Provision of Non-English Language Services in U.S. Mental Health Facilities

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Abstract

Objective: This study examined the proportion of U.S. mental health facilities and organizational correlates of providing non-English language services.

Methods: Using data from the 2018 National Mental Health Services Survey, differences between mental health facilities that provided non-English language services and those that did not were examined across 23 organizational characteristics. Further analyses compared facilities by their method of language service provision.

Results: Of 7503 facilities, 5,186 (69.1%) provided non-English language services. Facilities that offered these services were more likely than others to have high-patient-volume, to be publicly-owned, and to be located in the ten states with the highest percentage of residents with limited English proficiency. Among facilities with language services, 592 (11.4%) relied on multilingual staff, 2532 (48.8%) on external on-call interpreters, and 2062 (39.8%) on both.

Conclusions: Most mental health facilities provide language services, and they tend to be large public organizations located in areas of greatest need.

Limited English proficiency (LEP) in the absence of trained interpreters can be detrimental to immigrant patients' mental healthcare experience. Mental status evaluations performed in patients' non-primary languages can lead to distorted assessments and failures to identify disordered thoughts or delusions (1). LEP has also been associated with underutilization of mental healthcare services, which can be improved by providing mental health services in patients' primary languages (2,3).

Non-English language services, unlike medications or psychotherapies, are predominantly provided at the facility level rather than at the level of individual mental health practitioners. There is however, limited information on the provision of non-English language services across the nation's more than 14,000 mental healthcare facilities. In this study, we used data from the 2018 National Mental Health Services Survey (NMHSS) to determine

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the proportion of facilities that provide such services, and that provide such services through multilingual employee staff, through external on-call interpreters, or through both approaches. We further examine key organizational correlates of provision of non-English language services including: environmental characteristics (i.e. the percentage of non-English speakers in the state population); facility type and ownership; sources of funding; along with operational characteristics such as the number of annual patients admitted, and the number of specialized services provided.

Methods

The N-MHSS is an annual, voluntary survey of all known U.S. mental health facilities that gathers data on facility characteristics including funding sources, licensing, basic treatments provided, as well as specialized services offered (4). Of 13,554 eligible facilities, 90% (n = 11,682) completed the survey. Because the NMHSS is a publicly available dataset with no individual patient information, IRB approval was not required.

The N-MHSS-2018 asked facilities if they offered mental health treatment services in a language other than English, who provides that service (multilingual staff member, on-call interpreter, or both), and which of 30 languages are specifically provided by multilingual staff members. Spanish was by far the most frequently provided language (n = 3879, 33.2%), followed by French (n = 305, 2.6%) and 25 others (supplement).

Facility characteristics recorded by the survey included: type of facility (Community Mental Health Center [CMHC], hospital, multi-setting, outpatient, partial hospitalization, residential, Veterans Health Administration [VHA], or other), funding sources accepted (federal, state, county/local, no government funding, self-pay, private insurance, sliding scale, pro-bono, and other), number of total annual admissions (greater than 250 hospital admissions or new outpatients per year), number of specialized services such as supportive housing, legal assistance, smoking cessation and others (median 14), age groups treated at the facility, and state in which the facility was located. Geographically, high LEP states were defined as the ten states (top quintile nationally) with the highest percentage of residents with LEP (CA, NY, TX, NJ, FL, NV, HI, MA, RI, and NM). Data concerning the percentage of a state's population with LEP was derived from the U.S. Census Bureau's American Community Survey 2014–2018 (5). See the supplement for more details on the specialized services and state LEP populations.

Analysis proceeded in several steps. First, the facilities with missing data were compared to those with complete data. Then, using only the facilities with complete data, comparisons were made using bivariate relative risks and multivariate logistic regression of language providing facilities and non-language providing facilities. Then, among the group of languageproviding facilities, comparisons were made between facilities which employed multi-lingual staff, which contracted for external on-call interpreters, or which offered both. Because of the large sample sizes, statistical significance was evaluated at the p<0.01 level, and relative risks greater than 1.5 or less than 0.67 were considered to represent substantial effects (6).

Using only facilities with complete data, the language facilities vs. non-language facilities were compared across 23 characteristics using bivariate chi-square tests and risk ratios. Of the 23 variables, 12 met criteria for substantial differences and were further examined using a multivariate mixed-effects logistic regression to identify factors independently associated with provision of language services — addressing the correlatedness of data within states.

A second analysis, limited to facilities providing language-services (n = 5,186), compared those that employed multilingual staff to those that contracted for external on-call interpreters, and those that offered both types of service. Using the same 12 variables as the previous model, three multivariate mixed-effects logistic regression models compared two groups at a time: both vs. interpreter, both vs. staff, and staff vs. interpreter.

All data analysis was conducted using R version 4.0.0 and the "lme4" package for mixed effects modeling.

Results

Of the 11,682 facilities in the dataset, complete data were available for 64.2% (n = 7503). The majority of facilities with complete data provided language services (69.1%), and there was virtually no difference in language service provision between facilities with complete data and missing data (69.1% vs. 70.2%). Facilities with and without complete data differed substantially on only two characteristics — facilities with complete data were less likely to be hospitals (RR = 0.66) or VHA facilities (RR = 0.43) than facilities with missing data (supplement).

Of the 7,503 facilities with complete data, 5,186 (69.1%) provided language services. These facilities were more likely to have high-patient-volume (RR = 1.80), to be publicly-owned (RR = 1.70), hospitals (RR = 2.33), CMHCs (RR = 1.93) and were more likely to be located in the ten states with the highest percentage of LEP populations (RR = 1.59). They were also more likely to offer a greater than median number of specialized services (RR = 1.51), and to provide pro-bono care (RR = 1.51) (Table 1). Facilities offering language services were *less* likely to be VA medical centers (RR = 0.51), residential programs (RR = 0.33), or partial hospitalization programs (RR = 0.29), to be private for-profit organizations (RR = 0.53) or to receive no government funding (federal, state, or local) (RR = 0.23) (Table 1). When these 12 strongly associated characteristics were evaluated together in a multivariate logistic regression, the observed relationships were not substantially altered (supplement). The model's marginal pseudo R^2 was 0.22.

Multivariate logistic regression was then used to compare three types of facilities that provided language services (n = 5,186): those with only multilingual internal employees (n = 592, 11.4%); only on-call external contract interpreters (n = 2,532, 48.8%); and both multilingual staff and on-call interpreters (n = 2,062, 39.8%) (supplement). Facilities offering only internal multilingual staff were more likely to be private for-profit and less likely to be publicly owned and hospitals compared to the other two facility types. Facilities with only external on-call interpreters were more likely to be hospitals and less likely to be located in a state with high LEP populations compared to the other two groups.

Discussion

Limited literature exists on language service provision by medical organizations, as only two studies have examined this issue in general hospitals, and to our knowledge this is the only study that has focused on mental health facilities. Using data from the American Hospital Association and the American Community Survey, two studies found that providing a greater volume of services (i.e. having more beds) and being located in a region with larger LEP populations were prominently associated with providing language services (7,8) — consistent with our findings for mental health organizations. However, unlike our study, one of those studies found that hospitals owned by private non-profit organizations had the highest rates of language service provision, with government-owned and private-for-profit organizations both having lower rates of language service provision (8). This may reflect the fact that mental healthcare facilities, in contrast to general medical hospitals, are more likely to serve low-income populations and to provide services for which language proficiency is especially critical.

Another novel finding of our study were the differences in language provision among various types of mental health facilities. Hospitals and CMHCs tended to provide more language services, likely due to their public-oriented mission of serving the surrounding communities. On the other hand, residential and partial hospitalization facilities tended not to provide language services, perhaps because these are small, specialized facilities, and LEP patients there may get their mental health needs met elsewhere. VHA facilities were less likely to provide language services probably due to the much lower rates of LEP in the veteran population than in the general population (9).

No previous studies have described the proportions and characteristics of mental health facilities that provide language services through on-call interpreters, multilingual staff, or both. It is likely that the type of language service provided is determined by the administrators' evaluation of the cost effectiveness of hiring, training, and employing in-house staff members vs. outsourcing and paying for on-demand services.

Studies of both hospitals and outpatient medical organizations cite cost of acquiring interpreter services as one of the most important barriers to providing these services (10,11). Currently, few private insurance companies and only 13 state Medicaid programs reimburse interpreter services, meaning that some providers lose money by accommodating LEP patients who need interpreters (12,13). Increasing or establishing funding or insurance coverage for medical interpreters may foster increased provision of language services, especially among private-for-profit mental healthcare facilities with low demand for such services. Further research is needed to establish levels of reimbursement that would be needed to encourage medical interpreter availability among diverse organizations and regions.

Several methodological limitations of this study deserve comment. First, missing survey data led us to exclude 35.8% (n = 4,179) of total responding facilities. However, because comparison of the excluded and included sample showed few differences, we believe our study's conclusions still reasonably generalize to U.S. mental healthcare facilities.

Additionally, location data was only specific to the state level. Because LEP population levels can vary across regions within states, examining the association of county-level LEP populations with language service provision would have been a more precise method of examining facilities' response to their population's needs. Furthermore, the NMHSS did not have more specific data about which particular services were offered in which non-English languages — it only asked a binary question of whether or not a facility offers services in non-English languages overall. In addition, data on local legislative mandates and reimbursement policies for medical interpreters were not available in the NMHSS dataset and may have a substantial, but unmeasured, impact on language service provision. Lastly, the NMHSS is not inclusive of all mental healthcare practiced in the U.S. as it excluded small practices and correctional facilities, where substantial populations may need non-English mental health services (14).

Conclusions

This study demonstrated that the majority of mental health facilities in the U.S. provide language interpretation services for LEP patients and that those facilities tend to be large, public hospitals and CMHCs located in states with large LEP populations. Contracting on-call interpreter services is the most frequent method of language service provision, but is less common in facilities located in areas with high-LEP populations. Because our study was limited by the nature of survey data, more research is needed to examine the quality of language services, the recognition of language service needs by administrative and professional staff, and the effectiveness of language services in reducing disparities in access to care and in outcomes among LEP patient populations.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Disclosures and Acknowledgements:

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Highlights:

- A national survey of mental health facilities found a majority (69.1%) provide non-English language services, more often through on-call contract interpreters than multilingual staff.

- Language service provision is strongly associated with public ownership of facilities, high patient volume, and location in states with a high proportion of residents with limited-English proficiency.

Table 1.

Likelihood that Mental Health Facilities Offered Services in a Non-English Language, based on Facility Characteristic[a]

Characteristic	Any Language Services		No Language Services			
	N = 5186 (69.1%)		N = 2317 (30.9%)			
	N	%	N	%	Chi-square[b]	RR[c]
Facility Type						
Hospital	799	15.41	153	6.60	111.24	2.33
CMHC	1480	28.54	343	14.80	163.50	1.93
VA	106	2.04	93	4.01	23.31	0.51
Residential	434	8.37	586	25.29	389.00	0.33
Partial Hospitalization	83	1.60	128	5.52	88.79	0.29
Funding[d]						
Provides Pro-bono Care	3018	58.20	892	38.50	248.19	1.51
Receives No Gov Funding	41	0.79	81	3.50	71.59	0.23
Ownership						
Public	1045	20.15	275	11.87	75.19	1.70
Private Non-profit	3411	65.77	1431	61.76	11.09	1.06
Private For-profit	730	14.08	611	26.37	164.07	0.53
Other Characteristics						
Total Admits > 250/year[e]	2655	51.20	660	28.49	334.01	1.80
Located in Top Ten States with Highest LEP Pop.[f]	1640	31.62	461	19.90	108.66	1.59
High Number of Specialized Services[g]	2573	49.61	761	32.84	181.74	1.51

[a] Source: National Mental Health Services Survey, 2018.

[b] dF = 1, p 0.001 for all characteristics.

[c] For categorical variables facility type and ownership, the reference group is the combination of all other responses. For all other variables, the reference group was the absence or opposite of that variable.

[d] Some facilities received multiple sources of funding.

[e] For inpatient facilities, this variable refers to the number of patient admissions in the past year. For outpatient facilities, this variable refers to the number of initiations of a course of treatment in the past year.

[f] Source: American Community Survey 2014–2018. See supplement for more details.

[g] Facilities were considered to have a high number of services if they had more than the median (14) number of specialized services such as supportive housing, legal assistance, smoking cessation, etc. See supplement for more details.