Characterizing the Mental Health Care of U.S. Cambodian Refugees

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Objective: This study examined U.S. Cambodian refugees' utilization of mental health services across provider types, levels of minimally adequate care, and mode of communication with providers.

Methods: Face-to-face household interviews about mental health service use in the past 12 months were conducted as part of a study of a probability sample of Cambodian refugees. The analytic sample was restricted to the 227 respondents who met past 12-month criteria for posttraumatic stress disorder (PTSD) or major depressive disorder or both. Analyses were weighted to account for complex sampling design effects and for attrition. **Results:** Fifty-two percent of Cambodian refugees who met diagnostic criteria obtained mental health services in the past 12 months. Of those who obtained care, 75% visited a psychiatrist and 56% a general medical provider. Only 7% had obtained care from other mental health specialty providers. Virtually all respondents who had seen a psychiatrist

(100%) or a general medical doctor (97%) had been prescribed a psychotropic medication. Forty-five percent had received minimally adequate care. Most relied on interpreters to communicate with providers.

Conclusions: Cambodian refugees' rates of mental health service utilization and minimally adequate care were comparable to those of individuals in the general U.S. population. Cambodian refugees obtained care almost entirely from psychiatrists and general medical doctors, and nearly all were receiving pharmacotherapy; these findings differ from rates seen in a nationally representative sample. Given this pattern of utilization, and the persistently high levels of PTSD and depression found among Cambodian refugees, treatment improvements may require identification of creative approaches to delivering more evidence-based psychotherapy.

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Nearly 125,000 Cambodian refugees reside in the United States, having emigrated nearly three decades ago after being subjected to one of the most brutal and traumatic conflicts of the past century (1,2). Although many years removed from their overseas tribulations, the Cambodian refugee community continues to suffer from high levels of posttraumatic stress disorder (PTSD) and major depression (3). To explain Cambodian refugees' enduring mental health problems, many have pointed to the low rates of mental health service use in the Asian-American community (1,4).

Despite research documenting that Asian Americans are less likely than their non-Asian counterparts to seek help for mental health problems (5), the best available evidence indicates that lack of utilization, in itself, is unlikely to explain the persistent mental health problems experienced by Cambodian refugees. Specifically, Marshall and colleagues (6) found that Cambodian refugees with major depression or PTSD or both had received mental health treatment in numbers comparable to those found among individuals with diagnosable disorders in the general population.

Given that the failure to access services does not appear to fully explain the enduring high levels of PTSD and major depression in the Cambodian refugee community, a question arises as to the nature of care that is being provided to Cambodian refugees. This study was undertaken to characterize the sources and types of mental health services provided to a representative sample of Cambodian refugees and to gain potential insights into ways in which care might be improved. As a framework for comparison, we sought to determine the proportion of Cambodian refugee clients who could be described as having received minimally adequate treatment (7). Moreover, we investigated the mode of communication between providers and Cambodian refugees (for example, use of interpreters) given previous research documenting linguistic barriers to care (4,8).

Although refugees are required to adjust their status to lawful permanent residents after a year in the United States, and thus technically are no longer refugees, we continue to refer to this study's participants as "refugees" to denote the circumstances under which they entered the country and their distinct premigration experiences, which often differ from those of other immigrant groups. Prior studies of refugee mental health services have focused mainly on standardized treatments delivered in controlled trials, whereas

studies of services delivered in naturalistic settings have been limited to refugee clients in specialized centers or clinics (9). This is the first study to conduct a more in-depth investigation of the nature of mental health care in a representative community sample of refugees, particularly with respect to minimally adequate treatment.

METHODS

Participants and Sample Design

Participants were drawn from a follow-up study of Cambodian refugees who were originally interviewed between October 2003 and February 2005. A three-stage randomsampling design was employed for a geographically contiguous area consisting of the four census tracts with the largest proportion of Cambodians in Long Beach, California, home to the largest single concentration of Cambodian refugees in the United States. Eligible participants were between ages 35 and 75 and had lived in Cambodia during some portion of the Khmer Rouge regime. Overall, 87% (N=490) of those who screened eligible completed the initial interview. Detailed information about the sampling design of the original study is provided elsewhere (3).

Between January 2011 and March 2012, follow-up interviews were conducted to collect more comprehensive information about the use of mental health services. A total of 331 of the original study participants (72%) took part in the follow-up interviews. Analyses in the study reported here were restricted to the 227 participants who, in the 12 months prior to the follow-up interview, met diagnostic criteria for PTSD or major depression or both as defined by the Composite International Diagnostic Interview, version 2.1 (10). Ninety-seven percent (N=219) met criteria for past-12-month PTSD-59% with PTSD only (N=132) and 37% (weighted) with comorbid depression (N=87). Participants had a mean±SD age of 60.1±9.72, and 67% (N=167) were female (all percentages weighted).

Procedures and Measures

Face-to-face, fully structured, household interviews were conducted in Khmer by bilingual lay interviewers who received extensive training and supervision. Written informed consent was obtained, and participants were provided with a nominal financial incentive. Study procedures were approved by the RAND Institutional Review Board.

Instruments were translated into Khmer and backtranslated into English by using recommended procedures (11). The two English versions of the interview were compared for equivalency and discrepancies. Discrepancies were reconciled by the original translators and by one additional translator who was not involved in the initial translations.

To assess receipt of mental health care, respondents were asked if they had received help for their depression, anxiety, drug addiction or alcoholism, or other mental health problems in the past five years (the period since the baseline interview) from each of the following providers: a "psychiatrist," a "family doctor or medical doctor," or a "psychologist, social worker, or other mental health professional" (referred to below as a "nonphysician mental health professional"). (The item about receipt of mental health care was derived from the National Comorbidity Replication Study; the original English wording asked about help for "emotions, nerves, use of drugs or alcohol, or any other mental health issue" [7]). Here we provide the version of the question as it was back-translated from Khmer.) If respondents endorsed seeing a provider within the past five years, they were then asked follow-up questions regarding whether any visits were made in the past 12 months for help with mental health, the number of visits made in the past 12 months, and the average duration of visits. Respondents were also asked whether they had obtained a prescription for medication from their provider and, if so, the name of the medication and when they started taking the medication.

Minimally adequate care was defined as either having received pharmacotherapy (two or more months of an antidepressant or anxiolytic medication and four or more visits to a psychiatrist or medical doctor) or psychotherapy (eight or more visits with a psychiatrist or other mental health specialty provider, with an average treatment session of 30 minutes or more). This definition of minimally adequate care is based on available evidence-based guidelines and criteria used in prior studies (7,12). Mode of communication was assessed for each provider type seen in the past 12 months with the following question, "How did you typically communicate with this [provider]?" Response options were as follows: "You spoke in English," "The [provider] spoke in Khmer," "You used an interpreter provided by the [provider] or clinic," or "You had a family member or friend interpret."

Data Analysis

Analyses were weighted to account for complex sampling design effects and for attrition. The proportion of respondents with documented mental health need who had obtained mental health care in the past 12 months was computed separately across provider types. Correspondingly, the mean number of visits made in the past 12 months, the average duration of each visit, and mode of communication were estimated for each provider type seen. For all analyses, weighted percentages and unweighted sample sizes are provided.

RESULTS

More than half of the 227 Cambodian refugees who met criteria for PTSD or major depression or both (52%, N=127) obtained mental health services from at least one provider in the past 12 months. Thirty-nine percent (N=102) had seen a psychiatrist, 29% (N=66) a general medical doctor, and 4% (N=11) a nonphysician mental health professional. Approximately half of the 227 refugees who met criteria for PTSD or major depression or both (50%, N=124) reported taking

TABLE 1. Use of care in the past 12 months among 127 Cambodian refugees with a diagnosis of PTSD or major depressive disorder

		Seen	a	N of	visits	Visit duration (minutes)		
Provider type	N	%	SE	М	SE	М	SE	
Psychiatrist	102	75	5.88	9.00	.39	29.00	1.63	
General medical provider	66	56	5.47	10.00	.99	34.00	2.92	
Nonphysician mental health professional	11	7	2.25	8.00	2.10	45.00	6.24	

^a Some respondents saw more than one type of provider. Weighted percentages and unweighted sample sizes are provided.

a psychotropic medication in the past 12 months. Medication names were obtained either by recording information from medication bottles provided by respondents (97%, N=119) or by self-report (2%, N=3); the source of medication names was missing for two participants (2%).

Table 1 provides data on mental health care obtained from each provider among the subset of 127 participants who had received mental health care in the past 12 months. Among the 127 persons, 75% had seen a psychiatrist and 56% had seen a general medical doctor. In contrast, only 7% had seen a nonphysician mental health professional. Moreover, all of the respondents who obtained care from a nonphysician mental health professional had also received treatment from a psychiatrist or a general medical doctor. Among the 127 persons who had used services in the past 12 months, 37% (N=48) had seen more than one type of provider. Of these 127 persons, 45% (N=71) had received minimally adequate care. Approximately 37% (N=58) had received minimally adequate pharmacotherapy, and an additional 8% (N=13) had received minimally adequate psychotherapy.

Participants who had seen a psychiatrist had a mean of 9.00 visits in the past 12 months, with each session lasting an average of 29.00 minutes (Table 1). Similarly, those who had seen a general medical provider had a mean of 10.00 visits, with an average duration of 34.00 minutes. Those who saw a nonphysician mental health professional had a mean of 8.00 visits, with each session lasting a mean of 45.00 minutes.

All 102 respondents who obtained mental health care from a psychiatrist and 64 (97%) of those who had obtained mental health care from a general medical doctor had been prescribed psychotropic medications. Of the 79 participants

who provided information about the duration of their medication use, 55% (N=46) reported taking the medication for more than five years, and 26% (N=23) took the medication for more than a year but for less than five years. The large majority of Cambodian refugees who had seen a psychiatrist (95%) or a nonphysician mental health professional (79%) had used interpreters supplied by the provider or clinic (Table 2). In contrast, of those who had seen a general medical doctor, 63% had used an interpreter and 32% had a provider who spoke Khmer.

DISCUSSION

The purpose of this study was to better understand the nature of mental health services provided to Cambodian refugees and to identify areas in which care might be improved. Although the Cambodian refugees in our study were receiving minimally adequate treatment at rates comparable to those of individuals with diagnosable disorders in the U.S. general population (7), certain aspects of their care appear to have been markedly different. First, Cambodian refugees were relying almost exclusively on psychiatrists and medical doctors for their care. Cambodian refugees were obtaining treatment from psychiatrists at almost double the rate of individuals with depression or PTSD in the general U.S. population (7). Moreover, the patterns of mental health care in the sample were also starkly different from those of other immigrant groups. For instance, the percentage of Cambodian refugees in the sample who obtained mental health treatment from a psychiatrist is more than five times the rate found for foreign-born Asian Americans with depressive and anxiety disorders (13). Similarly, the Cambodian refugees in the sample were receiving care from general medical doctors at almost ten times the rate found for foreign-born Asian Americans with a diagnosable mental disorder (14).

Second, another distinctive feature of Cambodian refugees' mental health care was their prevailing use of pharmacotherapy. Practically all study participants who had obtained mental health treatment were taking a psychotropic medication. Cambodian refugees' use of pharmacotherapy is nearly double that observed among white Americans and six times that observed among Asian Americans with depressive and anxiety disorders (15). Finally, Cambodian

TABLE 2. Mode of communication with providers among Cambodian refugees with a diagnosis of PTSD or major depressive disorder a

Provider type (N who	Provider or clinic provided interpreter		Family or friend interpreted			Participant spoke English			Provider spoke Khmer			
saw provider)	N	%	SE	N	%	SE	N	%	SE	N	%	SE
Psychiatrist (N=102)	96	95	2.13	3	2	1.09	2	2	1.74	1	<1	.62
General medical provider (N=66)	39	63	7.48	1	1	1.04	4	4	2.43	22	32	7.13
Nonphysician mental health professional (N=11)	8	79	11.90	1	8	8.36	0	_	NA	2	12	8.97

^a Samples were not large enough to permit reliable estimates of differences between groups. Weighted percentages and unweighted sample sizes are provided.

refugees experienced significant disparities with respect to receipt of care from nonphysician mental health professionals. Only 4% (N=11) of Cambodian refugees had obtained treatment from a nonphysician mental health professional, compared with rates of 19% among white Americans and 14% among foreign-born Asian Americans with a diagnosable mental disorder (13).

Our findings suggest that Cambodian refugees' mental health care consists primarily of pharmacotherapy and limited trauma-focused psychotherapy. Although our data did not allow us to definitively determine the extent to which trauma-focused psychotherapy was received, the number and duration of visits with psychiatrists were of relatively low intensity if trauma-focused therapy was being provided. Cambodian refugees were seeing psychiatrists for an average of nine visits, with a mean duration of 29 minutes. Given that care from psychiatrists almost always involved pharmacotherapy management and the use of interpreters, it seems unlikely that a half-hour visit would provide sufficient time for trauma-focused psychotherapy. If trauma-focused therapy was being delivered, it was occurring in a rather limited manner, given that evidence-based trauma-focused psychotherapy typically consists of eight to 12 session of 60 to 90 minutes each when there is language congruence between provider and client (16).

These findings should be considered in light of treatment consensus guidelines for traumatized populations (17,18). Although most PTSD practice guidelines acknowledge that pharmacotherapy can be beneficial, there is uniform support for the use of trauma-focused psychotherapy as the first line of treatment (19). Moreover, a small but growing number of studies suggest that trauma-focused psychotherapy may be effective in treating PTSD specifically among refugee populations (20,21). In fact, cognitive-behavioral therapy yielded promising findings for Cambodian refugees who had been undergoing long-term pharmacotherapy for treatmentresistant PTSD (20). Given that the vast majority of Cambodian refugees who had obtained mental health care were receiving pharmacotherapy, and most had been taking these medications for more than five years, efforts should be directed at wider dissemination of adjunctive psychotherapy.

The underutilization of evidence-based psychotherapy for PTSD is a broader issue that affects almost all traumatized groups (22), despite the fact that it is the recommended course of treatment for chronic PTSD (23). It is likely that just as the general U.S. population experiences barriers to accessing evidence-based trauma-focused psychotherapy (22), Cambodian refugees encounter similar challenges that may be intensified by the lack of Khmer-speaking providers. This raises another potential challenge in providing refugees with effective PTSD treatments; namely, there has been insufficient research on how the use of interpreters affects the quality and efficacy of mental health services (24). Little systematic research has been conducted to provide evidencebased guidelines for how to improve the quality of care for individuals with limited English proficiency. A recent

meta-analytic review found that culturally adapted mental health interventions were twice as effective when providers and clients were matched on language than when they were not, suggesting that provider and patient language congruence or lack thereof may affect the quality of mental health care (25).

One potential strategy for addressing this challenge may be through narrative exposure therapy (NET), a short-term, trauma-focused therapy designed to be administered by trained refugees in regions affected by war and disaster, where mental health professionals may be scarce (26). A recent meta-analysis indicates that NET is effective and its effectiveness is substantially greater when delivered by refugee lay counselors compared with health care professionals (26), perhaps because delivery by refugee lay counselors allows for more linguistically and culturally appropriate care. The success of NET suggests that trained lay providers may be able to provide high-quality psychotherapy for Cambodian refugees.

Certain limitations of this study should be noted. First, the standard definition of minimally adequate care may overestimate the quality of care in this population because the duration of visits may, in effect, be reduced by the need for translation. Also, the construct of "minimally adequate care" is a crude measure of treatment engagement, rather than a measure of the quality of clinical care. Thus more finegrained research would clarify the extent to which Cambodian refugees are being provided with high-quality, evidencebased care. Moreover, this study did not shed light on the origins of the pattern we observed, in which few Cambodian refugees were receiving evidence-based psychotherapy even though it is considered a first-line treatment for both PTSD and major depression. One can speculate that the finding arises from a combination of factors, including a shortage of Khmer-speaking psychotherapy providers, preferences for pharmacotherapy because of somatic symptoms and resettlement processes that may direct refugees to general medical doctors or psychiatrists rather than to nonphysician mental health professionals (for example, medical screening for newly arrived refugees and disability evaluations). However, further study is needed to examine how this pattern of care developed.

Nonetheless, this is the first study to take a more comprehensive look at the nature of mental health care among a representative probability sample of refugees. To the extent that the patterns of care hold for other refugee groups residing in the United States, these findings have broad implications for the provision of first-line recommended mental health treatments to refugee populations. Future research involving population-based samples rather than clinic or convenience samples is needed to determine whether significant disparities in the provision of trauma-focused psychotherapy are occurring in other refugee communities. Refugees are a heterogeneous group, varying in socioeconomic backgrounds, trauma histories, and levels of integration in the United States, and thus making it difficult to ascertain the

generalizability of the experiences of one group of refugees to others. Our findings also highlight the need for further study of the longer-term integration of refugees into the mental health care system and of their access to effective and high-quality services when there is a limited supply of providers who can deliver care in refugees' native language.

CONCLUSIONS

Almost 30 years after resettlement, most Cambodian refugees continue to have substantial psychiatric problems despite relatively high utilization of mental health services. Cambodian refugees in this sample received care almost entirely from psychiatrists and general medical doctors, generally in the form of brief, relatively infrequent medication management visits delivered via an interpreter. Expansion of evidence-based trauma-focused psychotherapy, particularly if delivered in Khmer, may aid in further alleviating Cambodian refugees' persistent trauma-related symptoms.

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