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Idioms of distress, ethnopsychology, and the clinical encounter in Haiti's Central Plateau

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ABSTRACT

Haiti's 2010 earthquake mobilized mental health and psychosocial interventions from across the globe. However, failure to understand how psychological distress is communicated between lay persons and health workers in rural clinics, where most Haitians access care, has been a major limitation in providing mental health services. The goal of this study was to map idioms of distress onto Haitian ethnopsychologies in a way that promotes improved communication between lay persons and clinicians in rural Haiti. In Haiti's Central Plateau, an ethnographic study was conducted in May and June 2010, utilizing participant observation in rural clinics, 31 key informant interviews, 11 focus groups, and four case studies. Key informants included biomedical practitioners, traditional healers, community leaders, and municipal and religious figures. Deductive and inductive themes were coded using content analysis (inter-rater reliability > 0.70). Forty-four terms for psychological distress were identified. Head (*tèt*) or heart (*kè*) terms comprise 55% of all qualitative text segments coded for idioms of distress. Twenty-eight of 142 observed patient–clinician contacts involved persons presenting with *tèt* terms, while 29 of the 142 contacts were presentations with *kè* terms. Thus, 40% of chief complaints were conveyed in either head or heart terms. Interpretations of these terms differed between lay and clinical groups. Lay respondents had broad and heterogeneous interpretations, whereas clinicians focused on biomedical concepts and excluded discussion of mental health concerns. This paper outlines preliminary evidence regarding the psychosocial dimensions of *tèt* and *kè*-based idioms of distress and calls for further exploration. Holistic approaches to mental healthcare in Haiti's Central Plateau should incorporate local ethnopsychological frameworks alongside biomedical models of healthcare.

Introduction

Efforts to address the mental health needs of Haitians have gained much-needed momentum since the catastrophic earthquake on January 12, 2010 (Lecomte & Raphaël, 2010; WHO/PAHO, 2010). However, even "compassion apparatuses" can contribute to potentially harmful remaking of subjectivities and re-conceptualizations of trauma and distress (James, 2010a, p. 86). Instead, as myriad organizations work toward improving mental health in Haiti, there is an opportunity to address challenges to successfully incorporating mental health into primary care, a central concern in recent research, priority-setting, and guidelines such as *mhGAP* (IASC, 2007; WHO, 2010). Integration of screening into primary care, training of health personnel, and identification of local descriptions of mental health are top-ranked needs in global mental health (Collins et al., 2011; Tol et al., 2011). One challenge to achieving these goals is identifying appropriate lay and clinical language for mental illness.

Despite increasing attention to developing culturally-validated screening tools (Jordans, Komproe, Ventevogel, Tol, & de Jong, 2008; Kohrt et al., 2011; Van Ommeren et al., 1999), less has been written about language in the clinical encounter in global mental health research. A recent special issue of *Social Science & Medicine* (Vol. 73, Issue 6), explored the challenges and complexity of the sociology of diagnosis, predominantly from the perspective of high-income country clinical settings (e.g., Jutel & Nettleton, 2011; Olafsdottir & Pescosolido, 2011; Prior, Evans, & Prout, 2011). When delivering healthcare or training in cross-cultural settings with

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nascent psychiatric services, issues of lay terminology, interpretation of biomedical jargon, and describing diagnoses can lead to even more complex and occasionally misleading clinical encounters.

Idioms of distress in health communication

A central challenge is that there rarely exist synonymous terms that capture lay and clinical communication needs. Idioms of distress are culturally meaningful terms, rooted in concepts of mind-body functioning, that express discomfort or distress in ways that are locally intelligible (Hinton, Pich, Marques, Nickerson, & Pollack, 2010; Kirmayer & Young, 1998; Nichter, 1981). Studying idioms helps to elucidate how and why health communication may or may not achieve goals of patients and clinicians (Abramowitz, 2010; Hinton & Lewis-Fernandez, 2010; Kohrt & Hruschka, 2010; Nichter, 2010).

Attempts to find words that capture both a psychiatric construct and a lay category in cross-cultural contexts repeatedly have identified complex, overlapping categories rather than fully synonymous terms (Nichter, 2010). For example, *ataque de nervios* cannot be reduced solely to panic attacks among Latino groups (Guarnaccia, Lewis-Fernandez, & Marano, 2003). Trauma-related idioms of distress in Peru do not exclusively demarcate PTSD symptoms (Pedersen, Tremblay, Errazuriz, & Gamarra, 2008). In Mongolia, the lay term for mental fatigue, *yadargaa*, has only 33% sensitivity for depression; instead, social disenfranchisement is the distinguishing characteristic of sufferers (Kohrt, Hruschka, Kohrt, Panebianco, & Tsagaankhuu, 2004).

To help conceptualize this heterogeneity in lay and clinical constructs, Hinton and Lewis-Fernandez (2010) have suggested clinically relevant subtypes of idioms of distress, such as indicators of life distress or psychosocial functioning, as well as illness syndromes. In Haiti, illness syndromes include *seziman* (seized-upness), *movè san* (bad blood), and *pèdisyon* (arrested pregnancy), all of which invoke a range of etiologies, symptoms, and social connotations (Coreil, Barnes-Josiah, Augustin, & Cayemittes, 1996; Farmer, 1988; Kiev, 1961; Mazzeo & Hoover, 2010; Murray, 1976). This paper provides a complementary examination of idioms of emotional, cognitive, and psychosocial distress, investigating the meaning, use, and interpretation of these terms and their significance to ethnopsychology in Haiti's Central Plateau.

Ethnopsychology and ethnophysiology

Ethnopsychology is the study of how individuals within a cultural group conceptualize the self, emotions, human nature, motivation, personality, and the interpretation of experience (Kirmayer, 1989; White, 1992). Western biomedicine is rooted in a Cartesian ethnopsychology of mind-body dualism (Scheper-Hughes & Lock, 1987), and non-Western ethnopsychologies are equally complex and nuanced. In Nepal, persons are composed of the heart-mind, brain-mind, physical body, spirit/soul, and social status (Kohrt & Hruschka, 2010). Among Cambodian refugees, wind channels are components of the self important for understanding anger and panic (Hinton, Nickerson, & Bryant, 2011). From ethnopsychology, one can understand how interconnections are made between mind and bodily states, and how external threats are thought to impact well-being.

Understanding how cultural groups interpret sensations and experiences can be further facilitated through ethnophysiology, "the culturally-guided apperception of the mind/body rather than actual biological differences" (Hinton & Hinton, 2002, p. 161). Ethnophysiology explicates how a cultural group conceptualizes the body and its processes, how those processes might be harmed, and which therapies are most salient (Kohrt & Hruschka, 2010). An ethnopsychological/ethnophysiological model thereby allows for appropriate referrals to and promotion of local systems of care (Hinton & Lewis-Fernandez, 2010; Kohrt & Hruschka, 2010; Nickerson & Hinton, 2011). Recognizing that ethnopsychology, ethnophysiology, and ethnomedicine are necessarily interwoven, particularly when addressing cognitive, emotional, and somatic experiences, this paper uses the term *ethnopsychology* to refer to culturally-guided concepts of mind-body phenomena and the terms *ethnomedicine* and *ethnophysiology* when referring to more precise constructs that do not overlap as strongly with ethnopsychology.

Haitian ethnopsychologies

In Haiti, where Indoamerican, African, and European spiritual traditions converged (Pedersen & Baruffati, 1985), individuals exist within a web of relationships: with living, dead, and divine (James, 2008). An individual is composed of four different parts: *ti bon anj* (little good angel), *gwo bon anj* (big good angel), *lonbraj* (shadow), and *kò kadav* (physical body) (Dayan, 1995; James, 2008). Each part of the self is vulnerable to illnesses ranging from the natural/supernatural (*maladi bondye*) to curses and sent spirits (*maladi dyab, maladi Satan*) (Carrazana et al., 1999; Kiev, 1961; Sterlin, 2006). The part of the self that is affected influences the treatment-seeking pathway, as evidenced by the Haitian proverb *tout maladi pa maladi doktè* – not all illnesses are for doctors (Douyon, 2010). Thus, Western approaches to mental healthcare in Haiti should explore these multifaceted concepts of personhood and complex explanatory models of illness at greater depth (c.f. James, 2008; Khoury et al., 2012).

Outside of Port-au-Prince, national and international non-governmental organizations (NGOs) provide 70% of biomedical care services (WHO/PAHO, 2010). The most advanced, full-time providers within these NGOs are often Haitian doctors and nurses, trained in curricula founded upon North American and French schools of thought (Farmer, 1992; Lecomte & Raphaël, 2010; Vonarx, 2008). Consequently, Haitian clinicians working in rural Haiti are in the unique position of negotiating the complex terrain where Western biomedicine interfaces with the ethnopsychologies of their patients.

The goal of this study was to explore idioms of distress in the clinical setting in Haiti's Central Plateau. In particular, we sought to identify which mental health terms are employed, to distinguish possible types and subtypes among these terms, to map them onto current models of Haitian ethnopsychology, and to compare how these terms are used and interpreted in clinical and lay discourse. Important implications for biomedical providers are considered. The conceptual contribution is to advance ethnopsychology and ethnophysiology as frameworks for making sense of idioms to understand suffering and communication. The paper demonstrates the potential for psychological anthropology to contribute to public health applications, much as medical anthropologists have done in other fields like infectious disease (Closser, 2010; Farmer, 2001). The intended application of this study is to determine the most appropriate forms of communication for implementing *mhGAP* interventions (WHO, 2010) and advancing global mental health research priorities in a manner that incorporates social suffering, psychological distress, and physical pathology for holistic approaches to well-being (Collins et al., 2011; Tol et al., 2011).

Methods

A six-week ethnographic study of perceptions and provisions for mental illness was conducted from May 9 to June 20, 2010 in Haiti's Central Plateau. Research activities were concentrated in the communal section of LaHoye, home to approximately 6,000 people

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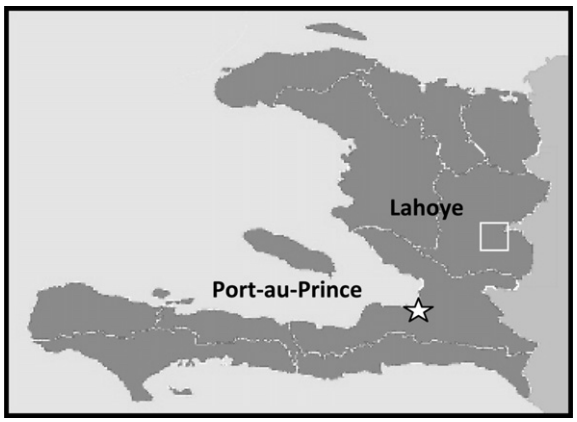

Fig. 1. Map of Haiti. Research area indicated with white square. Source: Rèpublique D'Haïti Direction Nationale de l'Eau Potable et de l'Assainissement (DINEPA), http://www.dinepa.gouv.ht/.

according to a 2009 census (see Fig. 1). Research was facilitated by a Haitian-staffed NGO that ran a permanent primary care clinic, bi-weekly mobile clinics, and occasional home visits. The most advanced-level clinicians were Haitians fulfilling a State-required service contract following their graduation from the national medical, nursing, and social work faculties in Port-au-Prince. Local residents were employed as community health workers. Typical clinical encounters began with a patient expressing a chief complaint, followed by a series of questions asked in quick succession by the provider. A differential diagnosis was made based on the patient's responses, and the interaction typically concluded with a prescription for medications obtained on-site. Most encounters lasted five to ten minutes. Commonly dispensed medications included antiulcer and anti-hypertensive agents, anti-infectives, and acetaminophen. The permanent clinic had a lab with the capacity to run blood analyses, urine and stool tests, STI/HIV tests, and pregnancy tests.

The study team was comprised of four Haitian research assistants (RAs) who spoke Kreyol, French, and English and four U.S. researchers, two of whom spoke fluent French. All U.S. researchers studied one semester of Kreyol taught by a Haitian native. Language training focused on emotions, idioms of distress, and health communication. Data collection methods included semi-structured interviews, focus group discussions, observant participation of clinical practitioners, pile sorts, and case studies of persons locally identified as suffering from mental illness. Qualitative approaches were selected to elucidate *subjective* experience in relation to *labels* for experience as they differed between lay and clinical groups. The development of a quantitative survey based on our qualitative findings has been described elsewhere (Kaiser, Kohrt, Keys, Khoury, & Brewster, in press). All study participants provided verbal consent in Kreyol. The study was approved through Emory University's Institutional Review Board and the Haitian Ministry of Health.

Qualitative data collection and analysis

Thirty-one semi-structured interviews were conducted with traditional healers, clinicians, religious leaders, municipal figures, and lay individuals (see online Supplemental material), identified through purposive sampling of persons in key societal roles. No randomization procedures were employed. Interviews elicited participants' models of mental illness causation, perceptions of manifestation, and treatment. All Kreyol interviews were conducted by at least one Haitian RA and one U.S. researcher. Focus groups with lay persons were also undertaken, discussing the mapping of emotional experiences to parts of the body, explanatory models, and mental illness terminology. Researchers shadowed clinicians at a primary care clinic, mobile clinics, and during home visits. Patient–clinician interactions were observed and field notes were taken regarding history and presentation, language and terminology used by patient and provider, and treatment decisions made by the clinician.

Four persons identified by community leaders as suffering from mental illness served as case studies. Each case study participant was observed in their daily activities and interviewed several times during the period of observation. Field notes were taken by co-investigators, and selected interviews were recorded.

Audio recordings were transcribed in Kreyol and translated into English by bilingual Haitian RAs. Bilingual English and French speakers familiar with Haitian use of French transcribed and translated French interviews. It is important to note that persons selected for the key informant interviews represent a bias toward those individuals with greater education, employment, and power in the community. However, the participant observation, focus group discussions, and case studies provided information more representative of the general population.

Using content analysis (Ryan & Bernard, 2003), we constructed a codebook that included both deductive and inductive codes. Codes were created after data collection was completed and included themes of causes of mental illness, Western and local symptomatology, experiences and outcomes with mental illness, and existing resources. All transcripts and field notes were coded by co-investigators after establishing sufficient inter-coder reliability ($\kappa > 0.7$).

MaxQDA10 was used for coding and analysis (VERBI, 1989–2010). Qualitative data analyzed in this article resulted from retrieval of text segments coded for idioms of distress; additionally, included segments were coded for existing resources and/or local explanations for causes and symptoms of mental illness. All text segments pertaining to idioms of distress and psychosocial complaints were preserved in the original Kreyol along with the English translation for coding and qualitative analysis.

Pile sorts

In-depth interviews and participant observation revealed forty-four potential idioms of distress (see online Supplemental material). These terms were discussed in a focus group with lay individuals and in two interviews with Haitian clinicians to understand the various meanings and interpretations of each idiom, as well as the contexts in which they are used. Following these conversations, the list of potential idioms was reduced to those that communicate emotional, cognitive, and psychosocial distress within Haitian ethnopsychological and ethnophysiological frameworks. Idioms were removed from the list if they were described as universal experiences that are non- or minimally-distressing (i.e. non-specific), were taboo topics of discussion that would severely stigmatize research participants, or were reported to be poorly understood. Additionally, when multiple idioms represented very similar experiences, the better understood item was kept.

The resulting 17 items were used in a pile sort activity with 30 participants to understand how the items are related. Pile sorting enables one to understand the similarities and differences among items, both through visualizing relative similarity and having participants explain relationships among items (Borgatti, 1998). This method provides an initial understanding of associations within a category and is a useful complement to more in-depth ethnographic techniques that further elucidate the meaning and structure of cultural models (Dressler, 2005). To collect pile sort data, participants were given cards, each with one idiom of distress

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written on it, and either read the items themselves or had the items read to them by a RA. They were asked to place the cards in piles, based on which items were more similar to each other. This approach is consistent with pile sort methods used in other cultural contexts to assess mental health categories (Dressler, 2005), and others have used a similar approach, combining locally elicited items with DSM-IV criteria (Bolton, 2001).

Piles were analyzed using Visual Anthropac–Pile Sort (Borgatti, 1996). Pile sort data are used to produce an item-by-item matrix, which quantifies item similarity as the percentage of respondents who placed any two items in the same pile. This can be used to produce a multidimensional scaling (MDS) map of the pile sort items. MDS enables visual analysis of item difference as represented by distance between any two items. Although MDS does not map items onto meaningful axes, it is possible to identify dimensions that indicate variation on a particular characteristic (Borgatti, 1998). MDS has been used to compliment ethnographic data on ethnopsychology to illuminate categories of experience, which can provide important insights for mental illness stigma (Kohrt & Hruschka, 2010). In our study, cluster analysis was used to identify potential sub-domains of associated items. The eigenratio, or ratio of first-to-second eigenvalues of the similarity matrix, was calculated to determine consensus among participants regarding item associations. An eigenratio of 3 or greater is generally agreed to indicate consensus (Borgatti, 1998).

Results

Overview of idioms of distress

We identified 17 illness terms that can be categorized as idioms of emotional, cognitive, or psychosocial distress in Haiti's Central Plateau.

Fig. 2 visually presents the relationship among the 17 items from the pile sort activity. Items appear to vary along a concrete-abstract axis, with more concrete and explicitly somatic items on the right, becoming more abstract farther left along the axis. The eigenratio was 4.64, indicating consensus among participants. When asked to explain their piles, most participants remarked that the piles represent different illnesses, with several respondents highlighting the difference between idioms referring to the head (*tèt*) and heart (*kè*). Such idioms can be seen to represent two distinct clusters. There was a range of explanations as to why items were thought to be related as they were, with descriptions of causes, treatments, or expected outcomes. The fact that consensus was reached regarding item relationships, despite variation in justification for such relationships, could indicate a shared implicit ethnopsychological model. However, only short (1–2 sentence) explanations were elicited, which could also account for the variation in responses.

Table 1 summarizes participants' explanation of key idioms and associated functional impacts. In total, *tèt* (head) and *kè* (heart) expressions comprised 55% of all qualitative text segments coded as an idiom of distress and represented 40% of all chief complaints observed in the clinical setting, suggesting that these terms are important for communicating suffering and that forms of distress are often expressed through reference to the head or heart.

Participants described a range of signs and symptoms expressed through *tèt* idioms, including forgetfulness, poor concentration, worry, and unusual behavior. During participant observation with Haitian clinicians, 28 (20%) of 142 patients expressed a *tèt*-associated chief complaint. Based on these complaints, the most readily diagnosed problems were hypertension complications, dizziness or vertigo, anemia, and malnutrition. In contrast to these biomedical frameworks, lay respondents offered heterogeneous etiologies for *tèt* idioms, including hunger, fevers, evil spirits, financial hardship, stress, and tragedy. Table 2 presents seven *tèt* expressions with corresponding interpretations by lay persons and clinicians.

The heart-related idioms were associated with emotional and bodily upset and dysfunction. In the biomedical setting, 29 (20%) of 142 patients utilized a *kè* (heart) idiom to express their chief complaint. Both *doulè nan kè* (pain in the heart) and *kè fè mal* (heart that hurts) were frequently encountered in the clinic and interpreted by clinicians as indicative of indigestion, typically treated with available antiulcer agents. Like head idioms, heart complaints were interpreted by lay respondents within a broader psychosocial framework, attributed to sadness, fear, hunger, and lack of appetite. Table 3 presents these common heart idioms and their interpretations by lay persons and clinicians.

Focus group participants mapped various emotional and cognitive processes onto different parts of the body. Fig. 3 is an illustration made by members of a focus group who were asked where locally identified emotions reside on the body.

Contending with a "head that hurts:" Ameline

Ameline was a 24-year-old female and mother of two who was living in Port-au-Prince when the earthquake struck, killing her mother and boyfriend and destroying her family's home. Having lost all economic and personal security, she relocated to LaHoye a short time thereafter. After relocating, she stayed with seven

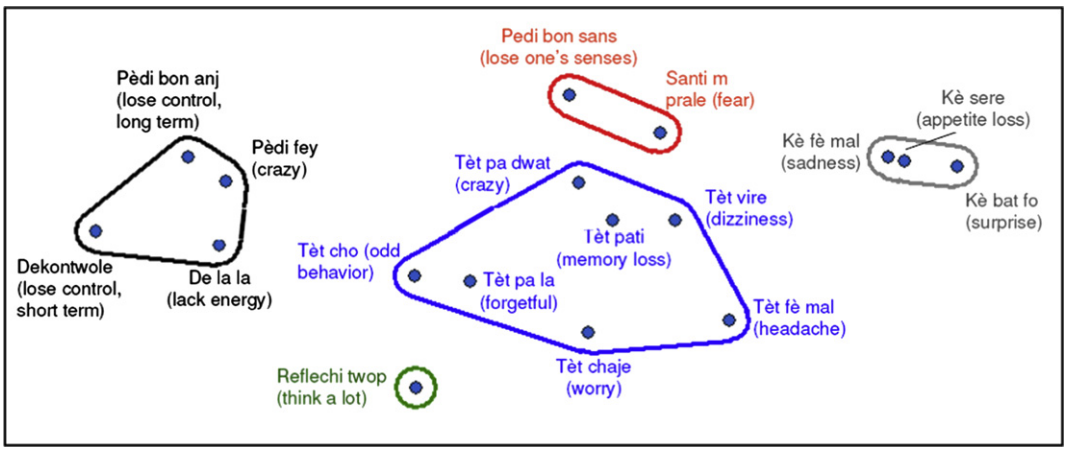

Fig. 2. Pile sort of idioms of distress. Visual created using nonmetric multidimensional scaling in Visual Anthropac – Pile Sort, with clusters overlaid. Labels indicate Kreyol idiom with close English equivalent in brackets. Relative proximity between items indicates the percentage of respondents who placed the two items together in the same pile.

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Table 1
Common Haitian idioms and respective functional roles by linguistic class.

Linguistic class[a]	Idioms of distress	Functioning potentially impacted
Tèt (head)	*Tèt chajè* (loaded head)	Concentration
	Tèt virè (spinning/turning head)	Problem-solving
	Tèt pati (head that has left)	Decision-making
		Memory recall
		Normal behavior
Kè (heart)	*Kè fè mal* (heart that hurts)	Emotional health
	Kè serè (tight/bound heart)	Strength
	Doulè nan kè (pain in the heart)	Appetite

[a] We are not suggesting that these experiences of distress or associated functional outcomes are solely located within particular parts of the body. Rather, we present the organizational system as explained by participants, which seems to indicate linguistic rather than anatomical categories.

Table 3
Kè idioms, English translations, and typical interpretations.

Kreyol idiom	Literal translation	Lay interpretation	Medical interpretation
Doulè nan kè	Pain in the heart	Sadness, grief, stress, hunger, *asid*/reflux	GERD
Kè bat fo	Hearts beats strong	Fear, worry, surprise, weakness	Palpitations, anemia, malnutrition
Kè fè mal	Heart hurts	Sadness, pity, *asid*/reflux	GERD, epigastric pain
Kè serè	Tight/bound heart	Shock, sadness, pity	Poor appetite, GERD

other siblings in a one-room rented house that "leaks and lets animals pass through" (Ameline, 06/14/2010).

Ameline complained of *tèt fè mal* (head that hurts). When asked to describe her *tèt fè mal*, she said:

> After the events of January 12th, I came here to go to school, and I am dealing with many problems. If my classmates make a loud noise, I can get startled and start panicking. That can set me back in my school work. (6/14/10)

For Ameline, the head pain (*tèt fè mal*) was associated with startling easily, distractibility, difficulty sleeping, crying inconsolably, losing her appetite, and thinking so much that she couldn't see anything. All of these symptoms had started after the earthquake, which had important connotations regarding the meaning of her illness. She felt the earthquake was an act of God that punished sinners, and although she hadn't "committed many sinful acts against God's will, you can say it's my fault" (Ameline, 06/14/2010).

Ameline eventually sought relief for her *tèt fè mal* at a nearby clinic:

> During my visit to the clinic they gave me two kinds of pills. They help me sleep better. [But] every time we reach the 12th of every month I am very sad. I don't sleep because I cry so much. Ever since [the earthquake] my headache (*tèt fè mal*) never went away. (06/14/10)

Ameline was given two medications at the clinic, an analgesic for a presumed migraine and a barbiturate to help her sleep. According to Ameline, the medications improved her ability to sleep. However, she continued to experience emotional and cognitive distress, which she communicated through her description of an unrelenting *tèt fè mal*.

Tèt (head) idioms in lay and clinical discourse

At stake in Ameline's story is the question of whether her head pain could be managed exclusively with analgesics and sleep aids or whether psychosocial dimensions deserved more attention. For both lay and clinical respondents, *tèt*-related idioms invoked an array of somatic, cognitive, emotional, and behavioral experiences resulting from a variety of stressors, both physical and non-physical in origin. However, these complaints were typically reduced to biomedical frames of head pain in the clinical encounter.

Tèt-related afflictions were explained to impart considerable loss of functioning associated with psychosocial distress. Ameline linked an inability to concentrate to her head pain. Persons with "too many things on their mind" or who think too much (*reflechi twop*) about immediate or abstract challenges were explained to have difficulty making decisions or overcoming at-hand tasks. Lay respondents often described these persons as being socially withdrawn.

In some cases lay persons, like clinicians, proposed physical causes for some *tèt* idioms. *Tèt vid* (empty head) and *tèt virè* (spinning/turning head) were sometimes explained as resulting from hunger, anemia, low blood pressure, weakness, dizziness, blood in the head, and spirits sent by malicious persons. At the same time, clinicians were aware of the possibility for psychosocial distress to be manifested in the form of somatic complaints, typically insomnia. The following exchange occurred with a nurse who was observed to routinely diagnose *tèt fè mal* as a complication of hypertension:

> [Interviewer]: When someone is suffering from *pèdi fey* [lit., "to lose one's leaves," or crazy] what do they say normally as [their] complaint?
>
> [Nurse]: They say "I have *tèt fè mal*." He always has insomnia. (Nurse, 6/02/10)

Although clinicians acknowledged underlying psychosocial distress as potential causes of *tèt* complaints, they rarely probed such possibilities with their patients.

Treating "pain in the heart:" Marie

Marie was a 20-year-old female residing in LaHoye. According to her family, around age 15 she suffered from *kè boulè* (burning heart), *doulè nan kè* (pain in the heart), and then fever. Subsequently, she began displaying unusual behavior, alternating between talking to herself and remaining mute, running away from home, inexplicably knocking objects off furniture, and necessitating family members to provide for her basic hygiene. At times able to

Table 2
Tèt idioms, English translations, and typical interpretations.

Kreyol idiom	Literal translation	Lay interpretation	Medical interpretation
Tèt chajè	Loaded head	Worry, frustration, preoccupation	*[Not observed in biomedical clinic]*
Tèt cho	Hot head	Unusual behavior	*[Not observed in biomedical clinic]*
Tèt fè mal	Head that hurts	Pain in the head, arising from variety of physical and non-physical sources	Migraines, hypertension, vertigo
Tèt pa la, Tèt pati	Head that is not there, head that has left	Forgetfulness, rumination, worry, psychosis	*[Not observed in biomedical clinic]*
Tèt vid	Empty head	Forgetfulness, hearing noises/voices, poor concentration, anemia, sickness	Malnutrition, anemia, vertigo
Tèt virè	Turning/spinning head	Unusual behavior, dizziness, anemia, blood in head, evil spirits	Vertigo, anemia

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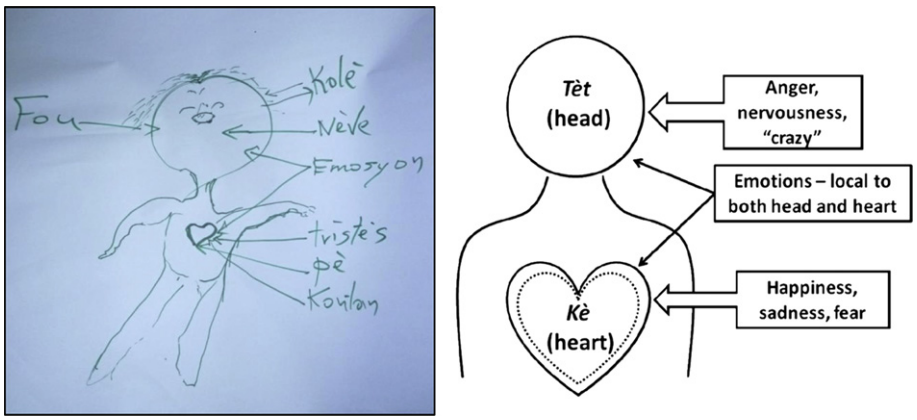

Fig. 3. Conceptual and emotional map of the self. Left: Illustration made by focus group participants localizing emotions to parts of the body. Right: Corresponding graphic with translated emotions. This figure is not intended to reduce emotions to anatomical locations, but rather contribute to an ethnopsychological understanding of emotions, the body, and functioning as conceptualized in Haiti's Central Plateau.

care for herself, she experienced relapses, and was unable to regularly attend school. At one point she became mute, experiencing *doulè nan kè* (pain in the heart) to the point that "food did not go through her heart" (Mother of Marie, 6/12/10). Marie's mother interpreted the *doulè nan kè* as lack of appetite. Others in Marie's life attributed her *doulè nan kè* to emotional stress and the earthquake. Biomedical providers diagnosed Marie's *doulè nan kè* as a symptom of heartburn, but antiulcer medications provided no relief.

The fever left her with headaches and an empty, turning head (*tèt vid*; *tèt virè*). To seek care for Marie, her family visited a nearby hospital, where they were told that her headaches were caused by anemia. Marie's family then met with traditional herbalists and a Catholic priest. The priest informed them that the problem was "in her head." Dissatisfied with this interpretation, the family converted to Protestantism. A pastor then explained that Marie was suffering from evil spirits. While Marie finally found some improvement through prayer, she admitted that from time to time she still suffered from *doulè nan kè*, that left her feeling sad (*tris*).

Kè (heart) idioms in lay and clinical discourse

Marie's story provides insight into the meanings that rural Haitians attach to the heart (*kè*), its importance to optimal health, and its vulnerability to physical and non-physical threats. The heart was described as the principle sensory locus for happy/sad constructs, pity, intense fear, and a variety of emotional symptoms explained to result from hunger. While emotional or psychosocial dimensions of *kè*-associated idioms were outlined by biomedical providers, they rarely explored such possibilities in the clinical setting. Instead, *kè* idioms were reduced to underlying physical pathologies, such as acid reflux or palpitations.

Appetite, hunger, and digestion were referenced using the term *kè*. Adequate nourishment produces a happy heart (*kè kontan*) and provides energy (*fòs*): "You eat, your belly is full, now you sit down and you are thinking, then your heart is happy!" (Male community member, 6/10/10). Two heart idioms were caused by lack of food: *kè boulè* (burned heart) and *doulè nan kè* (pain in the heart). Haitians in the Central Plateau conceptualized the heart as vulnerable to excess stomach acid produced when one does not have enough to eat. A community leader explained the process:

> *Doulè kè* is most easily caused by hunger. Hunger is a promoter of acid. Hunger can be like gas and can find its way to someone's constricted lung and remain next to some liquid in there. Then that liquid turns sour. That acid can be the source of many illnesses. (6/18/10)

Emotion and hunger were explained to affect the heart through psychological and physical pathways. For example, weakness brought about by not eating well could produce *kè bat fò* (heart beats strong). Reciprocally, an emotionally burdened heart could result in poor appetite. One respondent explained that *kè serè* (tight/bound heart) occurs when "Someone hears news, for example that someone died. That can twist up their heart, and then they can't eat" (Female community member, 6/23/10). A pastor commented that with *kè serè*, "There is nothing that interests you. Even if you have food you don't want to eat it" (Pastor, 6/23/10).

Kè idioms also communicated fright and panic. *Kè bat fò* (heart beats strong) was explained to result from surprise or shock. When Ameline explained that fellow students' loud noises in the classroom were reminiscent of the earthquake, she used the term *kè'm sotè* (my heart jumps). In the clinics, *kè bat fò* was encountered more often than *kè sotè* and was routinely diagnosed as palpitations or complications from hypertension. There was no discussion of fright or trauma in these clinical exchanges.

It is important to note that, as with *tèt* idioms, clinicians were aware of non-physical causes that lay individuals associated with *kè* idioms. For example, a social worker used the idiom *kè sere* (tight/bound heart) to explain that sadness can lead to a seemingly physical blockage in the digestive tract. The same social worker described how complex psychosocial stressors could be communicated through somatic complaints:

> There are people, physically, who feel weak from sadness. For example, I speak with an HIV/AIDS patient. He'll explain that he feels so weak. He can't even raise his feet up, but it isn't true. On a physical level, he's in good shape, but it's because he thinks about his situation. He'll talk about his kids, his wife, and [he] will say that he's weak. (5/31/10)

Additionally, clinicians said that while in the clinic they considered only physical causes for *kè fè mal* (heart that hurts), they concurred that the expression referenced sadness or pity among lay individuals. A psychologist and social worker explained that further questioning of the patient can help distinguish physical from non-physical etiologies and whether an emotional or cognitive burden may underlie a purported physical problem. However, participant observation indicated that such acknowledgment had yet to be translated into general clinical practice.

Ethnopsychological complexities and care provision

Locally drawn connections among emotions, the head, and the heart are in no way static, nor always well-demarcated. We found

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lay respondents quick to explain how the health of one part depends on another, and emotions that might be associated primarily with one locus can be rooted elsewhere. While sadness might be associated with the heart, "thinking too much," a problem associated with the head, was explained to cause sadness and could be used to identify someone in distress. For example, a lay respondent emphasized that hunger as felt in the heart can engender psychosis via problems in the head:

> Hunger or anemia can do that to someone. One's memory may suffer from this intermittently. One may lose his sense of awareness, which means one may be *fou* [crazy]. All of this comes from the heart. Because the heart is attacked, the head can have problems too. (Community member, 6/18/10)

Clinicians accepted the interconnection and varying interpretations of idioms of distress, and providers attributed their reluctance to explore potential mental distress to the severe shortcomings they face in their professional training and resources. Clinicians reported that they had limited training in mental health and pointed to a lack of referral resources. One psychologist worked in the closest hospital, itself a day's walk for most. Clinicians reported that mobile clinics only operated bi-weekly or monthly and covered a wide geographic range, so there was little opportunity for regular interaction with patients. On the part of patients, they independently sought care from traditional healers, church figures, and neighbors for psychosocial complaints, often simultaneously with biomedical care seeking. However, there was no identified referral from biomedical providers to traditional resources and community healers.

Discussion

The goal of this study was to understand the place of Kreyol idioms of distress in the ethnopsychology and ethnophysiology of Haiti's Central Plateau, in a manner that promotes improved communication of psychosocial suffering and physical complaints between primary care clinicians and patients. We identified 17 idioms of distress pertaining to emotional, cognitive, and psychosocial distress. Over half of these idioms related to *tèt* (head) or *kè* (heart) in Haitian ethnopsychology. *Tèt* (head) idioms invoked disruptions in concentration, decision-making, memory, and behavior regulation. *Kè* (heart) idioms related to sadness, strength, appetite, and fright. These results provide a first step toward understanding the complex use, meaning, and interpretations of idioms of distress between lay individuals and clinicians in Haiti's Central Plateau. The centrality of head and heart idioms also echoes ethnopsychologies documented in West African and South Asian cultural groups (Fox, 2003; Kohrt & Harper, 2008).

Both lay and clinical respondents endorsed physical interpretations of head and heart idioms, primarily headaches and indigestion. However, in clinical settings health workers exclusively dealt with the physical interpretation of these idioms, to the neglect of any discussion of psychosocial circumstances. *Tèt*-based complaints were treated with analgesics, and *kè* complaints were treated with antacids and other anti-reflux medications. The only psychopharmacology was dispensation of barbiturates for the treatment of insomnia, assumed to be a manifestation of head-associated symptoms.

Given that clinicians entertained psychosocial interpretations of these idioms, the lack of psychosocial discussion in the clinical setting was surprising. Patients were not referred to the one psychologist at the closest hospital, nor was there any discussion of psychosocial support through family, religious leaders, and traditional healers. When asked why they did not address psychosocial issues, clinicians highlighted their lack of training, absence of referral resources, and lack of regular contact with patients. Similar results have been found elsewhere in Haiti, where Haitian clinical staff, familiar with traditional concepts of personhood, emphasized biomedical solutions to conditions resulting from emotional distress (James, 2011).

A surprising finding was the grouping of emotions, digestion, and vitality within the heart. While most heart terms seemed to communicate emotional distress, *doulè nan kè* was associated with a specific physiological process, potentially referring to a cultural illness syndrome. While the idiom was used in circumstances of sadness, fear, and bereavement, *doulè nan kè* was also explained to result from acid directly attacking the heart. Clinicians treated it with available antacid medications but did not explore broader psychosocial implications. Given the embodied proximity of sadness, fear, and gastrointestinal distress, practitioners may have been influenced by an ethnophysiological model that depicts acid as a direct threat to the heart, with the expectation that antacid medications may influence emotional states. Future research should investigate this possibility, as well as the extent to which *doulè nan kè* represents a cultural syndrome.

Similar experiences of emotional and psychosocial distress caused by an upward rising of pathogenic elements have been documented elsewhere. Cambodian refugees diagnosed with PTSD reference *khyal* attacks, an upward moving of windlike substances due to sudden shock or surprise, worry, standing up too quickly, or a change in the weather (Hinton & Otto, 2006). These patients often attribute somatic symptoms, such as dizziness, palpitations, or weakness, to a *khyal* attack. In encountering these patients, biomedical clinicians have examined how the meaning attached to the physiological experience impacts interpersonal relations with other members of the cultural group, life events, and perceptions of appropriate treatment (Hinton et al., 2010). Similar research in Haiti could seek to clarify the meaning of *doulè nan kè* and its use and interpretation by lay individuals and clinicians.

We also encourage efforts that attempt to understand how idioms are potentially used to deflect perceptions of emotional vulnerability for stigmatized states. The sparse psychiatric services in Haiti are considered by many to be reserved for those deemed most mentally ill or suffering from significant co-morbidities (e.g., HIV/AIDS). People may in turn rely on somatic expressions as a means of legitimizing a clinical visit and thereby avoiding stigmatization (Kirmayer & Young, 1998). Because Western primary care practices tend to interpret palpitations and emotional upset through medical algorithms, underlying psychosocial significance is often neglected, and thus inadequately addressed. Finally, longitudinal ethnographic work should be initiated in the Central Plateau to track the use, negotiation, and potential change in terminology that has been documented to occur in contexts of changing mental health systems and a creolization of mental health discourse (Abramowitz, 2010).

These findings can be applied to improve training, screening, diagnosis, and treatment of mental illness in Haiti's Central Plateau. In training primary care workers, head and heart idioms should prompt further inquiry about psychosocial conditions (see Fig. 4). Psychoeducation by clinicians should incorporate these terms and ethnopsychological constructs to inform patients and families about recognizing and supporting persons with mental illness. Similarly, public health approaches to mental illness should focus greater attention on potential implications of references to the head and heart. Ultimately, clinicians are unlikely to screen for disorders that they feel ill-equipped to treat (Khoury et al., 2012). Therefore mental healthcare training will need to be matched with improved treatment resources and infrastructure. There is potential for increased collaboration among existing care providers, from *hougan* (Vodou priests) to pastors, priests, and the general community.

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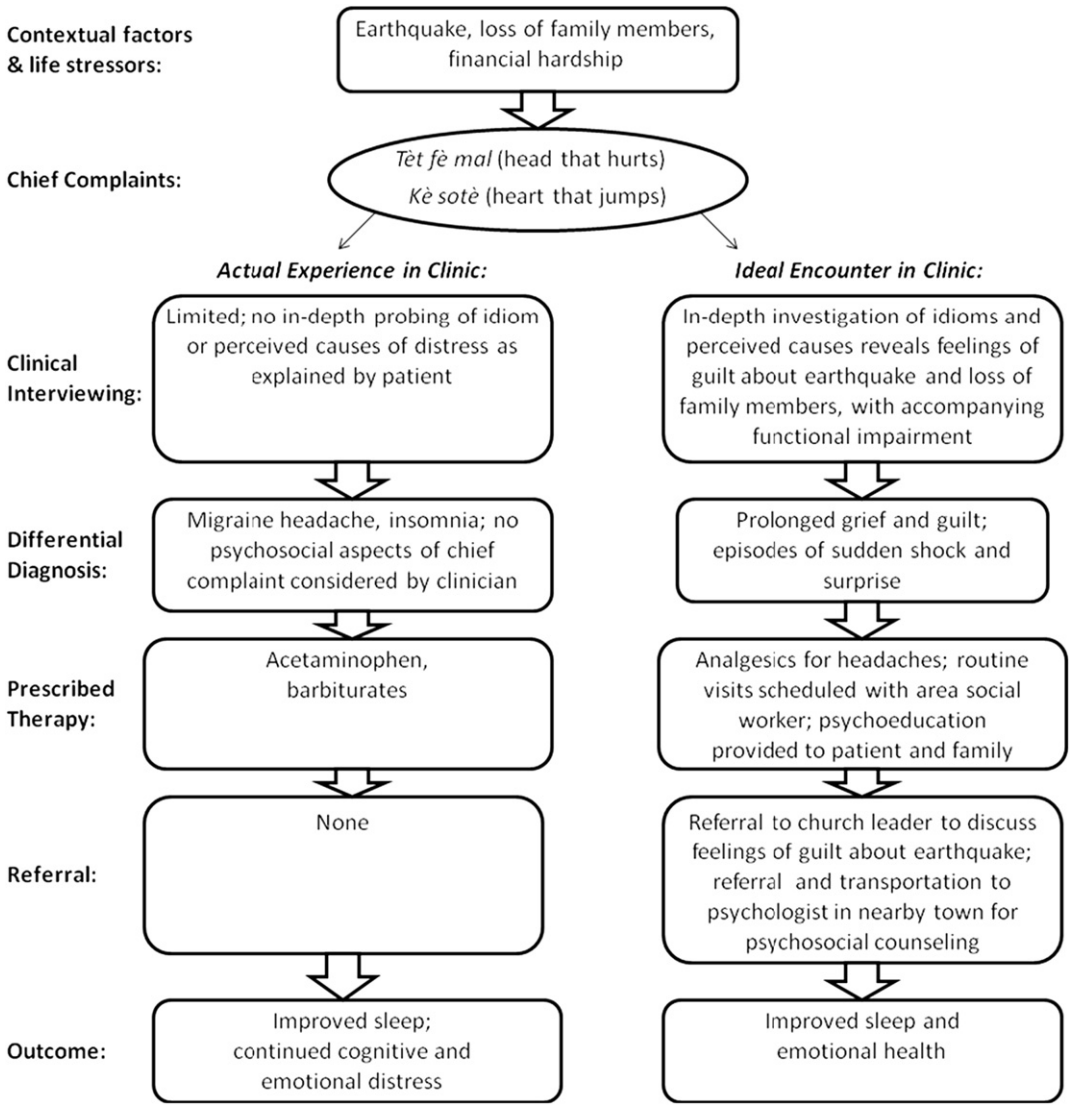

Fig. 4. Idioms of distress in a clinical decision-making pathway. The example of Ameline's experience in the clinic and an alternate possibility if her presenting idioms of distress were explored and appropriate referral systems were in place among care providers.

Thinking holistically about somatic complaints is a key component of training for healthcare workers and psychoeducation for patients and families. In many cultures, headaches and gastrointestinal distress may draw attention to social, economic, and political problems (Hinton & Hinton, 2002; Kirmayer, Dao, & Smith, 1998; Kirmayer & Young, 1998; Kleinman, 1977, 1982; Kohrt, Tol, & Harper, 2007). In the first case study, the woman had complaints of head pain and was also someone who experienced significant life problems. From a holistic standpoint, a cultural analysis of somatic complaints and the context in which they occur is crucial, and this should be complimented with a consideration of biological processes, such as the biology of stress. Hinton, Kredlow, and colleagues (Hinton, Kredlow, Bui, Pollack, & Hoffman, 2011) argue that somatic complaints should be analyzed from the perspectives of metaphor, ethopsychology/ethnophysiology, trauma memory, *and* the biology of stress. When the biology of stress or other biomedical etiologies for somatic complaints are ignored, there is a risk of failing to address treatable physical pathologies that cause cognitive, emotional, and somatic complaints. For example, in Nepal, two thirds of persons expressing an idiom of distress for paresthesia *jham–jham* had physical comorbidity, such as vitamin deficiencies or diabetes, in addition to having depression (Kohrt et al., 2005). In Mongolia, the idiom of distress for fatigue *yadargaa* mapped onto stress related medical issues including hypertension and other cerebrovascular problems (Kohrt et al., 2004). Therefore, ideal appraisals of somatic complaints would include both psychosocial and biomedical evaluations (Kohrt et al., 2007).

From a broader perspective, this study's findings shed more light on the dynamics between Western biomedicine and Haitian medico-religious healing, a relationship that traces its lineage to Haiti's colonial past (Raphaël, 2010; Vonarx, 2008). Biomedicine, first introduced into Haiti under the French colonial regime and later through the American occupation, was housed within larger colonialist/interventionist agendas (Raphaël, 2010). In turn, populist Haitian healing systems, suffused with the spiritual and medical practices orally passed down from slaves, became colonized, dominated, and delegitimized (Lecomte & Raphaël, 2010; Léonard, 2005, pp. 265–266; Vonarx, 2007).

The varying uses and interpretations of emotional and somatic idioms of distress among clinical and traditional care providers, their patients, and family members in Haiti's Central Plateau

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potentially reflect how Western-oriented clinical care models affirm, debate, or discard Haitian ethnomedical constructs. Since the earthquake, Haiti has deservedly received the attention of international mental healthcare specialists. Such endeavors must be founded on an understanding of how Haitians communicate their suffering and ascribe meaning to those experiences. Readers may have noted the resemblance between the Kreyol idioms outlined here and similar cognates in the French language. We caution researchers and health practitioners who assume that these terms have the same psychosocial significance in Haiti's Central Plateau as they would in Port-au-Prince—where French is more commonly spoken—let alone Paris. In the quest to define, categorize, and treat suffering based on Western concepts of mental illness, there is heightened risk of further marginalizing the very models of personhood and care provision that may be most appropriate (James, 2010b, 2011). Such risk can be mitigated through future research that investigates the linguistic roots of these idioms and explores where their use, meaning, and interpretations diverge with similar French counterparts.

One of the limitations of this study is the lack of attention to positive idioms. The language of hope and resiliency is just as important for therapeutic mental healthcare as the language of distress (Eggerman & Panter-Brick, 2010). Another limitation is that the authors were not fluent in Haitian Kreyol. Despite the use of translators, transcription and translation of audio recordings, and collaboration with five native Haitian Kreyol speakers, important linguistic and cultural meanings embedded in lay and clinical discourse may have been lost in translation. Thus, the study's findings might be augmented by similar investigations conducted by native or fluent speakers of Haitian Kreyol over a longer time period. Furthermore, we recognize the need to examine barriers to mental healthcare in primary care settings. This study contributes to a lexicon for screening, diagnosis, and mental health treatment, but improvement in mental healthcare will be stymied without removal of treatment barriers.

Conclusion

Much-needed attention has been focused on the mental health needs of Haitians following the 2010 earthquake. In the well-intentioned effort to provide aid, we caution the use of Western-based screening and treatment methods that rely on illness constructs that are not congruent within the local cultural setting. Nevertheless, we urge the professional community to refrain from over-exoticizing the mental illness experience, as has so often been done in Haiti's past. While the ways in which Haitians conceptualize and communicate mental distress are highly local and culture-specific, they remind us that people suffer universally. Understanding the language of suffering is one step toward ending global mental health disparities.

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Appendix A. Supplementary material

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