodological limitations may have obscured potential differences. Specifically, the interpreter knew that the study aimed to compare the two types of evaluations, and the same psychiatrist assessed patients and transcribed encounters.

Two studies reviewed medical records from initial health screenings of refugees seeking asylum in Switzerland (36,37). Use of professional interpreters was associated with increased disclosure of traumatic events and psychological symptoms, compared with use of ad hoc interpreters or no interpreter (36). Patients reported few physical or psychological symptoms in encounters without an interpreter or when providers reported that communication was poor, and patients reported more symptoms during encounters with professional interpreters (37). However, the presence of an ad hoc interpreter, typically a family member or friend, was associated with reports of many physical symptoms but few psychological symptoms (37). Thus disclosure of psychological symptoms may be more sensitive to language barriers than disclosure of physical symptoms.

In Saudi Arabia a review of charts of primary care patients found that Arabic-speaking physicians and non–Arabic-speaking physicians using interpreters (professional or ad hoc) diagnosed mental disorders at similar rates (38). Although this finding suggests that some physicians made psychiatric diagnoses after evaluating patients whose language they did not speak (patients' primary language was not reported), this study

provided little insight into either the accuracy of physicians' assessments or physicians' ability to differentiate among psychiatric disorders, both critical prerequisites for high-quality care.

Results from these empirical studies indicate that interpreter-mediated encounters are prone to errors, although the clinical significance of errors varied among studies. Nevertheless, interpreters (especially professional ones) appear to facilitate more complete disclosure, which is a crucial component in ensuring accurate psychiatric assessments.

Treatment

A review of administrative data found that among Latino patients with schizophrenia, limited English proficiency was associated with greater adherence to antipsychotic medication, lower rates of excess prescription filling, and fewer hospitalizations (39). In contrast, the same study found that among Asian Americans, limited English proficiency was associated with lower adherence, greater nonadherence, and excess prescription filling. The authors speculated that cultural differences in family support structures and beliefs about mental illness and treatment may have accounted for these findings.

In Switzerland asylum seekers were more likely to be referred for psychiatric care when providers were bilingual or when professional interpreters were used than when ad hoc or no interpreters were used (36,37). However, the greater likelihood of psychiatric referral did not remain significant when the analysis controlled for effects of demographic variables, symptom severity, and disclosure of prior trauma. It is important to note, however, that professional interpreter use was associated with greater disclosure of psychological symptoms and trauma, suggesting that improved disclosure may have mediated the association between professional interpreter use and referral, although this was not tested. Finally, rates of referral for psychiatric care but not for medical care were higher with adequate patient-provider language concordance than with no concordance.

Patient-provider interaction

A heterogeneous group of studies, reviewed under the theme of patient-provider interaction, addressed how language proficiency or interpreter use affects the process of psychiatric care from the perspective of patients or providers.

Two studies that used videorecordings of Spanish-speaking patients found less verbal production by psychotic patients with limited English proficiency during English-language evaluations than during evaluations conducted in Spanish (29,30). During evaluations conducted in English, patients made significantly more short replies to questions that were identical in the Spanish interview, demonstrated slower speech and more pauses and disturbances (such as incomplete sentences, repetition, stuttering, and incoherent sounds) (29), and scored lower on ratings of self-disclosure (30).

Another study examined clinicians' impressions of their ability to create case formulations for Latino outpatients in one of two situations: in-person encounters with patients during which an ad hoc interpreter assisted or watching videotaped interviews with the help of an ad hoc interpreter (the interviews were conducted in Spanish by other clinicians) (40). In both situations, clinicians reported a high degree of confidence in their assessments and believed that the interpretations provided to them by the interpreters were accurate and free from bias. Most clinicians reported that use of an interpreter led to assessments of diagnosis and functioning that were of equal or greater severity than assessments they would have made without an interpreter. However, patients' language proficiency was not assessed, and the assessments of English-speaking and Spanish-speaking clinicians were not compared, limiting the ability to determine the accuracy of clinicians' assessments. Similarly, there was no direct assessment of the interpretations to determine whether errors or bias may have been undetected by clinicians.

A study of nurse evaluations of asylum seekers in Switzerland found that only professional interpreters had a beneficial impact on communication (36). Nurses rated communication as "poor" or "fair" in 84% of evaluations without an interpreter, 72% of those with ad hoc interpreters, and only 6% of those with professional interpreters.

Patients and psychiatrists may have differing views of evaluations conducted with use of interpreters (41). Compared with Spanish-speaking patients seen without an interpreter, significantly more patients seen with an interpreter (type not specified) reported that they gained self-understanding and found the visit helpful. In contrast, the psychiatric residents who conducted the evaluations were unanimous in feeling that they provided less help to patients whom they saw with interpreters than to those whom they saw without interpreters. Most patients who were seen with an interpreter wanted a return visit; however, a minority of the residents believed that these patients wanted to return, and only one reported feeling comfortable seeing a patient with an interpreter for ongoing care. The authors postulated that residents projected their discomfort with treating patients who had limited English proficiency onto the patients, which prevented the residents from acknowledging patients' feelings of being helped and their desire for continued care. In contrast to the positive experiences of patients in this study, some patients in South Africa with limited English proficiency refused to utilize interpreters for various reasons: they were insulted that their English skills were perceived as inadequate, they wanted to avoid interference by third parties, or they had overt paranoia regarding the interpreter (31).

Overall, psychiatric care of patients with limited English proficiency that is provided without interpreters may lead to incomplete patient disclosure and thus limit the effectiveness of evaluation and treatment. Results are mixed on how ad hoc interpreters may affect patient-provider interaction, with some studies suggesting negative effects and others indicating a benefit. Research addressing how professional interpreters influence patient-provider interaction is lack-

ing; however, one study did report improved patient-provider communication. Patients and providers may hold divergent views of the benefits of interpreter-mediated visits.

Summary of findings

Patients provided longer replies with greater disclosure when interviewed in their first language compared with a nonnative language (29,30). When evaluating patients in English without interpreters, clinicians may alter their interview style to discourage lengthy replies, thus biasing assessments (31). Clinicians may understand short replies to signify a hostile or guarded mental state, intellectual impairment, impoverished thoughts, withdrawal, or tension. In one study Spanish-speaking psychotic patients who were conversant in English were rated similarly on positive symptoms when evaluations were conducted in English or in Spanish, but in the English evaluations they received higher ratings (indicating more severe symptoms) on domains most likely to be influenced by communicating in a nonprimary language (28). However, another study found that clinicians documented less overall psychopathology among bilingual patients during English-language evaluations than during Spanish-language evaluations (30). Therefore, English-language evaluation of patients with limited English proficiency may obscure mental status findings among patients with schizophrenia (28,30), and the effects of language proficiency may vary according to symptom type (28). For example, it is not known whether language proficiency affects the communication of symptoms of depression or anxiety in ways that differ from the communication of psychotic symptoms. Finally, studies using structured interviews (28–30,32,35–37) do not represent clinical practice, which suggests the need for research in naturalistic settings.

Use of ad hoc interpreters may impede disclosure of sensitive material (33,37) and contribute to distortions and errors (33,34). Errors have been shown to occur more often for acutely ill patients (34) and may lead to over- or underestimation of psychopathology (33). Nevertheless, some clinicians are confident in assessments conducted with such interpreters (40). Compromised disclosure with ad hoc interpreters may yield fewer referrals for follow-up care (36,37), which may have an impact on treatment and health outcomes. Professional interpreters, however, may facilitate improved disclosure (36,37). Although errors also occur in encounters mediated by professional interpreters, their clinical impact may be less substantial (35). Standards for mental health interpreting do not exist, and both ad hoc and professional interpreters may lack sufficient language skills to facilitate the communication needed for high-quality psychiatric care (34,35). More systematic study of the clinical consequences is warranted.

Discussion

There has been little systematic inquiry into the impact of language proficiency or interpreter service use on the quality of psychiatric care. A few studies have directly examined communication during interpreter-mediated encounters (31,33–35); however, none of these studies addressed contemporary psychiatric practice in the United States.

Past studies provide the background for future systematic study of the potential impact of language barriers on quality of care, which is needed to develop an evidence base to inform mental health services delivery and policy. Evidence suggests that persons from ethnic minority groups have fewer psychiatric disorders and that mental health disparities are related to receipt of lower-quality care (42). Thus understanding how language barriers hinder care represents an important direction in elucidating and eliminating disparities.

There has been insufficient examination of how language barriers influence care for patients with various presentations and diagnoses. Interpretation errors occur during psychiatric assessments, but their clinical significance is poorly understood. Patient, provider, and interpreter characteristics that influence the likelihood of errors are not known, nor is it known how best to minimize errors and their impact. Moreover, authors disagree on whether interpreters should provide literal translations only and avoid attempts to clarify the speaker's intent (43) or play an expanded role as cultural brokers (40). Similarly, it is not known whether specific methods of data gathering enhance the likelihood that providers will elicit an accurate history.

This review has focused on analysis at the level of patient-provider encounters, which has been described as the gold standard for assessment of health care quality (44). However, analysis at broader levels of the health care system, such as care teams, organizations, and the external environment—including health policy, regulation, financing, and accreditation—will also inform understanding of the effects of language proficiency and interpreter use on psychiatric care (44,45). For example, recent research has examined methods to assess the need for interpreters (46), although more study along these lines and in psychiatric settings is indicated. How policies for language services, including interpreting standards or laws governing reimbursement, affect the provision and quality of mental health services warrants systematic evaluation.

Conclusions

A systematic review of the literature on the impact of language barriers on the quality of psychiatric care revealed multiple potential sources of miscommunication and distortion resulting from gaps in communication, particularly when no interpreters or ad hoc interpreters are used. There is insufficient evidence to determine whether quality of care is compromised and under what circumstances high-quality psychiatric care can prevail in the presence of language barriers. Complementing the robust literature on medical interpreting, a small body of literature suggests that use of professional interpreters during psychiatric encounters facilitates disclosure of sensitive material and leads to greater patient satisfaction and self-understanding, thereby reinforcing the cornerstones of high-quality psychiatric care.

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