Murug, *Waali*, and *Gini*: Expressions of Distress in Refugees From Somalia

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Objective: To study how mental illness is understood, expressed, and treated among Somali refugees and how these factors influence use of health services for mental problems.

Method: Seventeen adult Somali refugees (9 women, 8 men) were recruited by mail or by word-of-mouth to participate in the study. The study setting was an urban community health center in Rochester, N.Y., that provides family practice patient care to local Somali refugees. A qualitative design was used that incorporated a combination of methods, chiefly semistructured interviews. Interviews focused on the ways in which sadness, depression, and anxiety are expressed and on the participants' understanding of the origins of and treatment strategies for these problems. Interview transcripts were analyzed to identify recurrent themes.

Results: Nearly all participants felt that mental illness was a new problem for their community that did not exist to the same extent in prewar Somalia. Themes that emerged to explain the causes of mental illness included the shock and devastation of war; dead, missing, or separated family members; and spirit possession or a curse. Three major types of mental problems were identified that were associated with specific behaviors and treatment strategies: *murug* (sadness or suffering), *gini* (craziness due to spirit possession), and *waali* (craziness due to severe trauma). Rather than seek help from a clinician, participants preferred to first use family support, prayer, or traditional therapies for most situations.

Conclusion: Somali refugees have distinct ways of conceptualizing, expressing, and treating commonly understood mental problems. Participants differed in their opinions about whether they would consult a doctor to discuss feelings of sadness or craziness. Effective mental health care of refugees should address culture-specific belief systems in diagnosis and treatment.

(Prim Care Companion J Clin Psychiatry 2004;6:119–125)

Received Oct. 10, 2003; accepted Jan. 5, 2004. From the Department of Family Medicine, Boston Medical Center, Boston, Mass.

Supported by grants from the Department of Family Medicine (Health Resources and Services Administration award #5D15PE52032-11) and the Department of Community and Preventive Medicine (National Institutes of Health K30 award for Clinical Research Curriculum #HL04161), Boston Medical Center, Boston, Mass.

Acknowledgments are listed at the end of the article.

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According to the United Nations High Commission for Refugees, there are approximately 22 million refugees, asylum seekers, returned refugees, and internally displaced persons worldwide. Over 6 million are African[1]; Somalia is one of the African countries with the largest number of refugees. It is estimated that over 2 million refugees reside in the United States; refugees from African nations are one of the fastest growing immigrant and refugee populations in the United States.[1,2]

Although circumstances vary, refugees seek resettlement usually because living conditions for an individual, family, or community are too perilous or unstable to remain in the home country. Human rights violations have been documented in over 150 nations worldwide; various forms of torture are endemic in regions with the largest numbers of refugees.[3] Over 500,000 refugees from Somalia have been displaced since 1991. Somali refugees have resettled in many different countries, with the largest Somali refugee communities in Europe and North America residing in the United States, United Kingdom, and Canada.[1,2] Somalis have experienced a variety of traumas as a result of civil war and associated violence, famine, inadequate living conditions, and prolonged detainment in refugee camps.

Given the nature of their experiences, refugees can develop persistent psychological and physical sequelae, often complicated by the demands of adjustment to a new country. The literature on mental illness in refugees heavily emphasizes the prevalence of psychiatric diagnoses (as defined by Western standards) and the frequency of self-reported trauma experiences and symptoms. For example, refugees from Cambodia, Laos, Vietnam, Sierra Leone, Bhutan, and Bosnia have had high rates of exposure to trauma and torture and symptoms correlating with anxiety, depression, and posttraumatic stress disorder (PTSD).[4–10] Very few studies describe mental illness in African refugees[9,11–13]; published work on this topic pertaining to Somali refugees is not readily available.

Research has traditionally placed little emphasis on refugees' own explanations and belief systems about mental health. How can we determine what constellations of symptoms exist for refugees such as Somalis so that culturally proscribed patterns of behavior can be grouped into possible diagnostic schemas? How do their beliefs

about mental illness influence use of Western health services and treatment strategies?

METHOD

After ethical approval from the University of Rochester and permission from its medical director were obtained, participants were recruited from an urban community health center (Brown Square Health Center) where most Somalis in Rochester, N.Y., receive medical care. Two community leaders were contacted about the project, indicated their support, and assisted with the initial design and development of an informational recruitment letter, a consent form, and the semistructured interview template.

All adult Somalis with an accurate address known to receive medical care at Brown Square Health Center (N = 58) were mailed an informational recruitment letter. The same letters were also given to Somalis after routine appointments at the health center during a 2-month period (N = 21), some of whom had also received letters via the mail.

Additionally, key informants and the author recruited participants by word-of-mouth among both Somalis in the community and Somalis receiving medical care at Brown Square Health Center. Of these various methods, the word-of-mouth method of recruitment was most successful. Of the 20 potential participants who were approached in this way, 19 agreed to participate; however, 2 of these individuals (a 42-year-old man and a 21-year-old woman, both fluent in English) could not be reached despite multiple attempts by phone and mail. Therefore, a total of 17 individuals participated; 13 of these had also received a recruitment letter at the health center or in the mail.

The research team's aim was to recruit participants with a variety of ages and durations of residence in the United States but with as even a split between genders as possible. This decision was made for 2 reasons: (1) the recommendation of key informants that Somalis living in the United States longer would be more "westernized" than more recently arrived Somalis and thus might provide different information about beliefs and experiences with mental illness and (2) the research team's assumption that such a mix would maximize the likelihood of attaining a broad, diverse set of views, perspectives, and experiences. Participants were not preferentially selected on the basis of English fluency.

For those participants who did not speak English, interviews were conducted and audiotaped in English by J.K.C. with the aid of a Somali interpreter (interview template available from the author upon request). All semistructured interviews were carried out by J.K.C., a family physician practicing at the health center from whom many participants had received medical care. Information shared may have been altered in some way because these participants knew the physician interviewer. The consequence of this dynamic could be either positive (having trust from previously established rapport to share personal opinions or experiences) or negative (avoiding certain topics or responding to questions in a certain way to please the physician interviewer). Efforts were made repeatedly with a translator during the consent process to ensure that potential participants knew that their participation was entirely voluntary.

Participants were first asked to provide general background information and to describe health problems common among Somalis. Interviewees were asked if they had ever heard of mental illness or mental sickness and, if so, to describe the meaning of the term or give an example. Questions explored the use and meaning of Somali terms to describe sadness, stress, and anxiety. Participants were then asked to describe how they might treat such problems. All interviews were transcribed verbatim into English.

J.K.C. conducted the principal analysis, assisted by an interdisciplinary team, using features of grounded theory methodology.[14–16] After each interview was completed, J.K.C. made brief notes describing salient features or possible emergent themes from the interview. The interviewer also noted her reactions, self-critique of the process, and ambiguous topics that needed further clarification in subsequent interviews. For the analysis, data were reduced using systematic open coding and organized into categories. Core categories (for example, "healing by prayer") were used to classify emerging phenomena on a more abstract level; these core categories were developed by linking other categories together. Themes were gradually constructed from the core categories to explore broad patterns and recurring ideas relevant to the research questions. Emerging themes (for example, "threats to family and kinship networks") were reapplied to the transcript data to concretely link thematic material to the raw data to maximize validity and plausibility of the themes.

The author and the interdisciplinary team held group meetings to discuss themes and supporting quotations and evaluate their relative importance. Themes were analyzed in light of background knowledge and contextual information gathered in the preliminary work. Categories were developed iteratively by continuously analyzing new transcript material in light of previously identified categories. Randomly selected interview transcripts were reviewed a second time to verify accuracy and consistency of the coding process. The team met periodically to discuss emerging themes and strategies for analysis. J.K.C. scrutinized transcript data for outlying information and reviewed transcripts with 6 of the participants to double-check the accuracy of interpretation of their comments. Finally, J.K.C. reviewed these results with 3 Somali health professionals not involved with the study to check the accuracy of vocabulary, themes, and constructs elicited.

RESULTS

Participant Characteristics

Nine women and 8 men (age range, 21–47 years; mean age = 37 years) participated. Most Somalis in this study had lived in the United States for 5 to 7 years (11 participants), with a range of 8 months to 10 years; they represented a total of 9 different clans. Educational level varied, as did whether participants were from urban or rural areas of Somalia. Prior to immigrating, participants had been living in refugee camps in Somalia for a minimum of 3 years to a maximum of 10 years. Two participants had never lived in the refugee camps. Three of the participants were known by J.K.C. to have been diagnosed with depression, and 1 of these individuals had also been diagnosed with PTSD. Table 1 summarizes participant characteristics.

Table 1. Characteristics of 17 Somali Refugees

Age (y)	Gender	Region of Somalia[a]	Education
41	F	North (town)	Trade school
38	F	South (town)	Trade school
31	F	Mogadishu	Grade school
40	M	Mogadishu	Some college
44	M	Mogadishu	College
21	F	Mogadishu	Grade school
47	F	Mogadishu	Grade school
28	F	Mogadishu	Some college
34	F	South (rural)	Grade school
41	M	South (rural)	Grade school
29	M	South (town)	High school
29	F	South (town)	Grade school
41	M	Mogadishu	High school
44	M	South (town)	Trade school
32	F	North (town)	College
45	M	Mogadishu	College
43	M	South (rural)	High school

[a]Mogadishu is the capital city of Somalia.
Abbreviations: F = female, M = male.

Causes of Mental Illness

Most (14 of 17 interviewed) participants stated that mental problems were a significantly more widespread, common problem for Somalis now than they had been before the civil war began in 1991. Although not specifically asked, some participants spontaneously volunteered that they thought Somalis "everywhere" could—and did—have mental problems, but that in Africa the problems were more severe. However, the question of whether mental problems were more common before or after migration was not specifically asked. Ten people said that psychological problems were an entirely new phenomenon, while 4 Somalis believed that some forms of mental illness had always existed in prewar Somalia. Three individuals did not specifically comment on this issue.

K.A., a 44-year-old man, remarked that

> Before this problem, before the civil war, all the Somalis, they are Muslim, and they believe Allah. They were very happy in Somalia. They had their relatives, they were working, doing something. But after these problems, after the civil war, I think eighty percent of Somalis, they have sadness.

A.M., a 45-year-old woman, said, "In Africa, depression is so much. In America, it's rare. . . . I don't know most of the Somalis [in America] because I'm a newcomer. But I think it's there."

Several different causes of mental illness were mentioned. The most common themes were loss and suffering due to the devastation of the civil war. These participants reported a variety of different traumatic experiences during the war in Somalia (preflight), during their escape to neighboring refugee camps (flight), and while living in the camps. They also reported experiencing the stress of adjusting to life in a new country (postflight). With the exception of 1 individual, all of those interviewed had experienced the death of an immediate family member, relative, or friend due to violence, hunger, or untreated infectious illnesses while in a refugee camp. Nearly all (N = 15) reported witnessing at least 1 person die (more often, several) while in Somalia during the war and/or in a refugee camp.

All participants mentioned such war-related traumas as a major cause of mental illness among Somali refugees. A vivid example of such preflight trauma was provided by A.H., a 38-year-old woman:

> What made me leave there [Somalia] is that my father was the principal of a school. The war broke out, and they didn't want any educated people there. It wasn't safe. So my father was killed in the war. They wouldn't even let us bury him! They just let his body stay there. My two eldest brothers, they tried to bury him, and they were killed too. I had to leave the very day my brothers were killed. I am haunted by this still. To this day, I have a brother and a sister missing. I don't know where they are.

M.M., a 21-year-old woman, spoke of experiences during her flight and in the refugee camp:

> The area [in the camp] was desert. The area we were living in was desert. A lot of heat. No rain. No cover of trees. No mountains. No water. . . . The land where I come from, it was harsh. Hardship. . . . Life was so difficult in the camps. I remember people dying of hunger, of thirst.

K.A., a 44-year-old man, shared a story about a man he knew who had symptoms of war-related trauma from when he tried to flee Somalia with his family:

> Some of them [Somalis] lost their children, six children! I know a man who lost two of his children in the sea! He is always standing alone, thinking. He still has some flashback—

the sea, the ocean. . . . This is the first time we see this problem for most Somalians in other places, everywhere. And also we are sad because they are still fighting in Somalia, and some of our relatives, they are living there!

Another cause of mental problems that emerged was the theme of postmigration stress such as protracted economic strain in the United States with the pressure to provide for family members remaining in Africa. Nearly all (N = 16) participants had lost a significant amount, if not all, of their financial assets in the war. Adding to this insecurity was the difficulty described by several interviewees of having to survive in the United States on low wages with a much higher cost of living and feeling pressure from desperate relatives to still be able to send money to them, as told by this 29-year-old woman:

F.O.: Two babies there [in the camp]. That's why my mom's sad. Also father in the camp. Two children in the camp. Sometimes you call and [they say], "F., please, a dollar."
Dr. Carroll: Who calls you?
F.O.: Husband. No work. Sometimes [they] call, "Please, please, help me with money. Two hundred dollars." Me, this is problem! Every month!

No respondent stated that mental problems were caused by biological mechanisms (such as a chemical imbalance), and only 1 respondent volunteered that he thought mental problems could be hereditary.

Specific Expressions of Mental Distress

Three specific key words—*murug*, *waali*, and *gini*—were used by respondents and emerged as common themes for these Somalis' expressions of psychological distress.

***Murug*.** All participants understood and spontaneously volunteered the word *murug* in the interviews, defined most frequently as sadness. Some Somalis described *murug* as a spectrum ranging from "everyday" sadness, stress, or disappointments at one end to a more serious depression that could cause physical illness or "craziness" at the other extreme. Interestingly, almost all Somalis in this study (N = 16) said that the more serious form of *murug* was a relatively new problem that did not exist with the same frequency or extent in prewar Somalia. In addition, nearly all Somalis stated that the chief causes of *murug* were the shock and trauma of war and suffering as refugees in the camps. Other common causes of *murug* included financial pressure to provide money to family despite earning low wages working in the United States. Most participants highlighted these issues in poignant ways, as shown in the following conversation with F.O., a 29-year-old woman:

F.O.: Murug—a problem, yes. Headache, no eat. We say murug. . . . Stay home. No eat. Husband no work. Me—all the babies sick. No husband there sometimes. She say murug. [F.O. hunches over and rests her head in her hands on the table.] We say murug.
Dr. Carroll: Are you crying?
F.O.: Yes! I cry, too much! Yes. Before, Somalia, baby sick. My mom sick. Outside—no good. No doctor. Sometimes, I cry. What happen? Murug. All too much murug—man, woman, kids. Anybody. Small kids—I don't know. Eleven, fifteen, fourteen, sixteen years old—it's problem. Problem—my mom. My sister—Africa. Sometimes my mom—she is thinking. I say, "What happen?" She say, "Africa!" [F.O. grabs her head with a pained expression.] Sometimes you call, they say, "Please send money. All baby, no eat. America has money." I no money. Problem.
Dr. Carroll: Does she ever have pain with murug?
F.O.: Yes. Three or four times she no eat. She stay home. No forget. Too much murug. Any pain. Hot. No sleep. Headache.

Consistent with the above excerpt, many other participants' responses also described physical and behavioral symptoms often associated with severe or prolonged *murug*. These symptoms included headache, loss of appetite, crying, poor sleep, and a lack of interest in social activity. Less commonly mentioned associated symptoms were trembling, fever or feeling hot, having flashbacks, and hair loss. Three individuals stated that they felt that *murug* could lead to other medical problems if untreated, such as high blood pressure, diabetes, constipation, anemia, and digestive problems.

Participants mentioned a variety of treatment approaches. Most (N = 14) agreed that talking to a trusted family member or friend was useful and important for coping with *murug*. Participants disagreed as to whether a physician would be helpful (5 said yes, 6 said no, and 6 said they would only consult a doctor for physical symptoms caused by *murug*). The 6 participants who said they would consult a doctor for physical symptoms of *murug* stated that they would not discuss their feelings or emotions with a doctor. These differences of opinion were not clearly split according to gender, education level, duration of U.S. residence, or whether J.K.C. knew of a diagnosis of PTSD or depression in the respondent. All respondents knew of medications available for physical symptoms of *murug*, such as drugs for pain, poor appetite, or gastric discomfort, yet only 6 participants knew that medications were available for sadness or emotional symptoms.

Overall, participants felt that talking about *murug* was helpful, and most (N = 14) said they would choose to talk to friends or family first rather than a counselor. However, 8 persons (including the 3 participants known to have been diagnosed with PTSD and/or depression) mentioned that counselors could provide a valuable service to people with more severe *murug*. Three people felt that Somalis would talk to a doctor rather than confide in friends or family for reasons of confidentiality or fear of being stig-

matized; only one of these 3 was known by the principal investigator to have a diagnosis of PTSD.

Waali. *Waali* was understood and used by all participants to mean "crazy." *Waali* was generally believed to be more stigmatizing than *murug*. All participants, when asked if they knew the word *waali*, said yes. Common words used to describe *waali* were "crazy," "mentally unfit," "nervous," and "mad." Examples of behavior in a person afflicted with *waali* include "talking nonsense" or mumbling unintelligibly, not talking at all, wandering through the streets aimlessly, taking off one's clothes in public, and dressing inappropriately. A person afflicted with *waali* could be violent as well, beating or screaming at someone else randomly and unpredictably. As with *murug*, participants stated that *waali* was caused by extreme shock or trauma. The following segment from an interview with B.K., a 28-year-old woman, explains *waali* in a detailed manner consistent with that of other respondents.

> **Dr. Carroll:** What's the Somali word for "crazy"?
> **B.K.:** Waali.
> **Dr. Carroll:** When people are crazy, how do they act? What kinds of behavior do they show?
> **B.K.:** They act different kinds. Some of them, they talk. Some of them, they take off their clothes. Some of them, they are very dirty. Some of them, they don't talk. They don't eat. They are going around the streets. They talk by themselves. . . . You can see in the bus, on the streets. Someone is talking. Maybe someone you know good. But you didn't see these days. They get trouble then you will see another day, going down the street talking to himself. So if you can't get treatment, you take off your clothes. And some of them, they lose their hands, their legs. So if they get in the war, they can't get what they want. . . . You know, every day we have the civil war. If they get that way, he can't run. He can't stay with everyone. So he talk to himself.
> **Dr. Carroll:** What are some of the reasons people become crazy?
> **B.K.:** Out of job. They lose their job. They lose their hope.
> **Dr. Carroll:** You talked about the war also. Do you think the war has made people crazy?
> **B.K.:** Yes, of course. Because you can't go to work. You can't get whatever you want.

Treatment approaches for *waali* were variably described. Eleven participants said that medications were available for *waali*; some felt they could be effective, and others didn't believe they were likely to help. Three individuals felt that no treatment was available, 1 individual only knew of witchcraft and herbs as treatments for *waali*, and 4 interviewees expressed no opinion on treatment for *waali*.

Gini. The term *gini* emerged as a topic when discussing certain forms of mental sickness. However, participants said that *gini* could have different meanings or different uses depending on the context; one application of the term could be in the context of mental sickness. *Gini* could be related to a form of mental sickness according to all but 1 participant (N = 16). The participant who did not believe *gini* should be considered a mental problem said she believed that all mental problems started after the war, whereas *gini* (spirits) had always existed in Somali society and were thus considered by her to be distinct from mental problems.

Gini was described by several participants as a word that referred to supernatural beings or spirits created by God. According to these participants, *gini* had the power to alter their appearance to be human-appearing, animal-like, or invisible. Six individuals stated that *gini* lived in the ocean or mountains of Somalia. The following excerpts provide especially vivid explanations and descriptions of *gini*:

> **S.O.:** God created human beings and gini. . . . Gini means some people you cannot see but God create them.
> **F.A.:** Gini can look any way, you know. Like a human head with the body of a horse, legs of a horse. Sometimes you can't see gini at all.
> **F.O.:** Gini are spiritual things. They can come into you and cause you to be like that [mentally sick]. . . . Many are affected by gini. Spirits. They come from the ocean. They can attack you anytime. My religion also believes that God created gini and human beings.
> **A.S.:** Gini are everywhere. They are powerful. Like spirits or ghosts that can come into you, maybe curse you or make you sick. I don't like to talk about gini [Laughs]—they may be here right now!

Gini were described as being very powerful and therefore capable of exerting influence over many human actions and behaviors, including (but not limited to) mental problems. In the application of the concept to the context of mental illness, there was variation in the words used to describe or define *gini*. *Gini* was often described as someone who is "mentally unfit," appearing "unconscious" or, alternatively, "afraid, mad, or unnatural." This was seen as a particularly stigmatizing form of mental illness. Although *gini* shared similar behavioral attributes to *waali*, participants distinguished between the two based on causation; in contrast to *waali*, behavior associated with *gini* could be caused by spirits, ghosts, or a curse. In the context of mental distress, the word *gini* had 2 nuances expressed: *gini* could refer to the syndrome or behavior displayed by the afflicted person (e.g., "She has gini") or to those supernatural forces that caused the illness (e.g., the ghosts, spirits, or curses themselves).

Several people (N = 12) listed specific, observable behaviors common for a person afflicted with *gini* such as intense fear, bad dreams, disorientation, and, occasion-

ally, violent behavior toward others. People could appear outwardly nervous or stressed or have inner voices talking to them, as described by M.M.:

> Unnatural sickness may be those gini. Spirits. They can attack somebody, and they start to become mad. They start eating even rubbish. They start walking naked. . . . Those can be mental problems. Others are also being bewitched. . . . If they are talking, people won't be understanding what they are saying. They are talking like a child. The words are nonsense. A person I know has been attacked by gini. In Somalia. They believe that person is unnatural.

Three of the participants, while acknowledging that Somalis generally believe in the existence of *gini*, stated that they themselves did not believe that spirits themselves could cause such sickness. Interestingly, these 3 individuals were from different clans and regions of the country, but all had attained some degree of college education. However, these same 3 also remarked that the behavior pattern ascribed to *gini* was a form of mental illness.

Treatment for mental distress related to *gini* was believed to be difficult, given the persistence of the behavior and power exerted by *gini*. Most respondents stated that a doctor would not be useful because a doctor had no power over the spirits, which were the root cause of the problem. Strategies that were mentioned as the best chances for successful treatment were to enlist the services of a spiritual leader, religious/cultural doctor, or group ceremony or read the Holy Koran. However, despite these available treatment options, most Somalis felt that the results were usually mixed. Some people would still most likely not be cured, whereas others might experience a cure or improvement. Although *waali* and *gini* could potentially be more stigmatizing than *murug*, treatment strategies for all conditions tended to involve family, community, and often prayer.

DISCUSSION

This study identified 3 major expressions commonly understood and used among this group of resettled Somalis for describing mental distress: *waali*, *gini*, and *murug*. Each term is associated with distinct causes, behaviors, and treatment strategies. Most participants attributed *murug* and *waali* largely to traumatic refugee experiences, the larger social-political devastation of civil war and famine, and, in some cases, postmigration stressors. Supernatural elements such as spirits, ghosts, or a curse were also believed by some to contribute to a more extreme form of mental distress, irrespective of a person's traumatic experiences relating to the war and displacement. In discussing this more severe form of mental distress, the term *gini* was used to describe the supernatural elements that could give rise to such behaviors. These findings contrast with Western teaching and emphasis on biological and physiologic origins for many common forms of mental illness. Participants disagreed about the extent of the role a physician should have; answers ranged from total involvement to no involvement.

This study is consistent with prior work showing that refugees of many different ethnicities and national origins often have experienced high levels of trauma[4,5,7–10]; nearly all participants in this study spoke of firsthand experience with some form of trauma. This study is one of a smaller body of literature that attempts to explore underlying belief systems pertaining to mental illness cross-culturally, specifically in a North African refugee population.

Results from this work complement qualitative research conducted with other refugee populations, such as with Afghan refugees[17] which found that antecedents to mental health problems included experiences in Afghanistan, the escape/refugee camp experiences, and continuing stress in the United States about events in Afghanistan. Our study shows that Somali refugees have unique expressions of distress that may not map accurately to Western diagnostic constructs of mental illness. Research with Southeast Asian immigrant and refugee groups in the United States has also shown that these groups can have health belief systems different from those of U.S.-trained clinicians and that several aspects of cultural and linguistic translation can be inadequate.[18]

Culture-specific interpretations of the self, body, health, and illness exist,[19] and interviews of this group of Somalis showed how alternative belief systems construct causality, nosology, and healing distinctively.[20] Research done with refugee populations exposed to high levels of trauma has shown that a number of self-reported symptoms (i.e., nightmares, feeling afraid, and trembling) occur with high frequency. These self-reported symptoms can be—and in most studies usually are—grouped into clusters that are correlated with Western psychiatric diagnoses (such as PTSD). Western physicians might group such self-reported symptoms differently than their non-Western patients. This difference in grouping or categorization of symptoms could potentially superimpose a different diagnostic formulation than that understood by their patients and risk being overly reductionist in equating indigenous constructs to Western diagnostic systems. More research is needed to map indigenous constructs to Western models and thereby help improve treatment strategies and health services delivery to different cultural groups such as Somali refugees.

Potential limitations of this study pose cautions for generalization. First, the fact that the person conducting the interviews (J.K.C.) was a physician could have biased or slanted the questions to a more medically oriented, Western perspective, thus biasing the types of answers given by participants. Second, the sample of participants

was not community based, but rather recruited from those persons receiving health care at a local community health center; this fact may have also altered responses. Differences in constructs based on participants' stated clan identification is a more complex issue: Somalis vary in their opinion of how important clan differences in ideologies are, and some respondents had relatives from other clans. Therefore, it is difficult to know based on these results what the relationship between clan identifications and belief systems about psychological problems might be.

Results from this study raise the issue of conceptual equivalence,[21] defined as the degree to which symptoms or behaviors apply to a common construct, meaning, or explanatory model between 2 cultures. Several symptoms reported by these participants could be linked to Western symptoms, but they were grouped according to indigenous constructs that had meanings quite different from Western diagnostic schemas. The findings are consistent with previous work identifying culture-bound syndromes that may not be conceptually equivalent to Western diagnostic schemas. Accurate translation ideally allows for full understanding of the question being asked and thus the validity of the concept being elicited from the interviewee. Translation is a complex process involving both linguistic and vernacular elements; both are critically important in studying belief systems cross-culturally. Participants may have responded inaccurately in some circumstances during the interviews, either because they did not have a complete linguistic understanding of the question or because the questions did not tap into vernacular elements important to the concept of interest. It is possible, therefore, that the results do not represent the full spectrum of respondents' beliefs about mental illness. Further research is needed to better understand how Somali refugees' expressions of distress might be linked to diagnostic constructs of mental illness before we will be able to improve mental health services for Somalis and persons from other cultural groups.

The issue of the role of the medical provider in the treatment of mental illness deserves further study because these participants disagreed widely on the role that the clinician should have in treating symptoms of psychological problems. It may be that respondents did not have knowledge about Western-trained clinicians' ability or willingness to treat psychological problems or that belief systems are so conceptually inequivalent that participants would be more likely to use other means of treatment that would not involve the health care system. Future research should (1) improve our understanding of how indigenous constructs of distress map (or do not map) to Western diagnostic schemas; (2) clarify the role of medical providers versus traditional therapies in treating mental distress from Somalis' perspective; (3) explore how indigenous constructs for mental illness are affected by stage of migration and acculturation; and (4) develop care plans that incorporate community resources and cultural beliefs and find ways to measure changes in outcomes associated with these interventions.

Acknowledgments: The author thanks Nancy Chin, Ph.D.; Timothy Dyes, Ph.D.; and Kevin Fiscella, M.D., M.P.H., for their support in critiquing the study design and aiding with interpretation of data, and Mary Cerreto, Ph.D., for her editorial assistance. Special thanks also go to Isse Abukar, Khadija Ahmed, Adde Mohamed, and Nimo Abdi for their support and assistance with interview design, recruitment of participants, and data analysis. Finally, the author is indebted to members of the Somali community who participated in the study, gave freely of their time, and thoughtfully shared their knowledge and experiences.

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