Labor Migration and Mental Health in Cambodia

A Qualitative Study

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Abstract: Labor migration is thought to have significant mental and physical health impacts, given the risks for exploitation and abuse of migrant workers, particularly among those in semiskilled and unskilled positions, although empirical data are limited. This qualitative study, conducted in July 2010 in Banteay Meanchey Province, Cambodia, focused on psychosocial and mental health signs and symptoms associated with labor migration among Cambodian migrant workers to Thailand. Two qualitative methods identified a number of mental health problems faced by Cambodian migrant workers in Thailand, including the presence of anxiety and depression-like problems among this population, described in local terminology as *pibak chet* (sadness), *keut chreun* (thinking too much), and *khval khvay khnong chet* (worry in heart). Key informants revealed the extent to which psychosocial well-being is associated with conditions of poverty, including debt and lack of access to basic services.

Key Words: Labor migration and health, mental health, qualitative research, exploitation

(*J Nerv Ment Dis* 2014;202: 200–208)

Irregular migration—defined here as migration through irregular channels, without legal status—can leave migrants especially vulnerable to abuse, exploitation, and threat of deportation (Zimmerman et al., 2011a).[1] Despite discussion in research and policy literature on the potential impact of migration on mental health and psychosocial well-being (Carballo and Mboup, 2005), there is limited understanding of the risks and results of exploitative practices associated with labor migration. The purpose of this qualitative study was to begin to identify mental health problems associated with labor migration in Cambodian communities with high rates of labor migration to Thailand. The focus of the study is on labor migrants broadly, some of whom may have experienced more severe forms of exploitation including trafficking.[2]

Context: Labor Movement From Cambodia to Thailand

According to the International Organization for Migration (IOM), between 1.2 and 2.3 million migrant workers live in Thailand, migrating from neighboring countries, including Cambodia, to work in sectors such as agriculture, domestic work, manufacturing, and fisheries (IOM, 2006). The complicated process of migration and registration for legal employment results in a majority of migrant workers entering through irregular channels and/or working without registration (Huguet and Punpuing, 2005). Given widespread poverty in Cambodia and opportunities for employment in many sectors in the Thai economy, migration to Thailand from Cambodia is a livelihood strategy used by migrants to benefit from the higher-wage economy in Thailand. In 2006, the IOM estimated that there were up to 400,000 Cambodian labor migrants in Thailand (IOM, 2006).

Most Cambodian migrant workers in Thailand are low skilled and irregular, leaving many workers vulnerable to exploitation by employers, recruiters, and traffickers (International Labor Organization [ILO], 2006). Research conducted by the ILO on labor exploitation in Thailand found that in some sectors, such as fishing and domestic work, there are considerable levels of violence and restrictions on freedom of movement, as well as lack of access to identity documents and excessive work hours (ILO, 2006). A 2011 study of Burmese migrant workers in the seafood processing industry in Samut Sakhon Province, Thailand, estimated that 54% of all respondents had experienced some form of forced labor, whereas 33% had been trafficked into forced labor (Robinson and Branchini, 2011). An ILO survey of 80 Cambodian returned migrant workers in Banteay Meanchey Province, surveyed as part of a larger study using random sampling in 31 villages across four districts, found that more than 50% of returned migrants reported being subjected to a range of abuses and forms of exploitation, including verbal abuse, being underpaid or not being paid at all, being restricted from leaving the workplace, threats of or actual arrest, physical violence, and sexual assault (ILO, 2005). Variation in experiences of exploitation in the ILO study may be explained by employment in different industries in Thailand or length of stay in Thailand.

Labor Migration and Health

Research has addressed some aspects of the physical and mental health impacts of irregular migration. Gushulak and MacPherson (2000) found that specific risks to health include unsafe modes of transport; risk for arrest or deportation; and exposure

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ISSN: 0022-3018/14/20203–0200

DOI: 10.1097/NMD.0000000000000101

[1]Huguet et al. (2011) present the various ways through which a migrant worker entering Thailand can become irregular: "(a) they may enter the country clandestinely or without approval; (b) they may enter the country with a valid document, such as a visa or day-pass, but stay longer than permitted; (c) they may be in the country legally but working without permission; (d) they may have been working with permission but their status has changed, as when the work permit expires or the migrant changes employers".

[2]*Trafficking* is defined in the Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime, as "The recruitment, transportation, transfer, harboring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. Exploitation shall include, at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labor or services, slavery or practices similar to slavery, servitude or the removal of organs" (United Nations Office on Drugs and Crime [UNODC], 2003).

to coercion, physical abuse, and low occupational health and safety levels. Lack of legal migration status has also been found to be a risk factor of physical and mental health problems in migration processes (Benach et al., 2011). Low-skilled migrant workers often take "3-D" jobs—dangerous, dirty, and degrading—that nationals of destination countries are unwilling to take (Benach et al., 2011) and are therefore exposed to difficult working conditions. Irregular migrants often face threat of arrest, detention, and deportation, exposing migrants to physical and psychological harm (Zimmerman et al., 2011b). Upon return to their home communities, migrants may experience "the cumulative toll that migration exposures have taken on their physical and psychological wellbeing" (Zimmerman et al., 2011b), with many vulnerable migrants returning to communities without access to livelihood opportunities or basic services.

Within the umbrella of labor migration is the subgroup of individuals who are trafficked against their will for a range of labor purposes. In the case of sex trafficking, the association with human immunodeficiency virus (HIV), other sexually transmitted diseases, and sexual violence has been well documented (Decker et al., 2011; Silverman et al., 2007; Zimmerman et al., 2011a, 2008). Studies conducted among female survivors of trafficking have found high rates of mental disorder, including depression, anxiety, and posttraumatic stress disorder (PTSD). For example, 54% of women in post-trafficking services in Moldova met criteria for at least one of PTSD or anxiety or mood disorder (Ostrovschi et al., 2011); there was 100% prevalence of depression and 29.6% prevalence of PTSD among women trafficked into sex work in Nepal (Tsutsumi et al., 2008). Data concerning the mental health needs of those who have experienced other types of trafficking are sparse.

Mental Health and Idioms of Distress in Cambodia

A large body of research focuses on the mental health among Cambodians, with a particular focus on trauma and associated mental health outcomes experienced during the Khmer Rouge regime. Studies conducted with clinic-based samples of Cambodians resettled to the United States found extensive exposure to significant traumas during the Khmer Rouge period, including imprisonment, war injury, experiencing torture, and witnessing murder or torture (Mollica et al., 1992, 1987, 1990). Studies have also shown associations between these exposures and adverse mental health outcomes. For example, a study of Cambodians who had been living in the United States for 2 decades found a dose-response relationship between exposure to trauma and both depression and PTSD, resulting in a conclusion that in this population, PTSD and depression may be "manifestations of a single continuum of posttraumatic distress" (Marshall et al., 2005). A study of Cambodian adolescent refugees living in a refugee camp in Thailand showed associations between trauma and somatic complaints and attention problems as well as depression and PTSD (Mollica et al., 1997).

Anthropological literature focused on mental health among Cambodians posits the importance of understanding local and culturally specific manifestations of mental health and distress (Eisenbruch, 1991; Eisenbruch et al., 2004; Honwana, 1998). This literature addresses specific modes of causal attribution of physical and mental manifestations of distress (Hinton et al., 2006). For example, *khsaoy beh daung* (weak heart), considered a key idiom of distress and trauma among Cambodians, has been explored in depth by Hinton et al. 2002), who found overlap between *khsaoy beh daung* and Western diagnostic categories that include panic attacks and PTSD in a sample of Cambodian refugees attending a psychiatric clinic in the United States. Another key idiom of distress, *khyal* attack—a form of panic attack—is described as caused by triggers such as excessive worry and *keut chreun,* thinking too much (Hinton et al., 2010). Symptoms associated with these manifestations of distress—for example, dizziness—reflect Cambodian explanatory models that account for causation of physical and mental disorders (Hinton et al., 2001). These are important considerations in the study of mental disorders in cross-cultural settings, given that cultural beliefs about the cause and the meaning of these symptoms can be related to the manifestation and the severity of mental disorders (Hinton and Pollack, 2009).

Purpose of the Study

The purpose of this study was to use qualitative methods to explore local descriptions of problems among Cambodian labor migrants, focusing on the psychosocial and mental health impacts of migration. This study was intended as a preliminary investigation to identify key themes for further investigation and to inform the development of locally appropriate mental health measures for use in future quantitative assessments. The objectives of this study were the following:

- To examine psychosocial and mental health problems experienced by individuals and communities affected by labor migration
- To identify perceived consequences of labor migration from Cambodia to Thailand

This study was implemented together by Johns Hopkins School of Public Health and Transcultural Psychosocial Organization (TPO), a local nongovernmental organization that has been providing psychosocial support and mental health interventions in Cambodia for the past 15 years.

Study Location

This study was conducted in Banteay Meanchey Province, Cambodia. Given the existence of "a large local trans-border network" (World Bank, 2006) between northwestern provinces in Cambodia and neighboring provinces in Thailand, Banteay Meanchey represents an ideal study site for exploring issues associated with labor trafficking. Poipet, the largest city in the province, is a major immigration checkpoint for both countries (Vijghen and Sithon, 2005). An ILO study of labor trafficking from Cambodia selected six districts in Banteay Meanchey Province because these are considered "primary places for receiving, transiting and sending labor migrants to Thailand" (ILO, 2005). Banteay Meanchey is a primarily agricultural province with high poverty rates, and socioeconomic conditions are such that labor migration is a prevalent livelihood strategy (Kingdom of Cambodia, 2009). The ILO study also found that high numbers of children drop out of school to help their families financially, and 85% of households surveyed reported not having enough food to eat in the past, factors that influence decisions to migrate to Thailand for work (ILO, 2005).

METHODS

This study used two qualitative interviewing methods, free-listing and key informant interviewing, used in other studies of mental health needs of vulnerable populations in non-Western settings (Betancourt et al., 2011; Bolton and Tang, 2002; Murray et al., 2006; Poudyal et al., 2009; Tol et al., 2010). Qualitative methods allow for open-ended investigation and assessment of problems from a local perspective, which was important because of the exploratory nature of this study. The specific methods selected for this study enabled a rapid and structured way of ascertaining the main problems impacting individuals and communities that were associated with labor migration. The first stage—free-list interviews—allows for identification of key issues and their relative importance, which were then explored in greater depth in the key informant interview phase.

Fieldwork was conducted for 3 weeks in July 2010. Interviewers were TPO trainees or employees who had previous experience working in community-based mental health assessments.

The lead author was present for and supervised all data collection. The TPO interviewers worked in pairs to conduct interviews, with one interviewer asking questions and the other taking detailed notes. The interviewers completed and transcribed the transcripts in Khmer, which were subsequently translated into English by professional Cambodian translators.

Free Listing

Free-listing interviews are a structured, rapid, and effective method to obtain data about a broad range of issues. Respondents are asked to list responses to specific questions (listed below), along with a short description of each problem. This article presents data from the following free-listing questions:

1. Please tell me about the problems migrant workers face in Thailand.
2. Please tell me about the problems migrant workers face after their return from Thailand.

A total of 38 adult respondents were selected for free-list interviews (18 men and 20 women). Five villages in Ou Chrov district were selected for free-list interviews. Given that Ou Chrov district borders Thailand, these villages were selected given the expected high prevalence of labor migration present. However, specific villages were selected in consultation with local TPO staff to best represent a range of migration experiences. For example, a village very close to the border was selected because migrant workers from that village likely cross the border daily and work in Thailand close to the border, whereas a village further away was also selected because migrant workers from that village likely go to Thailand for longer because they have to pay more to travel to and cross the border. Within these villages, free-list interview respondents were selected through convenience sampling. In each village, the interviewers selected an eligible respondent who was available to be interviewed and subsequently walked around the homes in the immediate area asking adults who were available and interested if they would agree to be interviewed.

Although inclusion criteria did not require that the respondents themselves were labor migrants, given the high prevalence of labor migration as a livelihood strategy in these villages, it was expected (and was the case) that the convenience sample would include individuals who had personally migrated and/or who had family members who had done so. The decision to ask the respondents about the problems of migrant workers in general, rather than their own problems, was based on our experience that asking about others can reduce the potential bias of not reporting stigmatizing and/or socially undesirable problems. In addition, asking about problems of this population more generally allows for a wider range of problems to be mentioned, both those that the individuals themselves might have experienced if they were a migrant laborer as well as the experiences of others that they know.

Key Informant Interviews

Key informant interviews were used to explore in greater detail selected issues that emerged from the free-list interviews. After the free-list interviews, 27 key informants were identified for in-depth interviews. Interviews focused on the mental health and psychosocial problems and labor migration dynamics that emerged from the free-list interviews. The key informants were asked the following open-ended questions focusing on the three problems selected for further exploration:

1. We have heard that workers who come back to the village have the problem *pibak chet*. Could you describe that problem?
2. We have heard that workers who come back to the village have the problem *keut chreun*. Could you describe that problem?
3. We have heard that workers who come back to the village have the problem *khval khvay knong chet*. Could you describe that problem?

The interviewers probed behaviors, feelings, relationship issues, causes, and coping mechanisms as well as other mental health signs and symptoms mentioned in the course of the interview.

Purposive sampling was used to select the key informants. Guest et al. (2006) describe purposive sampling as an approach in which "participants are selected according to predetermined criteria relevant to a particular research objective"(Guest et al., 2006). For our study, the relevant criteria included knowledge of the psychosocial impacts of labor migration and personal association with labor migration (either through the respondent's own experiences or through knowledge of family and community members). Using referrals from the free-list respondents, we identified community members for the first set of key informant interviews. The free-list respondents were asked to identify individuals in their communities who were knowledgeable about the mental health and psychosocial issues raised in the free-list interviews. Additional key informants were identified through chain-referral methodology, in which the first key informants were asked to refer the interviewers to additional community members who were knowledgeable about the discussion topics. The key informants were community leaders, village chiefs, psychosocial outreach workers, and village elders.

Analysis Methods

The Cambodian interviewers and study team conducted the analysis of free-list data in the field after all the free-list interviews were completed. The analysis process, conducted in Khmer by the Cambodian interviewers, consisted of generating composite lists of all the different problems mentioned and the number of different respondents who mentioned each problem. Problems were further categorized into overarching themes, such as economic deprivation and poverty or workplace conditions. The composite problem lists were reviewed to identify three to four frequently mentioned potential mental health problems for further exploration in the key informant interviews. We defined potential mental health and psychosocial problems as those related to thinking, feeling, behaviors, and relationships. This approach frames mental health as broader than the lack of mental disorders and acknowledges that there is a link between social factors and mental well-being (IOM, 2003).

The selected problems were *pibak chet*—sadness, *keut chreun*—thinking too much, and *khval khvay khnong chet*—worry in heart. These problems were selected because these were frequently reported in the free-listing data and were considered to be important conditions in this context. In discussions with local TPO staff, it was evident both that these terms were not well understood and that improved understanding of these terms and problems was thought by local staff and researchers to have the potential to improve TPO services and programming.

The lead author, with feedback from local staff, conducted two forms of data analysis on the key informant interviews. The first analysis method was to identify and count the different signs and symptoms mentioned in association with the three mental health problems. This entailed close reading of each key informant interview transcript, counting frequency of mentions of signs and symptoms and causes of the three mental health problems. This form of analysis enabled understanding of what signs and symptoms are associated with each problem as well as the overlap of signs and symptoms across problems.

The second analytic method further explored emerging themes using Atlas.ti (Scientific Software Development, Berlin), a qualitative data analysis software program. The lead author developed a codebook based on themes identified through initial coding

TABLE 1. Demographics of Free-List Respondents

	Respondents, *n* (%)
Sex	
Male	18 (47%)
Female	20 (53%)
Marital status	
Married	30 (79%)
Widowed	4 (10%)
Single	3 (8%)
Divorced	1 (3%)
Age	
18–24	3 (8%)
25–34	8 (21%)
35–44	15 (39.5%)
45–54	7 (18.5%)
>54	5 (13%)

of eight interviews chosen at random and complemented by themes identified in reading through the remainder of the interviews. Coding was carried out by the lead author, and emergent themes were discussed with the research team; however, consensus-based coding was not carried out for this analytic method given that the goal was to complement the first phase of analysis. Atlas.ti was used to identify narrative from the key informant interviews on the basis of codes related to causes, signs, and symptoms of the three terms. The findings presented here focus primarily on the psychosocial issues (presentation, causes, and treatments of the mental health problems).

The Johns Hopkins institutional review board deemed the project not human subjects research because the methods did not directly ask individuals about their own personal experiences but instead requested respondents to reflect on issues affecting the community more broadly. Before each interview, the respondents were informed of the purpose of the interview, that the interview was confidential, and that no direct benefits would be provided to the respondents, although their participation would assist the researchers in understanding more about the situation of Cambodian migrant workers.

RESULTS

Free-Listing Results

Table 1 displays the sex, age, and marital status of the free-list respondents, showing the spread of demographic characteristics across the sample. The respondents were chosen to represent a range of experiences in terms of working in Thailand or experience of having family members working in Thailand. This was ascertained by the interviewers before conducting the interview but was not recorded or linked to the respondents' answers because the interviewers did not want the respondents to feel uncomfortable sharing information that may have indicated prior illegal status in Thailand.

Table 2 presents the frequently reported free-list problems faced by migrant workers in Thailand (free-list question 1). The

TABLE 2. Most Frequent Responses Mentioned by Respondents to Question 1

Theme	Problem	Sample Descriptions	Frequency
Economic deprivation and poverty	Being in debt	Borrow money for food; borrow money to give to the job leader	18
	No money/not enough money/beg for money	No money for transport back home because didn't get wage; no money for daily expenses	14
	Not enough to eat/no good food	No money because in debt; don't eat enough because saving money to send back home	8
Maltreatment and problems during migration process	Police arrest and maltreat/police arrest and send back/police arrest for bribes	They didn't allow us to enter the country; sometimes the worker was beaten until they died; put in jail for 3 days and then sent back to Cambodia	33
	Cheated by job leader/have to pay money to job leader	Each person has to pay 3000 baht to go to Thailand without permit; job leader brings some to workplace and leaves some in the forest	25
	No border pass/problem with identification and border pass/illegal status	No money to get pass, it is expensive; police arrest and send back to Cambodia	17
	Difficulties with transport to Thailand	Put many workers in a small car; leader fled while traveling and police arrested them; have to sleep in the forest on the way	11
Maltreatment and problems in workplace in Thailand	Boss maltreats/doesn't give salary (at all or fully)/boss abuses	Work for 2 months and only given one month's wage; they hit us because we don't work well	33
	Hard work	Have to carry 100-kg sack on shoulders; have to work long hours	24
	Don't speak Thai language/language difficulties	Hard to find job; when they curse us, we do not know the meaning	21
	Change workplace	The boss sells us to another workplace; have to move workplace because not enough salary to send money home	19
	No job in Thailand/no regular work	Had to wait for job when arrived; workplace was closed when arrived	14
	Working on a boat	On the boat for about 3 years one time; they maltreat, hit and push people into the water	13
Physical and mental health problems	*Phay khlach* (fear)/*mean ararm phay khlach* (feeling fearful)	Hasn't gotten paid yet, police arrested; can't sleep, worrying about police arrest; sorrow in mind	11
	Bad health	Got malaria because living in the forest; headache	8
	Khmean serey pheap (no freedom)	Can't travel outside the workplace; fear about police arrest	6
	Pibak chet (sadness/sorrow)	Can't sleep or eat, thinking too much; afraid of the boss; not earning enough money	4

TABLE 3. Most Frequent Responses Mentioned by Respondents to Question 2

Theme	Problem	Sample Descriptions	Frequency
Economic deprivation and poverty	Poverty/no money/not enough money	Can't buy fertilizer for rice field; no food supply; no regular job; no capital for business	30
	In debt	Borrowed money with interest; sell cow and rice field to pay off debt	28
	No job/hard to find job/not enough work	Go to Thailand to try to find work; no rice field; work for small amount of money	25
	Not enough to eat	Do farming but not enough for children to eat; food is not sufficient, so decide to go to work in Thailand	16
	No rice field/not enough land/small rice field	Commune chief confiscated land; sold all belongings to pay off debt	16
	Work as hired laborer in Cambodia/work for pay in village	Look after other people's farms for money; harvest rice and carry rice sack	11
	Children cannot go to school	Not enough money; children couldn't finish their education	10
Physical and mental health problems	*Pibak chet* (sorrow/sadness)	Want to commit suicide because no money to come home; think about the future, how do our children have something to eat? lack of everything	17
	Bad health	Hard to go to hospital it is too far home; exhausted, no energy, fever; infected with HIV	17
	Mean ararm pibak (feeling difficulty)/things are too hard	Unhappy, worried, thinking too much; children don't send money	8
	Khval khvay khnong chet (worry in heart)/worry too much	No money to go to hospital; headache, cannot sleep, broken hearted	7
	Keut chreun (thinking a lot)	Worried about children and the future; don't know how to get enough food for children; headache, can't sleep	7
Problems with process returning to Cambodia	Relations with Cambodian police/have to pay money on the way back to police	Police ask for money when they come back home; must pay 200 baht each	11
Social problems	Domestic violence	No job, didn't get on well with each other, quarrel	9
	Drinking alcohol/drinking until confused	Make violence and hit each other; husband drinks alcohol, does not take care of family	6

respondents most frequently referred to issues associated with treatment by police (n = 33), employers (n = 33) and "job leaders" (n = 25), who were described as people who charged for services to take workers to Thailand and, in some cases, to set them up with work. Almost all respondents (n = 33) mentioned problems with police in Thailand, including being arrested, forced to pay a bribe to be let out of prison, and being deported back to Cambodia by the police. Examples of severe abuses were specifically mentioned as well; being raped by a Thai person was mentioned by two respondents. Table 3 presents free-list problems frequently mentioned in response to question 2, "problems migrant workers face after their return from Thailand." The central problems were related to poverty (n = 30), including debt (n = 28), landlessness (n = 16), not having enough money to send children to school (n = 10), and not having enough to eat (n = 16). In both Tables 2 and 3, only responses mentioned by four or more respondents are included.

Several mental health–related signs and symptoms also emerged from free-list question 2. *Pibak chet,* sadness or sorrow, was frequently mentioned as an outcome of return to communities after working in Thailand (n = 17). Other mental health issues, including alcohol abuse (n = 6) and domestic violence (n = 9), were commonly reported by the free-list respondents. *Khval khvay khnong chet,* worry in heart (n = 7), was discussed in relation to concerns about economic status, including not having enough money for health care or feeding children. *Keut chreun,* thinking a lot (n = 7), was also cited in some of the descriptions of other problems.

Key Informant Interview Results

The key informants were spread across the villages selected for the free-list interviews. Table 4 displays the age and sex breakdown of the sample of key informants. The results from the first analytic method—tallying of frequency of responses—are displayed in Table 5. The results from coding using Atlas.ti are presented below, with narratives drawn from interviews coded for signs and symptoms and causes of each of the three local idioms.

Six of the 27 key informant interviews focused primarily on labor migration dynamics and issues associated with working in Thailand, while discussing mental health if and when it emerged in discussion. As such, frequencies in Table 5 are lower because not all 27 interviews focused specifically on mental health. Signs and symptoms most commonly discussed in association with *pibak chet* were drinking alcohol, headache, dizziness, difficulty sleeping, irritation at others, crying, suffering, being easily angered, confusion, and weakness. Of these, headache, sleeplessness, irritation with others, confusion, and weakness were also frequently mentioned in

TABLE 4. Demographics of Key Informants

	Respondents, n (%)
Sex	
Male	15 (55%)
Female	12 (45%)
Age	
18–24	5 (18.5%)
25–34	3 (11%)
35–44	4 (15%)
45–54	10 (37%)
>54	5 (18.5%)

TABLE 5. Signs and Symptoms Associated With *Pibak Chet*, *Keut Chreun*, and *Khval Khvay Khnong Chet*, Data From Key Informant Interviews

Signs and Symptoms	*Pibak Chet*	*Keut Chreun*	*Khval Khvay Khnong Chet*
Headache	6	9	2
Drinking alcohol	10	3	1
Dizziness	8	4	2
Sleeplessness/difficulty sleeping	7	6	3
Irritation at others	6	8	2
Crying	6	3	1
Suffering	6	0	0
Easily angered	5	5	1
Weak	4	9	1
Loss of appetite	2	7	2
Confusion	4	4	0
Sad facial expression	2	2	6
Feeling complicated	1	3	2
Lose weight	0	3	1
Forgetful	0	4	2
Heart attack	3	1	2
Wanting to commit suicide	2	1	0
Tinnitus	0	3	0
Keut chreun	11	—	4
Pibak chet	—	4	2

relation to *keut chreun,* displaying the substantial overlap between these conditions that emerged. Moreover, *keut chreun* was listed as the most common symptom of *pibak chet.* Loss of appetite and being forgetful were more specific to *keut chreun,* whereas a sad facial expression was listed frequently in discussions of *khval khvay khnong chet.*

Causes, Signs, and Symptoms of *Pibak Chet*

The causes of *pibak chet* were described as including a wide range of poverty-related hardships, including lack of land, lack of employment opportunities, and lack of access to clean and safe water. One male key informant described lacking access to land, explaining:

> Those who have been living here long enough have farm land to grow rice but for those who have just settled here we only have enough land to build houses. This issue made me migrate to Thailand, where I was cheated and treated badly, and when I came back, I had no money and this is what makes me more and more *pibak chet*.

The key informants described a number of signs and symptoms associated with *pibak chet.* One male key informant stated, "If I am *pibak chet,* I tend to *keut chreun* (think too much). I can't sleep well, I lose my appetite for food." Another male respondent described people with *pibak chet*:

> Physically, they feel some kind of nausea most of the time and feel pain in the stomach and intestine. Sometimes, they have a fight with another person … They become aggressive, unhappy and start to complain a lot. Sometimes, tears drop down their face when they speak. Some people with *pibak chet* can do nothing at all besides *keut chreun* … *Pibak chet* makes them feel dizzy and have a headache.

Another female key informant explained a range of symptoms of people who feel *pibak chet*, including being "prone to diseases such as headache, fever and heart attack." The key informants described a number of physical symptoms, including headache and stomach ache, as well as loss of strength, aggression, and dizziness.

Causes, Signs, and Symptoms of *Keut Chreun*

The causes of *keut chreun* echoed those of *pibak chet*, including dimensions of poverty such as lack of food, lack of access to land, and lack of employment or income-generating opportunities. One female key informant presented a list of the issues impacting their village, leading to people experiencing *keut chreun*:

> Most people in the community are poor. Some people don't even have their own water, not to mention rice to eat. There's no rice in their house …. So, sometimes we migrate to Thailand, but we are afraid of being arrested. There is no water in the village, if we want water, we have to buy it, that's why we *keut chreun* …. *Keut chreun* also makes us feel headache, tired and forgetful.

One male key informant discussed a number of signs and symptoms of *keut chreun*, including the following:

> Their mental health is down, their physical health is also a problem. They get many diseases, their facial expression is unhappy. They feel dizzy and have a headache, stomachache. The serious problem for them is that they feel dizzy and have a headache because they *keut chreun*.

As in the case of *pibak chet*, the key informants discussed that individuals who experienced *keut chreun* get angry and irritated. One male key informant explained, "the symptoms of *keut chreun* are that it makes you become irritated, have some arguments with your family." Headache, fatigue, and loss of appetite were other symptoms commonly discussed.

Causes, Signs, and Symptoms of *Khval Khvay Khnong Chet*

The key informants discussed the causes of *khval khvay khnong chet*, describing the poverty-related causes discussed above in relation to *pibak chet* and *keut chreun.* For example, one male key informant stated:

> *Khval khvay khnong chet* is related to the concern of how to earn income. Those who can earn a lot in Thailand have no concerns when they come back. On the other hand, those who cannot earn much over there, they end up in debts when they come back and they always feel *khval khvay khnong chet*.

Some of the signs and symptoms described in the interviews included dizziness, looking sad, and *keut chreun.* One male key informant explained that a person with *khval khvay khnong chet*

> … becomes irritated and has a verbal argument with his wife. He keeps thinking about the difficulties without having any solutions. *Keut chreun* makes him sleepless … *khval khvay khnong chet* makes him unable to know that he just spoke bad words to people, that is to say, he cannot control his feelings.

Another male key informant described "sleeplessness, headache, loss of appetite for food, feeling weak and dizzy" as central components of *khval khvay khnong chet.* The most commonly discussed sign was facial expressions—looking sad. One male key informant stated that you can know if someone is *khval khvay khnong chet* by looking at his/her facial expression, stating, "we could know through seeing their irritation shown out, their face turns dark, and they tend to be forgetful, thinking of this and that." Symptoms also include physical manifestations, including dizziness and headaches, as well as being unable to engage in strong relationships with family and friends.

DISCUSSION

In this study, free-list data elucidated descriptions of a number of local idioms of distress in this population—*pibak chet*, *keut chreun*, and *khval khvay khnong chet*. The key informants described signs and symptoms related to these problems, including somatic experiences of distress (*i.e.,* headache, stomachache, dizziness, and lack of strength) as well as symptoms commonly associated with depressive and anxiety disorders (*i.e.,* irritation, sleeplessness, and loss of appetite). There is substantial overlap between the conditions, particularly *pibak chet* and *keut chreun*, whereas *keut chreun* does seem to be more associated with physical manifestations of distress, including tinnitus, weakness, and loss of weight. The data do not clearly show whether *pibak chet*, *keut chreun*, and *khval khvay khnon chet* should be considered as distinct syndromes, whether some conditions constitute signs and symptoms of a broader syndrome, or whether these conditions differ in severity. The primary problems often overlap; although some key informants stated that they understood there to be a clear distinction between the conditions or that one condition caused another, it is more likely that the three conditions constitute different aspects of the domain of depression and anxiety-related disorders in this context. Further research is required to determine whether these conditions constitute distinct syndromes; in this phase of research, the data provide a basis for future research questions relevant to developing and adapting measurement instruments and designing appropriate interventions.

In discussion of these conditions, a number of somatic complaints—such as dizziness and *nhor troung* (heart palpitations)—were commonly discussed, a finding that confirms a number of other studies focusing on symptoms of Cambodian idioms of distress (Hinton et al., 2001). The relevance of dizziness as a symptom of idioms of distress among Cambodians has been identified by Hinton et al. (2001), who found associations between *kyol goeu* (wind overload), which has dizziness as a central symptom, and panic attacks among a sample of Cambodian patients attending a psychiatric clinic in the United States as well as broader associations with anxiety.

Of these conditions, *keut chreun* has been identified and explored in other literature, which has identified associations between *keut chreun* and panic, panic disorder, and PTSD (Hinton et al., 2011a). As in prior research, *keut chreun* was described as a form of rumination and worry about a combination of present economic circumstances, family circumstances, and prior traumatic events and bereavement issues (Hinton et al., 2010). *Keut chreun* and *khval khvay khnong chet* are both associated with excessive worrying, which has been described in the literature on Cambodians in the United States (Hinton et al., 2002, 2011b, 2010). Of note, in other research, causes of *keut chreun* have included worrying and thinking about prior traumatic events. It is possible that in this context, *keut chreun* is associated with worrying about prior traumatic experiences during migration and employment in Thailand. Although in the data of this present study, *keut chreun* cannot be causally linked to specific traumatic events, it is evident from other literature that *keut chreun* is associated with PTSD, that *keut chreun* was identified as a problem in this population, and that further research may shed light on possible linkages between traumatic events and *keut chreun* in this setting. The significance of *keut chreun* in this context builds on prior ethnographic research focusing on Cambodian refugees who have been resettled in the United States and suggests the salience of this condition among Cambodians living in post-conflict rural areas.

The results of this study highlight the association between poverty and psychosocial issues in this population. A picture of a negative cycle of poverty emerged from this study—individuals going to Thailand because of poverty-related issues, often becoming further indebted while in Thailand, and then returning to Cambodia to a situation of household and communal poverty. Individuals may feel compelled to migrate to provide remittances to their families (IOM, 2010) and, in migrating as irregular migrant workers, be exposed to coercion and exploitation. The key informants described the causes of mental health problems in this population as structural issues of poverty and deprivation, demonstrating a perceived association between the identified mental health problems and social conditions. The key informants consistently cited the association between aspects of poverty and the despair and helplessness that seem to constitute *pibak chet*, *keut chreun*, and *khval khvay khnong chet*.

The results of this qualitative study demonstrate perceptions in this context that poverty and mental health are intricately linked. However, it is also evident that the association between poverty and mental health is not linear or direct, recommending additional research to further understand the cyclical nature of the relationship. Epidemiological research on this association in low-income settings suggest the role of insecurity, hopelessness, economic and social change, and access to education as mechanisms connecting poverty and common mental disorders (Patel and Kleinman, 2003). Other research suggests that although associations between poverty and adverse mental health outcomes may exist, the most significant correlate between poverty and poor mental health involves changes in life circumstances, a finding that is particularly relevant to the case of individuals who migrate, suggesting the need to focus on vulnerability, adverse events, and economic uncertainty, which households in low-income setting may experience (Das et al., 2007). Evidence shows that poor mental health status can lead to further impoverishment because symptoms interfere with capacity to perform livelihood activities, a factor that was described by the respondents in this study. Our qualitative data suggest that communities in this context perceive the important role of poverty in influencing mental health and determining individuals' and communities' choices to migrate and that the various mechanisms and processes described above may be operating in this context.

The results of this study can be used to inform TPO's existing psychosocial outreach services in Banteay Meanchey province, in the form of interventions to address poverty-induced migration, through improving household financial and psychosocial well-being (Lund et al., 2011) and through using the data presented to develop screening instruments and adapt evidence-based interventions for the purposes of addressing mental health problems affecting functioning and well-being among returned migrant workers in this context. The likely presence of individuals who have been trafficked in the present sample may also point to the need for further investigation of the specific impact of trafficking on mental health outcomes, through a study focused specifically on individuals who have been trafficked, or comparing labor migrants who have not and who have been trafficked.

Limitations

The findings of this study should be interpreted in light of some limitations of study design. One of the limitations of this study is that the respondents were asked to discuss migrant work in Thailand generally. Therefore, data did not shed light on whether there are industries within which exploitation is more extreme or whether psychosocial impacts are more directly associated with particular forms of employment. In addition, this means that the data do not show whether exposure to abuse and exploitation and mental health problems vary for differing forms of migration, such as short-term migration along the border or long-term, longer-range migration linking Cambodian workers with Thai destinations further away (IOM, 2006), a question that is worthy of further investigation. Moreover, conducting the study in Cambodia with individuals impacted by labor migration but not currently directly experiencing the problems associated with, for example, exploitative working

conditions may have shifted the focus to current economic and social problems in communities. Overall, these findings cannot be interpreted as causal; being a migrant worker in Thailand may be causally related to increased mental health problems, but it is also possible that increased poverty leads to migration, and thus, preexisting social conditions more fully explain mental health problems among migrant workers rather than the fact of migration itself. Further data collection in work settings in Thailand among Cambodian migrant workers could shed light on the direct risks associated with working in Thailand, whereas quantitative data with a comparison group of nonmigrants could shed light on the question of possible confounders.

An additional limitation is that, in the context of being a rapid qualitative assessment, the study selected a convenience sample for the free-list interviews. Although efforts were made to select respondents who represented a range of experiences within the processes and dynamics of labor migration in the area, representativeness cannot be ensured through a convenience sample. However, the sampling technique corresponded to the goals of this stage of the data collection, of generating data to inform hypotheses and themes for further exploration in the key informant interviews. Timing of fieldwork—at the end of the primary harvest season—may have introduced bias into the sample because many young men and women were working in Thailand at the time of data collection and were unavailable to participate in the study. As such, the key informants seem to be older than average migrant workers. However, all key informants were able to discuss the impacts of labor migration on their families and communities, given how prevalent different forms of labor migration are in this province.

Moreover, not all respondents, in the free-list or key informant interviews, had actually been labor migrants in Cambodia. This introduces limitations to these data—namely, that the responses of returned migrants may have differed from those of nonmigrants in ways that we cannot assess in this present study. Nonmigrant respondents may have less insight into the specific problems migrant workers from Cambodia in Thailand face. However, because of the sensitive nature of this topic and concerns the study team had about selecting respondents on the basis of this criterion, the researchers decided to conduct the study in an area of Cambodia where the prevalence of labor migration is such that all communities, families, and individuals are in some way connected to and affected by migration. This may have limited the knowledge of the respondents to directly assess the mental health problems experienced by returned migrants and indicates the need to do further research focusing on the individual experiences of returned migrants in this area.

CONCLUSIONS

Discussion of the potential outcomes of exposure to exploitative and abusive migration processes and working conditions for migrant workers often references the possible mental health impacts of these processes. However, to date, there have been limited empirical data explicating the risks and outcomes for migrant workers, despite understanding of the extreme abuses and risks they are exposed to at various stages of the migration process. This study focused on mental health and psychosocial issues in the context of Cambodian workers who migrate to Thailand. Through analysis of three local idioms of distress, *pibak chet*, *keut chreun*, and *khval khvay khnong chet,* this study explored the presence and the importance of depression and anxiety-like conditions among individuals and communities impacted by forced labor and exploitative migration processes. The study showed that communities heavily impacted by irregular migration view these conditions to be the cause and outcome of a range of poverty-related conditions—socioeconomic deprivation, domestic violence, alcoholism, and lack of access to basic services—experienced by individuals and communities in this context.

Although more research is needed to fully elucidate the physical and mental health impacts of labor migration and the kinds of exploitation to which migrant workers are subjected, the initial exploratory data suggest that the mental health risks are substantial. The mechanisms causing adverse mental health outcomes caused by exploitative labor migration processes are largely unknown, and there is limited evidence regarding appropriate interventions to address the mental health needs of those affected.

ACKNOWLEDGMENTS

The authors would like to acknowledge TPO research assistants for their work conducting data collection. The authors would like to acknowledge the Center for Global Health, Johns Hopkins University, for providing funding to conduct this research.

DISCLOSURES

This study was funded through a grant to the first author from the Johns Hopkins Center for Global Health.

The authors declare no conflict of interest.

REFERENCES

Benach J, Muntaner C, Delclos C, Menendez M, Ronquillo C (2011) Migration and "low-skilled" workers in destination countries. *PLoS Med*. 8:e1001043.

Betancourt TS, Rubin-Smith JE, Beardslee WR, Stulac SN, Fayida I, Safren S (2011) Understanding locally, culturally, and contextually relevant mental health problems among Rwandan children and adolescents affected by HIV/AIDS. *AIDS Care*. 23:1–12.

Bolton P, Tang AM (2002) An alternative approach to cross-cultural function assessment. *Soc Psychiatry Psychiatr Epidemiol*. 37:537–543.

Carballo M, Mboup M (2005) *International migration and health*. Geneva, Switzerland: Global Commission on International Migration.

Das J, Do QT, Friedman J, McKenzie D, Scott K (2007) Mental health and poverty in developing countries: Revisiting the relationship. *Soc Sci Med*. 65:467–480.

Decker MR, McCauley HL, Phuengsamran D, Janyam S, Silverman JG (2011) Sex trafficking, sexual risk, sexually transmitted infection and reproductive health among female sex workers in Thailand. *J Epidemiol Community Health*. 65:334–339.

Eisenbruch M (1991) From post-traumatic stress disorder to cultural bereavement: Diagnosis of Southeast Asian refugees. *Soc Sci Med*. 33:673–680.

Eisenbruch M, de Jong JT, van de Put W (2004) Bringing order out of chaos: A culturally competent approach to managing the problems of refugees and victims of organized violence. *J Trauma Stress*. 17:123–131.

Guest G, Bunce A, Johnson L (2006) How many interviews are enough? An experiment with data saturation and variability. *Field Methods*. 18:59–82.

Gushulak BD, MacPherson DW (2000) Health issues associated with the smuggling and trafficking of migrants. *J Immigr Health*. 2:67–78.

Hinton D, Hinton S, Um K, Chea A, Sak S (2002) The Khmer 'weak heart' syndrome: Fear of death from palpitations. *Transcult Psychiatry*. 39:323–344.

Hinton D, Um K, Ba P (2001) Kyol goeu ('wind overload') part II: Prevalence, characteristics, and mechanisms of kyol goeu and near-kyol goeu episodes of Khmer patients attending a psychiatric clinic. *Transcult Psychiatry*. 38:433–460.

Hinton DE, Kredlow MA, Bui E, Pollack MH, Hofmann SG (2011a) Treatment change of somatic symptoms and cultural syndromes among Cambodian refugees with PTSD. *Depress Anxiety*. 50:347–370.

Hinton DE, Nickerson A, Bryant RA (2011b) Worry, worry attacks, and PTSD among Cambodian refugees: A path analysis investigation. *Soc Sci Med*. 72:1817–1825.

Hinton DE, Pich V, Marques L, Nickerson A, Pollack MH (2010) Khyal attacks: A key idiom of distress among traumatized Cambodia refugees. *Cult Med Psychiatry*. 34:244–278.

Hinton DE, Pich V, Safren SA, Pollack MH, McNally RJ (2006) Anxiety sensitivity among Cambodian refugees with panic disorder: A factor analytic investigation. *J Anxiety Disord*. 20:281–295.

Hinton DE, Pollack MH (2009) Introduction to the special issue: Anxiety disorders in cross-cultural perspective. *CNS Neurosci Ther*. 15:207–209.

Honwana A (1998) Non-western conceptions of mental health. In UNHCR (Ed), *Refugee children*: *Guidelines on protection and care* (pp 103–119). Geneva, Switzerland: UNHCR.

Huguet JW, Charmatrithriong A, Richter K (2011) Thailand migration profile. In Huguet JW, Charmatrithriong A (Eds), *Thailand migration report 2011: Migration for development in Thailand: Overview and tools for policy makers*. Bangkok, Thailand: International Organization for Migration.

Huguet JW, Punpuing S (2005) *International migration in Thailand*. Bangkok, Thailand: International Organization for Migration.

International Labor Organization (2005) *The Mekong challenge: Destination Thailand. A cross border labour migration survey in Banteay Meanchey Province, Cambodia.* Bangkok, Thailand: International Labor Organization.

International Labor Organization (2006) *The Mekong challenge: Underpaid, overworked and overlooked.* Bangkok, Thailand: International Labor Organization.

International Organization for Migration (2003) *Position paper on psychosocial and mental well-being of migrants*. Geneva, Switzerland: International Organization for Migration.

International Organization for Migration (2006) *Review of labor migration dynamics in Cambodia.* Phnom Penh, Cambodia: International Organization for Migration.

International Organization for Migration (2010) *Analyzing the impact of remittances from Cambodian migrant workers in Thailand on local communities in Cambodia.* Phnom Penh, Cambodia: International Organization for Migration.

Kingdom of Cambodia (2009) *Banteay Meanchey data book*. Phnom Penh: Kingdom of Cambodia.

Lund C, De Silva M, Plagerson S, Cooper S, Chisholm D, Das J, Knapp M, Patel V (2011) Poverty and mental disorders: Breaking the cycle in low-income and middle-income countries. *Lancet*. 378:1502–1514.

Marshall GN, Schell TL, Elliott MN, Berthold SM, Chun CA (2005) Mental health of Cambodian refugees 2 decades after resettlement in the United States. *JAMA*. 294:571–579.

Mollica RF, Caspi-Yavin Y, Bollini P, Truong T, Tor S, Lavelle J (1992) The Harvard Trauma Questionnaire. Validating a cross-cultural instrument for measuring torture, trauma, and posttraumatic stress disorder in Indochinese refugees. *J Nerv Ment Dis*. 180:111–116.

Mollica RF, Poole C, Son L, Murray CC, Tor S (1997) Effects of war trauma on Cambodian refugee adolescents' functional health and mental health status. *J Am Acad Child Adolesc Psychiatry.* 36:1098–1106.

Mollica RF, Wyshak G, Lavelle J (1987) The psychosocial impact of war trauma and torture on Southeast Asian refugees. *Am J Psychiatry.* 144:1567–1572.

Mollica RF, Wyshak G, Lavelle J, Truong T, Tor S, Yang T (1990) Assessing symptom change in Southeast Asian refugee survivors of mass violence and torture. *Am J Psychiatry.* 147:83–88.

Murray LK, Haworth A, Semrau K, Singh M, Aldrovandi GM, Sinkala M, Thea DM, Bolton PA (2006) Violence and abuse among HIV-infected women and their children in Zambia: A qualitative study. *J Nerv Ment Dis*. 194:610–615.

Ostrovschi NV, Prince MJ, Zimmerman C, Hotineanu MA, Gorceag LT, Gorceag VI, Flach C, Abas MA (2011) Women in post-trafficking services in Moldova: Diagnostic interviews over two time periods to assess returning women's mental health. *BMC Public Health*. 11:232.

Patel V, Kleinman A (2003) Poverty and common mental disorders in developing countries. *Bull World Health Organ*. 81:609–615.

Poudyal B, Bass J, Subyantoro T, Jonathan A, Erni T, Bolton P (2009) Assessment of the psychosocial and mental health needs, dysfunction and coping mechanisms of violence affected populations in Bireuen Aceh. A qualitative study. *Torture*. 19:218–226.

Robinson C, Branchini C (2011) Estimating labor trafficking: A case study of Burmese migrant workers in Samut Sakhon Province, Thailand. Bangkok, Thailand: Labor Protection Network & UNIAP.

Silverman JG, Decker MR, Gupta J, Maheshwari A, Willis BM, Raj A (2007 HIV prevalence and predictors of infection in sex-trafficked Nepalese girls and women. *JAMA*. 298:536–542.

Tol WA, Komproe IH, Jordans MJ, Gross AL, Susanty D, Macy RD, de Jong JT (2010) Mediators and moderators of a psychosocial intervention for children affected by political violence. *J Consult Clin Psychol*. 78:818–828.

Tsutsumi A, Izutsu T, Poudyal AK, Kato S, Marui E (2008) Mental health of female survivors of human trafficking in Nepal. *Soc Sci Med*. 66(8):1841–1847.

United Nations Office on Drugs and Crime (2003) Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children. Available on http://www.unodc.org/documents/treaties/UNTOC/Publications/TOC%20Convention/TOCebook-e.pdf.

Vijghen JL, Sithon K (2005) *Goods and girls: Trade across borders*. Poipet, Cambodia: ZOA Refugee Care.

World Bank (2006) *Labor migration in the Greater Mekong Sub-region.* Bangkok: World Bank.

Zimmerman C, Hossain M, Watts C (2011a) Human trafficking and health: A conceptual model to inform policy, intervention and research. *Soc Sci Med*. 73:327–335.

Zimmerman C, Hossain M, Yun K, Gajdadziev V, Guzun N, Tchomarova M, Ciarrocchi RA, Johansson A, Kefurtova A, Scodanibbio S, Motus MN, Roche B, Morison L, Watts C (2008) The health of trafficked women: A survey of women entering posttrafficking services in Europe. *Am J Public Health*. 98:55–59.

Zimmerman C, Kiss L, Hossain M (2011b) Migration and health: A framework for 21st century policy-making. *PLoS Med*. 8:e1001034.