Baseline Study Report

on Community Mental Health and Development

Khamkeut, Bolikhan, and Viengthong Districts

Borikhamxay Province

Lao People's Democratic Republic

BasicNeeds

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March 2012

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Executive Summary

The baseline study investigates mental health and epilepsy care needs, perceptions, beliefs, attitudes, and life conditions of those living with mental or/and epilepsy disorders in Khamkeut, Bolikhan, and Viengthong districts in Borikhamxay province. It also looks at mental health and epilepsy care services available at these districts as well as capacity of their staff to provide such treatments. The study aims at gathering baseline information to use as a reference point for BasicNeeds' programme intervention and evaluation in Borikhamxay province.

In order to fulfil the objectives, cross sectional study design is applied and quantitative and qualitative approaches are used. The study recruited non-probability sampling of 17 people with mental health problems, 10 people with epilepsy, 22 caregivers, and 9 district health care workers. Three main tools were used to collect data, these include, mental health and epilepsy care at district hospitals observation, in-depth interviews with health care workers, and focus group discussions with people with mental or/and epilepsy disorders. The analysis process involved the stages of transcription, coding of responses, data interpretation, and report writing.

Study results suggest that mental health and epilepsy care needs in study districts were high due to lack of facilities and infrastructure to accommodate those needs. Seeking care behaviour among study participants was primarily with traditional and spiritual healers. Those who accessed mental health or/and epilepsy care district hospitals had to travel a long distance to Vientiane Capital in order to receive treatments referred by their local district hospital staff. District health care staff obtained basic and short term mental health and epilepsy training during their medical academic years prior to becoming health care workers, but many were unable to apply those learning in their real jobs. We assume that such training did not adequately equip them enough skills to implement mental health and epilepsy treatments.

In addition, we found that mental health and epilepsy bring in unemployment and livelihood burden not only to individuals with the disorders, but to their family as well (i.e. lack of labour, family members attend to the needs of sick loved ones resulting in loss of income). Our result also shows moderate to high stigma and discrimination at study districts. Internalized stigma was predominant among people with mental or/and epilepsy disorders. In regards to livelihood conditions, agricultural practice such as cash crops and animal farming are the most feasible income opportunities for people with mental health and epilepsy in study districts since their districts' economy is based on agriculture practice.

Our results conclude that community mental health and epilepsy intervention is indeed needed for Borikhamxay province. This baseline study will be a starting point for this implementation. It could be a source of project's planning, monitoring, and impact evaluation for the intervention. And further research on mental health and epilepsy issues are essentially needed in Lao PDR.

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Abbreviations

DFID	Department for International Development of United Kingdom
Lao PDR	Lao People's Democratic Republic
MD	Medical Doctor
MHU	Mental Health Unit
NTPC	Nam Theun 2 Power Company
THPC	Theun Hinboun Power Company
VTE	Vientiane Capital City

1. Background

Neuropsychiatric disorders, such as depression and other common mental disorders, alcohol-use and substance use disorders, and psychoses have been attributed to constitute 14% of the global burden of disease [1]. Poor mental health is associated with poverty, drastic social change, gender discrimination, unhealthy lifestyles, physical violence, human rights violations, genetic factors, and imbalances in chemicals in the brain [2]. Although most mental disorders are not deadly disorders, mortality rates are at least twice higher than those in general population. For instance, previous study has linked schizophrenia with poor conditions of care, suicide, and other accidents as leading causes of mortality for people with schizophrenia in both developed and developing countries [3].

It is clear that mental health problems are part of the global burden of diseases. However, Lao PDR has been putting little effort on the issue. For example, National Mental Health Policy has been developed, nevertheless, it has not yet fully put into practice [4]. This shows in an insufficient amount of mental health care funding from both international aid agencies and the Lao government. Moreover, previous studies show low admissions of individuals with mental health problems at Mental Health Units (MHUs) – the only two mental health facilities for the entire population located at the heart of the capital city of Vientiane. Long distance, poverty and an overall ignorance are claimed to be associated with the low access and admissions to those facilities [4,5]. Additionally, a scarcity of mental health care service is claimed to be an outcome of inadequate mental health care professionals. For this reason, capacity to expand mental health care service to other provinces is critically challenging. Moreover, mental health treatments at district hospitals and village health centres are not available, resulting in poor diagnosis and a deficiency in proper treatments. In particular, individual and families with mental health problems in Lao PDR are vulnerable to receive thorough treatment information and possible side effects of psychotropic drugs, leading to discontinued treatments and relapse [4].

Another health issue of concern in Lao PDR is epilepsy with its prevalence at 7.7 per 1,000 people. Phenobarbital, an anti-epileptic drug, is available in less than 55% of pharmacies in its capital city of Vientiane and not available in many rural areas. In addition, there have been

only two neurologists in Lao PDR, the neurology facilities are basic and most of them are focused in the capital city [6]. Importantly, Lao PDR has no national guideline for epilepsy and the disorder may be unfamiliar to the general population and health care professionals. In regards to perceptions of the disorder, epilepsy is believed by people in the community and relatives of people with epilepsy themselves to be a transmitted disease via saliva contact with epilepsy [7].

1.1 Program Description

BasicNeeds is the first non-governmental organization working in mental health field since 2007. Its first intervention, funded by Department for International Development of United Kingdom (DFID), was implemented in Vientiane Capital. This project successfully reached out to 832 people with mental illness and epilepsy, and 783 carers [8]. The main goal of BasicNeeds is to deliver help that will improve the quality of life for those suffering from mental or/and epilepsy disorders by implementing the BasicNeeds' Model of Mental Health and Development that has also been implemented in another 9 countries worldwide, key components of the Model include: capacity building; community mental health; livelihoods; research; and management.

As stated in previous section, it is important that mental health and epilepsy care reaches out to those who live outside the capital city. BasicNeeds has therefore expanded its work to other part of the country and Borikhamxay was chosen to be second intervention province, thanks to a separate funding from European Union and The Breadsticks Foundation. This project takes place in three districts in Borikhamxay province including, Bolikhan, Khamkeut and Viengthong districts – the districts are listed as one of the 47 poorest districts in the country, as well as the three most underprivileged districts in Borikhamxay province.

Geographically, Borikhamxay is located in the central part of Lao PDR with the population of 223,001 people [9]. In the past years, it has been affected by severe floods, causing not only the loss of agriculture produces (i.e. crops and livestock), but also to people's health, such as malnutrition, housing, sanitation, and emotional wellbeing. The impact of the floods was

particularly critical in the selected districts. More importantly, people living in these districts are poor farming families who live in scattered mountainous areas with little or no access to basic infrastructure and services [10]. These facts have contributed to decision to include these districts as main beneficiaries of the project. Figure 1 illustrates the geographic location of Borikhamxay province and its districts.

Figure 1. Map of Borikhamxay province.

Source: Lao National Tourism Administration, Vientiane - Lao PDR

BasicNeeds's intervention districts

Borikhamxay's capital district (where Public Health Provincial Department is located)

1.2 Rational of Study

BasicNeeds has rolled out its intervention in Borikhamxay province under project's title, "*Promoting mental health and development in Borikhamxay province*" and has been implemented since April 2010. This baseline study is part of the activities under Output 4 of

this project[1]. The study is expected to be used as a primary document to measure impacts of this project. In principle, the study is required to be conducted at the beginning of the project's cycle as to provide baseline information, due to time constraints and limited human resources; it could not be completed at that time. Until recently, with more time and resource allowances, the project could ultimately start working on the Baseline Study. To be more precise, the study is looking back at situation of mental health and epilepsy problems in selected districts before the project's intervention, that is, before April 2010.

1.3 Objectives

The general objective is to document mental health situation in Bolikhan, Khamkeut and Viengthong districts including, an existing mental health care services and resources as well as community mental health care needs. The study will also be used as part of a reference point for programme evaluation with specific reference to project outputs as given in the project log frame and proposal.

Specific Objectives:

1. To understand overall policy context for mental health and poverty alleviation in Lao PDR.
2. To assess the treatment needs of people with mental illness and epilepsy and their caregivers in the project area.
3. To explore the livelihoods situation and economic opportunities available for persons affected with mental illness.
4. To understand the current mental health services offered in Borikhamxay.
5. To assess the capacity of health staff in the 3 selected district hospitals for treating mental illness
6. To assess partner capacity for implementing the Mental Health and Development programme.

[1] Output 4: Research based advocacy to improve the implementation of mental health policy and practice addressing the needs of people with mental disorders.

2. Methodology

Study Site

The study sites are at Bolikhan, Khamkeut and Viengthong districts, Borikhamxay province.

Study Design

Cross-sectional study design is applied and quantitative and qualitative approaches are used. The study tools include semi-structured close-ended and open-ended questionnaires. In addition, focus group discussions are used to generate qualitative information.

Sampling

A non-probability sample of primary study participants, who visited monthly mental health outreach clinics at Bolikhan, Khamkeut, and Viengthong district hospitals supported by BasicNeeds Laos in December 2011, was collected. The selection process of the samples included convenience selection of individuals presented at the outreach clinics that either has mental health disorders or epilepsy disorders. Ultimately, a total of 17 people with mental health disorders, 10 people with epilepsy, and 22 carers were recruited in the study.

Secondary study participants are district health care providers. A total of 9 district health care providers, 3 people from each district hospital, were purposively selected for in-depth interviews, these include: directors of selected district health hospitals, a representative of health care worker in each district hospital who have been and who have not received mental health care training from BasicNeeds – the decision to include both untrained and trained staff were to minimize recall and information bias from key informants, because this study is recollecting past information and such bias could be a case.

Data Collection

This was done during the first week of December 2011. In order to fulfil the objectives of the study, data were gathered from both quantitative and qualitative techniques and tools, detailed as below.

*Observation of mental health care practice and resources at district hospital***:** close-ended and open-ended questionnaire (See Appendix 1) was sent by fax to Bolikhan, Khamkeut, and Viengthong district hospitals. The purpose of this tool is to learn about existing facilities, resources, and mental health care practice available at these hospitals before project intervention. The study team collected filled-in questionnaires after thorough explanations were given to key respondents and quality control check were done during the field data collection.

Health care worker in-depth interview: semi close-ended and open-ended questionnaire (See Appendix 2) was developed to explore knowledge, practice, and mental health care training needs among district health care workers. Each interview lasted approximately 30 minutes and this was done at the office of the interviewees.

Focus group discussion: pre-set open-ended focus group guide (See Appendix 3) was used at the focus group session. Focus groups were conducted with carers, separately from people with mental disorders or/and epilepsy. Table 1 shows number of participants in each study site.

Table 1. Focus group with primary study participants in each district

Focus group	Carers	Persons with mental health disorders	Persons with epilepsy disorders
Bolikhan	6	8	3
Khamkeut	8	5	3
Viengthong	8	4	4
	22	17	10

This was conducted during 6th to 8th of December 2011. The mental health outreach clinics' nurses and volunteers randomly selected individuals to participate in the discussions. With regards to ethical consideration, participants were given explanation about the purpose of the session, their rights to participate or refuse to participate, and what the results will be used for. The session did not begin until verbal consents were given from all participants. Each

session was conducted in Lao language and tape recorded in quiet spots/rooms at the district hospitals. One moderator led the discussion and one note taker recorded the key points. All interviews were subsequently transcribed.

Data Analysis

The analysis process involved the stages of transcription, coding of responses by giving coding numbers to each response. For example, code 1 = Yes, and code 2 = No. Similarly, we use number of codes to represent responses. For instance, code 1 = unemployed, code 2 = doing household chores, and so on.

After data collection was completed, research assistance entered transcription data in computer word processing and counted number of similar responses. Further, a consultant who was assigned to lead the baseline study, did quality control check by going through all transcriptions and counted all responses again and finally the report writing could be completed by the consultant.

Limitations

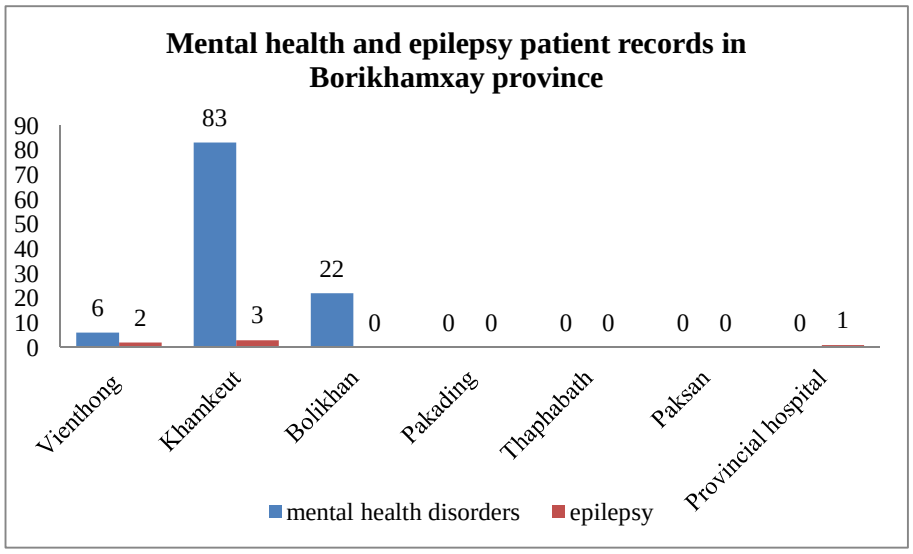
This study has a small sample size and it is purposively selected. As these reasons, generalization might not be made to an entire population of people with mental health disorders and/or epilepsy in Borikhamxay or Lao PDR. Moreover, the study explored past situation that happened before project intervention, thus we expect possible recall and information bias. Other possible biases could come from data collectors, since they are also affiliated with implementing the project.

3. Results

3.1 Prevalence of mental health and epilepsy disorders in study districts

Borikhamxay Public Health Department's outpatient record in 2008 identified 111 cases with mental health disorders and 6 patients with epilepsy. Using Borikhamxay's population census year 2008, we could calculate prevalence of mental health disorders at 4.97 per 10,000 people and prevalence of epilepsy was 0.27 per 10,000 people. Figure 2 below shows the trend in each district.

Figure 2 Number of mental health and epilepsy patient records by district.



This trend above grasps our attention given that majority of both mental health disorder and epilepsy cases congregate in intervention districts of BasicNeeds i.e. Bolikhan, Khamkeut, and Viengthong. The question is raised whether this trend was due to BasicNeeds' intervention, however, the intervention was not begun in these districts until April 2010, the data was collected in 2008.

3.2 Situation analysis of people with mental health and epilepsy disorders

Profile of study participants

A total of 22 carers (12 male, 10 female) participated in focus group discussion. At the focus group discussion dates, majority of them are farmers with an average age of 48 years old. Separate focus group sessions were done with people with mental health disorders (n: 17), and people with epilepsy (n: 10) (in total female was 19 and male was 8). Most of them are farmers and some of them help out family's household chores (These are current livelihoods, not before BasicNeeds's intervention).

Perceived causes of the disorders

Almost half of primary participants, both carers and people with mental health and epilepsy disorders (46.5%), believe that causes of their disorders had a stem from a high fever, but

they could not name types of the fevers. Three of study participants said their mental health disorders are the consequences of illicit drug use. About 28% said the disorders were from worrying about family issues, such as husbands having affairs. Some said they have had the disorders since they were born (12.82%),

> I was worried and thought so much about my husband's affair with other woman that I became sick. ***Participant in Bolikhan district.***

> When I was working in Vientiane Capital as a metal mechanic, most of my co-workers were amphetamine users. I first did not use it when they asked me to join, but over time, through persistent and common practice of using the drug at work, I gave in and I became really addicted that I developed this illness. I became sick and my uncle, who I stayed with during that time, sent me home to Khamkeut, to be with my parents. ***Participant in Khamkeut district,***

> He had a high fever caused by lice (typhus), ever since he has had a seizure. ***Carer in Bolikhan district.***
>
> My husband got a head injury from having coconut falling from the tree and hitting over his head, ever since, he has had the seizures. ***Participant (carer) from Pakading district, Borikhamxay province.***

Health care seeking behaviour

Prior to BasicNeeds' intervention, most study participants sought their mental health and epilepsy disorders treatments with various sources. The most common is with traditional healers 21.27%, while provincial hospital is the second place (14%), and district hospitals is third (13%). Other sources they tried to seek treatment are spiritual healers (11%), tertiary hospital such as 150 beds hospital (11%), mental health units in Vientiane Capital (VTE) (8.5%), and private clinics (8.5%). We could see from these trends that, before project's

intervention, participants relied on traditional healers more than others while provincial and district hospital are second. Mental Health Units is much less common place to seek help given a long distance and cost to reach the Units.

> I took my son to Viengthong district hospital and was referred to Borikhamxay provincial hospital. We spent 2 weeks there, but he did not get better. So we decided to take him to hospital in Vientiane Capital. But he still had seizures. We did not know what to do so we locked him up for 20 years. ***Carer in Bolikhan district.***

> We took her to traditional healer in other village for 10 days. We were given traditional herbs and we boiled them for her to drink. We also sought help at Thai hospital and the doctor said she had some neuropsychiatric disorder. But after treatment, her symptom was not improved. We then took her to Viengthong district hospital as well. But she was still not getting better, so we decided to seek help from spiritual healer as we thought that must be spirit possessed in our farm land did this to her. ***Carer in Viengthong district.***

> She has had the symptom since she was born. It happened at our farm. She would have her eyes wide open and then a seizure. It became more severe when she turned 5, she had it a whole day. We took her to Mahosot hospital twice. First time she felt better after medication, second time she took medication again, but this time the symptom was worsen. Her mum thought that was because of medication so she threw them away at the side of our house, but our daughter found them and took all of them, she then could not speak for a week, her body was very stiff. ***Carer of person with epilepsy in Khamkeut district.***

All primary study participants, both carers and people with mental health and epilepsy disorders, said they did not feel better after they sought out medical treatments. They regularly looked for help with spiritual and traditional healers. They asked for treatment advice from friends, family, and community. Often, they were suggested by their communities, friends, and families to seek both spiritual and medical treatments.

Impact of the mental health disorders/epilepsy

In our study, majority of participants with mental or/and epilepsy disorders were not able to work when they had an episode of their diseases. They could only work in a limited amount of time during the day. However, five out of 27 participants said they could not work at all and two said they could only do some household chores, but not earning any money.

> When I became sick, my family lost family's labour. When I had an episode I would not be able to work, but I could work again when it went away ***Participant in Viengthong district.***

> I did not do any work. My family was upset and angry at me, they told me to find work, but I felt ashamed of my disorder, I did not want to face other people. When I did find work, I did farming or construction work. ***Participant in Khamkeut district.***

The hardship as a result of the illness is not only predominance among people with epilepsy/mental health disorders, but also to their families. Majority of carers said they had to give up their productivity hours in order to attend to the needs of their loved ones. As stated earlier, majority of individuals with mental health disorders/epilepsy were unable to work or could work with limited amount of hours/days. Thus, this has an impact on their family's income. Other impacts to the family include:

- Family had to spend a lot of money to treat their loved ones
- Property damaged due to acute episode of the disorders

> I remember when my son's symptom got worse back then. He destroyed our house's belongings such as lamp and television. He almost burned our house once, but luckily we could stop the fire in time. Also, he used to walk from our village, took a bus and went to Vientiane Capital city and I had to look for him, it was really exhausting experience. ***Carer in Viengthong district.***

3.6 Community Acceptance

Participants with mental health and epilepsy disorders experienced stigma and discrimination in their community. They claimed they were discriminated by some people like neighbours and friends, but not everyone in their village. About 44.44% (N: 12) of participants said they had been discriminated on one or more occasions. A few participants (14.81%) said they were not stigmatized by the community at all. Nevertheless, many of them said they were self-conscious of what others think about them. So, a few of them prefer to stay at home and avoid to be out in public places.

In contrary to individuals with mental or/and epilepsy disorders' experiences, carers viewed stigma experiences of their loved ones differently, their experiences were not as critical as individuals' experiences themselves. For instance, about 36.36% of carers said community did not discriminate their loved ones at all, while the exact same number of carers (36.36%) said their loved ones experienced discrimination. Interestingly, a few carers said internalized stigma plays an important role in stigma experiences of their loved ones i.e. people with mental health/epilepsy disorders were afraid that other people would discriminate them even without any proved incidence.

> Before I fell sick, my friends and me would go to forest to find foods together, we used to share bed together. But they stopped being my friends after they found out about my illness. Now I only feel comfortable hanging out with my relatives. ***A 19 years old participant with epilepsy in Khamkeut district.***

> Nobody wanted to be around me because I have epilepsy, they are afraid they would catch the disease, so I spend most of my time at home with my children. ***A participant with epilepsy in Khamkeut district.***

Livelihoods

Before project's intervention, majority of participants with mental health /epilepsy disorders could not do any work (N:5), a few (N:4) could do some household chores, farming (N:4), and domestic animal raising (N:4). Others did construction work, barber shop, and mechanic. Majority of them said they would prefer going back to their old jobs if they feel better. Most of them are from farmer families, so majority of them expressed that farming and livestock work would be suitable for their potential income generation. For those who had previous jobs before they became sick, which were not related to farming, prefer to go back to their old jobs if they recovered from the disorders.

3.3 Situation analysis of mental health and epilepsy care at district hospitals

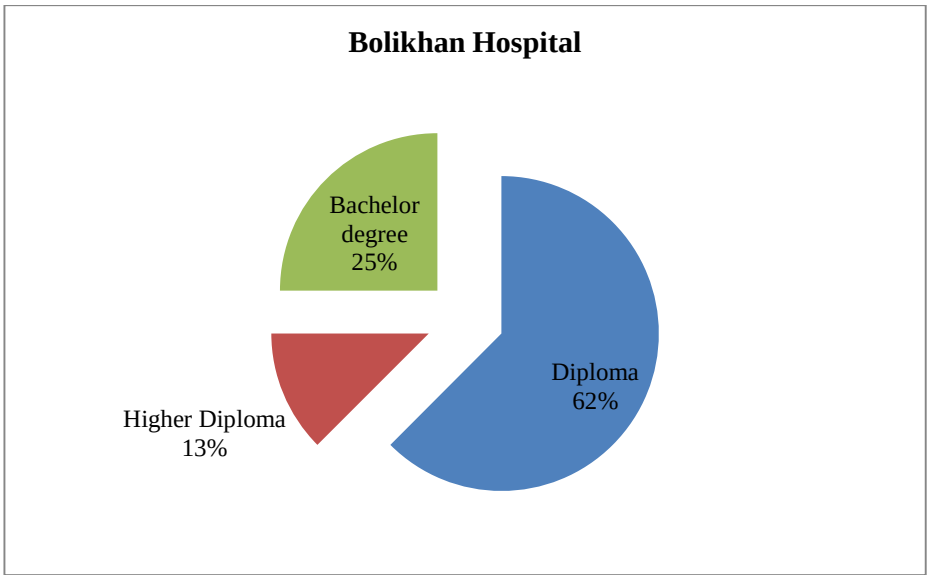
Profile of district hospitals

Table 2 below shows variation number of female and male practitioners, nurses, and pharmacists in each district. The table indicates that Bolikhan does not have many practitioners compare to other study districts, we assume that it is rather a small hospital given that it is located only 15 minutes away from the Borikhamxay Provincial Hospital. Khamkeut district has the largest number of practitioners, nurses, and pharmacists. It is certainly better equipped with more human resources. Viengthong hospital's practitioners are all male and it has a large number of nurses. Looking at big picture of all three district hospitals, male practitioners outweigh number of female practitioners. Nurses are the majority of human resources in all districts, and number of female nurses is much higher than male nurses. Figure 3 explains staff qualifications of each district hospital in details.

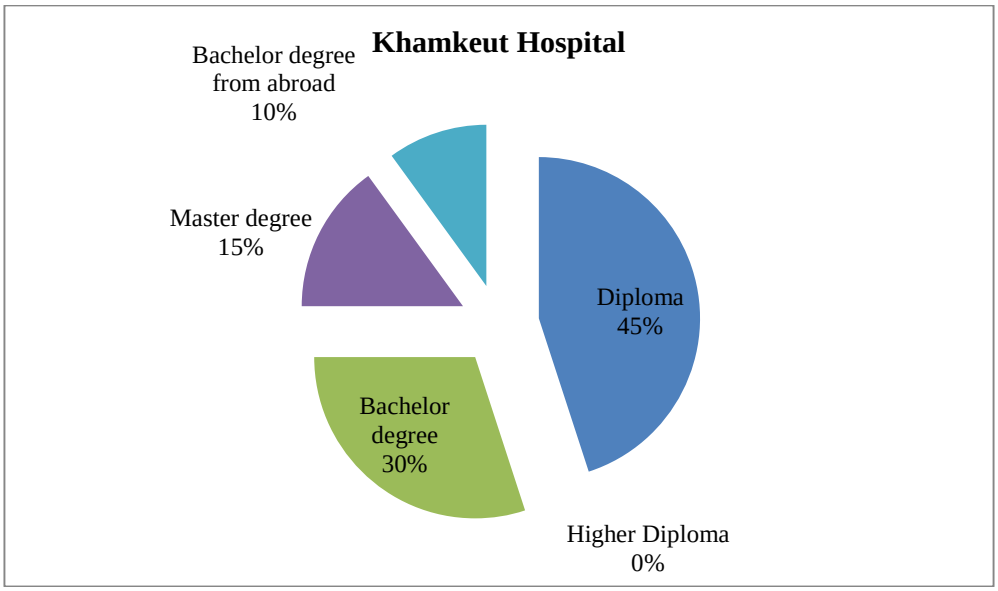
Table 2 Profile of health staff in study district hospitals

	Practitioners		**Nurses**		**Pharmacist**	
	m	f	m	f	m	f
Bolikhan	2	1	3	3	1	2
Khamkeut	9	10	1	35	0	5
Viengthong	6	0	11	18	3	1
Total:	**17**	**11**	**15**	**56**	**4**	**8**

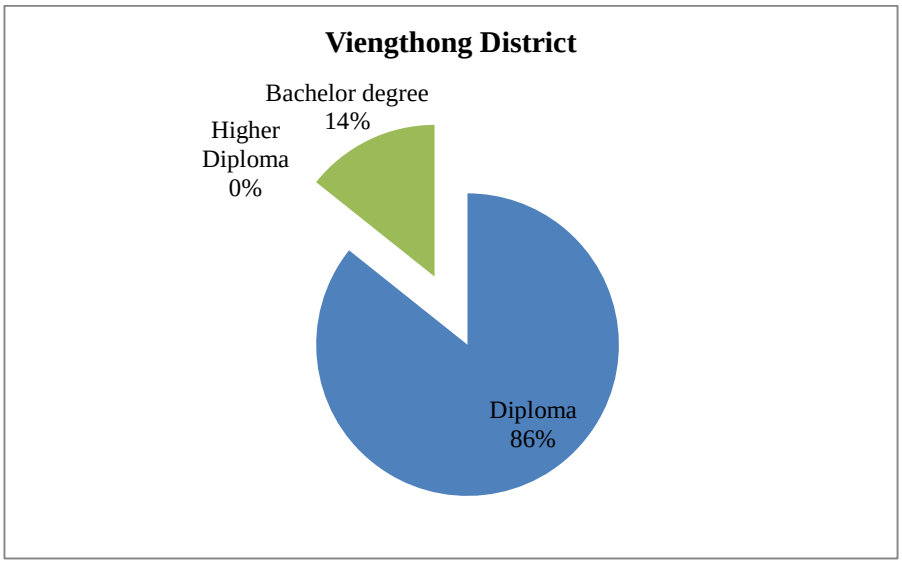
Figure 3 Staff qualification at each district hospital



Majority of Bolikhan district hospital staff (62%) are diploma graduates, about 25% earned a Bachelor degree, and 13% has a higher diploma.



Khamkeut hospital staff are mostly diploma graduates (45%), about 30% has a Bachelor degree, and 15% has a master degree.



Viengthong has a low number of Bachelor graduates (14%) as majority of staff earned diploma degree (86%).

Mental health and epilepsy treatment capacity of district hospitals

Bolikhan:

Before BasicNeeds' intervention, Bolikhan district hospital staff referred both patients with mental health disorders and epilepsy to Borikhamxay Provincial Hospital and tertiary hospitals in VTE. They did not have skills and capacity to provide treatments to these patients.

Khamkeut

Staff at Khamkeut district hospital were able to diagnose patients with epilepsy and prescribed epileptic drug (Phenobarbital). However, staff did not understand a long term medication for patients with epilepsy. For example, they only prescribed medication to last for a few weeks and did not suggest patients to come back for more follow-up or to get more medication. For mental health disorder patients, they referred patients to tertiary hospitals in VTE directly.

Viengthong

Staff at Viengthong district hospital were unable to diagnose nor prescribe medication for patients with mental health disorders. However, staff could diagnose and prescribe medication for patients with epilepsy. In most cases, staff referred patients directly to Mental Health Unit at Mahosot hospital in VTE. Table 3 illustrates the approaches in dealing with patients with mental health and epilepsy disorders of all three hospitals in details.

Table 3 Capacity of each district hospital in providing mental health and epilepsy cares

	Epilepsy	Mental Health Disorders	Comments
Bolikhan	No	No	Suggest patients to seek help at Borikhamxay provincial hospital and tertiary hospitals in VTE.
Khamkeut	Yes	No	Epilepsy Yes, but no follow-up or suggest patients to come back for more medication.
Viengthong	Yes	No	Yes with limited advice and medication, staff suggested patients to seek help at tertiary hospitals in VTE.

Training

Based on our interviews, we found most district health staff, who hold Medical Doctor (MD) degree or who earned Bachelor degree from University of Health Sciences in VTE, had to go through short term training (3 weeks) as medical students at Mental Health Unit in Mahosot hospital and took some classes on mental health topics, in order to learn how to diagnose and prescribe medication for patients with mental health/epilepsy disorders.

Further, we found most staff at study districts obtained mental health and epilepsy care training. However, none of them ever used skills in practice after the training at their respective hospitals. We assume that this short term training does not sufficiently equip medical students to perform mental health and epilepsy treatments at their real their jobs.

District hospital service management

Each district has a revolving drug fund of its own. It has a free service policy for those that are proved to be very poor that could not afford to pay for a service. These patients are

required to get confirmation letters from their respective village leaders to state that they are, indeed, the poor. Other approach is health staffs decide on this term through getting confirmation from patients' families or relatives directly.

Before BasicNeeds intervention, Bolikhan did not have any psychotropic or epileptic drugs at their hospital. On the other hand, Khamkeut and Viengthong hospitals have anti-epileptic drug (Phenobarbital), but they did not have psychotropic drugs.

3.4 Analysis of district health care staff mental health and epilepsy care capacity

To capture situation of mental health and epilepsy care capacity of health staff at study district hospitals, a total of 9 health care workers were included in in-depth interviews including, a director of each district hospital and their staff. The study found the following areas in regard to their capacity in providing mental health and epilepsy cares before BasicNeeds' intervention:

Treatment needs

Before BasicNeeds's intervention, health care workers witnessed a burden of disorders in their districts. There were many untreated people with mental health/epilepsy disorders who came to seek help at their respective hospitals, but staff could not provide proper treatments due to lack of knowledge in the fields and only referred patients to hospitals in VTE. Family of individuals with the disorders faced a challenge in taking care of their loved ones, these include, loss of income and resources, and individuals were often stigmatized by their communities.

Places people with mental health/epilepsy disorders and their families sought help in study districts as observed by respondents (districts health care workers) are outlined in chronological order as following:

1) Spiritual healers
2) Traditional healers
3) District hospital

4) Provincial hospital
5) Hospitals in VTE

All respondents said it is critically important to have mental health/epilepsy cares at their local hospitals as it would be the most cost-effective solution, given that majority of people in their districts could not afford transport cost and treatment fees in VTE. Five respondents said they really wanted to help these patients, but they did not have enough skills to do so.

> Family of individuals with mental health disorders had to lock their loved ones up in small rooms or cages and took turn to look after them, resulting in loss of their productivity. Society looked down upon them, some people often asked individuals to leave public places, judging from their untidy and unclean appearance. People with epilepsy were stigmatized because society believes they could transmit their disease through saliva contact, especially when they had a seizure. Often, not many people want to help them when they had an episode. ***Health care worker in Khamkeut district.***

> Back then I really hoped that patients with mental health/epilepsy disorders would get treatments at our hospital, so that they would not be a burden to their families or being locked up in the rooms. We even planned to have mental health care experts from VTE come to train us here, because we witnessed the deaths as a result of seizures, such as drawn in the river or fell over the fire. ***Health care worker in Khamkeut district.***

> We had a problem back then! We could not be any of help when we had patients with mental health disorders come to seek help. We had to refer them to Borikhamxay Provincial hospital or hospitals in VTE and patients and their families spent a lot of money. If they could get help just at our district hospital, it would be much more cost-effective and better option for patients. ***Health care worker in Bolikhan***

Health care workers' belief about mental health and epilepsy disorders

Almost half of respondents said they understood causes of mental health/epilepsy disorders, but they were unable to distinguish types of the disorders. Respondents believed following causes were accounted for mental health and epilepsy disorders in chronological orders:

Mental health disorders:

1) Life circumstances that caused worries and led to mental health disorders (count:5)
2) Genetic inheritance (count:5)
3) Abnormal cells in the brains (count:3)
4) Others: individual was born with the disorder; lack of love and caring in the family; dengue fever; malaria; accident etc.

Epilepsy disorder

1) Genetic inheritance (count:5)
2) Abnormal cells in the brains (count:2)
3) Others: brain cells damaged from high fever; transmitted by other people; ate unclean foods (rotten pork meat, foods that livestock already ate/touched and individuals ate those foods).

Mental health and epilepsy care training needs

All 9 respondents said they had obtained one or more short trainings on mental health and epilepsy care treatments. The training was done during their academic years at medical schools, mostly in the 90s. It was rather very short training ranging from 3 days to a few weeks. Some respondents received training at MHU Mahosot as part of their medical school courses. All participants said the training helped them to recognise patients with the disorders at real jobs, but not sufficient to actually provide treatment and diagnosis (See Appendix 4 List of staff in each district, who had obtained mental health and epilepsy training before BasicNeeds' intervention).

Although mental health disorders tended to be far reach knowledge and skills for most respondents, but epilepsy care was well-known among respondents, such as its medication and diagnosis. Nevertheless, most respondents did not understand a required long term

medication and treatment of the disorder. For example, majority of respondents could describe and recognise epilepsy disorder very well. They knew medication (Phenobarbital) for the disorder, but none of them understood duration they should advise patients to take medication.

With regards to mental health disorders such as depression and schizophrenia, majority of them recognise symptoms, but they could not distinguish types of disorders or know how to treat patients with these disorders. Before the intervention, more than half (78%) of respondents believed that mental health/epilepsy disorders could be treated with long term treatments that include medication and counselling, while two respondents said they were not sure if the disorders were treatable.

Mental health and epilepsy care services

In the past years, all three district hospitals had similar approaches in dealing with patients with mental health/epilepsy disorders. Based on the interviews, we could identify these following approaches:

Depression and schizophrenia cases:

- Valium (or Diazepam) injection or tablets were given to patients to make them feel calmer. When they felt better, they were allowed to go home.
- Some counselling was given such as family should be sensitive to patients' emotions and moods.
- Inpatient care was recommended for severe cases until patients became calm, they could be discharge and refer patients to MHU Mahosot.
- Vitamin B1 and B6 were given along with Valium tablets.
- All respondents said they referred most patients with severe symptoms to hospitals in VTE, particularly Mahosot hospital.

Epilepsy cases:

- Valium injection and Phenobarbital tablets were given to patients to last for 5 to 10 days and did not ask patients to come back for a follow-up (health care staff did not know if giving a long term Phenobarbital medication would help to solve the problems, they understood that the disorder was not curable, thus it would be useless to ask patients to take long term medication).
- Gave advice to patients and families to stay away from rivers and fire or climbing trees to avoid getting injured when they had seizures.

3.5 Livelihoods opportunities

Borikhamxay's economic is heavily influenced by agriculture practice as majority of its population are farmers. There have been more and more foreign investments focusing on agriculture products coming to the province, particularly Chinese and Vietnamese investors. Their approaches are that they provide free seeds cash crops i.e. cassavas, corn, chilli, and peanuts to farmers to grow then buy them back at harvesting time. This has become more important in terms of income generation for rural farmers. Table 4 shows other active organisations working in the study districts:

Table 4 List of organisations working in the study districts

	Name of organisation	Type of work
Khamkeut	Nam Theun 2 Power Company (NTPC)	Mother and child health Medical equipment support
	Theun Hinboun Power Company (THPC)	Support all health challenges of resettlement villages which were relocated from their old villages.
	SODI	Clear Unexploded Ordnance (UXO)
	Global Fund	Dengue fever, Tuberculosis (TB), and HIV preventions
	Electronic Company	Assemble electronic material
Viengthong	Lao-Luxembourg 012	Primary health care
	Livelihood project	Ministry of Agriculture
	Timber companies	Raw woods processing
	Drinking water company	Clean drinking water
Bolikhan	Lao-Luxembourg 012	Primary health care
	World Health Organization	Mother and infant health
	Timber companies	Raw woods processing
	Drinking water company	Clean drinking water

3.6 Summary of Key findings

We could sum up the key findings we found on Section 3 as below:

- Prevalence of people with mental health disorders in Borikhamxay province was 4.97 per 10,000 people and epilepsy was 0.27 per 10,000 people.
- Causes of mental health disorders and epilepsy believed by primary study participants were high fevers (i.e. dengue, malaria, and typhus).

- People with the disorders believed in traditional and spiritual practice at the onset of their illnesses in study districts.
- Majority of study participants with mental health/epilepsy could not earn an income before the intervention.
- Mental health/epilepsy disorders brought families and individuals with the disorders challenges in the areas of loss of income, resources, internalized stigma and discrimination.
- Reported moderate to high mental health/epilepsy stigma and discrimination in study districts.
- Potential work opportunities for people with mental health/epilepsy disorders are agricultural practice (cash crops) and animal farming. Return to previous jobs before the illnesses.
- All three district hospitals were unable to treat mental health disorders, but they have some knowledge and skills in treating people with epilepsy. However, there was no long term follow-up plan for patients with epilepsy.
- Majority of district health staff obtained one or more mental health/epilepsy care trainings during their medical academic years, but trainings were too short period and not sufficient to equip them to perform at their real jobs.
- There were no psychotropic drugs available at any study districts, but anti-epileptic drugs were available at Khamkeut and Viengthong district hospitals.

4. Discussion

To our knowledge, this is the first descriptive study investigating mental health situation in Borikhamxay province. Our results suggest that mental health and epilepsy cares did not exist in Borikhamxay province. People suffering from the disorders and their families relied on spiritual and traditional healers for treatments. Not only did they not receive proper treatments, but they also had faced livelihoods hardship and stigma in their communities. District health workers did not equip with adequate skills to provide treatments, often, they referred their patients to tertiary hospitals in the capital city of Vientiane.

In our previous baseline study [4] in Vientiane Capital City, study participants (in suburban districts in Vientiane Capital City) primarily sought treatments at their local district hospitals. In contrast, we found different health seeking patterns in Borikhamxay, because majority of our study participants went to traditional and spiritual healers at the onset of their illnesses while district hospitals were a second place. People in Borikhamxay live in rural and scattered in mountainous areas and this might help to explain a different health care seeking behaviour between VTE and Borikhamxay. The seeking health care behaviour in Borikhamxay coincides with similar study in Cambodia in which people with mental health disorders began the health care seeking behaviours with traditional medicine and spiritual healers [11]. This finding suggests that BasicNeeds will need to take religious and traditional practices into account of its intervention.

It is very interesting to also find that majority of study participants experienced a high fever just before they developed the disorders, especially people with epilepsy disorders. A few carers said their loved ones developed seizures since they were very young. Study districts are located nearby forests. We predict that febrile fevers, malaria, dengue fever, and typhus might be accounted for epilepsy disorders. Previous study (Baulac et al., 2004) [12] has linked the association between febrile fevers with epilepsy; Baulac found that about 13% of patients with epilepsy in their study had a history of febrile seizures[2]. Further research on this issue is therefore needed. It occurs to us that preventing these fevers could reduce prevalence of epilepsy in this region.

In regards to livelihood condition, majority of people with mental health/epilepsy in study districts could not earn any income before BasicNeeds' intervention. Some of them could do some household chores and farming. Our finding suggests that agriculture sector could be the most appropriate area to address for potential income generation for people with mental health/epilepsy disorders in the study districts. We learned from our results that the disorders

[2] A febrile seizure is the effect of a sudden rise in temperature (>39°C/102°F) rather than a fever that has been present for a prolonged length of time. Febrile seizures occurring in children between the ages of 6 months and about 6 years can be due to a hypersensitive hypothalamus in the brain. Source: Wikipedia. Available at: http://en.wikipedia.org/wiki/Febrile_seizure, accessed: 30 March 2012.

brought in hardship to families including a loss of family's labours and monetary spent on treatments. If they are provided with proper treatments alongside with livelihoods opportunity, this would tremendously enhance a better quality of lives for both individuals and their families.

In addition, community mental health intervention should take into account of stigma and discrimination issues in study districts. Our results pointed out that discrimination in the community had an impact to individual's livelihood, social life, and their families. We found moderate to high discrimination experiences across study districts, with Bolikhan to be the most critical district with discrimination experiences among individuals with mental health/epilepsy. Addressing living in harmony with people with epilepsy and mental health disorders in the community is extremely essential for a better outcome of the disorders.

It has become clear to us that short term mental health and epilepsy care courses at Medical schools are not sufficient to respond to treatment needs of Lao population. We probably could say that it is a waste of resources and time as none of health care workers, who went through this training, have ever been able to put this into practice. If Lao PDR is going to minimize the impact mental health and epilepsy disorders, then a proper and long term academic courses are essentially needed for medical students who want to pursue this field.

Even so, district health care workers have been equipped with some knowledge to deal with epileptic patients, but many failed to understand a holistic treatment approach i.e. a long term medication and counselling. On the other hand, their knowledge of mental health disorders was very low before the intervention, they would not be able to diagnose and provide care for people with the disorders leaving many untreated patients in their districts. And VTE hospitals, especially MHU Mahosot was the place district health care workers referred patients to the most. Considering a long distance, cost, and time to travel to the facilities in capital city, it is critically necessary to develop psychiatric and epileptic cares in Borikhamxay province including, trained human resources in this fields, medication, counselling rooms, and other necessary facilities to accommodate the service.

5. Recommendations

The following points are action-oriented recommendations which are based on findings of the baseline study:

1. Set up outreach clinics that could provide mental health and epilepsy cares (including pharmacological prescriptions, therapy or counselling and rehabilitation) in Bolikhan, Khamkeut, and Viengthong. There should be a system in place to refer severe cases to Borikhamxay Provincial Hospital and MHUs in VTE.

2. Provide intensive and on the job training to district health care workers to be able to provide services to people with mental disorders or epilepsy on regular basis. Monitoring and evaluation of trainees' learning progress should also be included in training plans.

3. Work with well-respected traditional and spiritual healers in study districts for identifying and referring people with mental or/and epilepsy disorders to outreach clinics.

4. Community education and advocacy on anti-discrimination towards people with mental disorders/ or epilepsy i.e. message about epilepsy as a non-communicable disease and it could not be transmitted through saliva contacts etc.

5. To improve livelihoods of people with mental or/and epilepsy disorders, agricultural and animal husbandry training as well as employment opportunities in study districts should be provided. In addition, people with mental or/and epilepsy disorders should be supported to re-enter their previous jobs before they became ill.

6. Seek potential future collaboration with organizations that work in the area of malaria, dengue and other diseases that could come from forests in order to

minimize the outcome of high fevers (i.e. cell brain damaged as a result of high fever) that could be associated with a prevalence of epilepsy in study districts.

7. Share this baseline study findings with University of Health Sciences and other related Medical Schools close by study districts about the outcomes of mental health and epilepsy training experiences of district health care workers. Addressing them that is vital to provide comprehensive mental health and epilepsy care training to medical students so that they will be able to provide mental health and epilepsy cares after graduation. Ideally, BasicNeeds should seek collaboration with University of Health Sciences and donors to establish academic courses for medical students who want to specialise in mental health and epilepsy cares.

References

1. Prince, M., Patel, V., Saxena, S., Maj, M., Maselko, J., Phillips, M. R., & Rahman, A. (2007). No health without mental health. *Lancet, 370,* 9590.

2. World Health Organization. (2010). Mental health fact sheets. Available: http://www.who.int/mediacentre/factsheets/fs220/en/. Accessed: 16 December 2011.

3. World Health Organization. (1998). Schizophrenia and public health. Geneva: World Health Organization. Available: http://www.who.int/mental_health/media/en/55.pdf. Accessed: 17 January 2012.

4. Morakoth M. (2008). Baseline Study Report on Community Health Development. Vientiane: BasicNeeds Laos.

5. Bertrand, D., & Choulamany, C. (2002). *Mental Helath Situation Analysis In Lao People's Democratic Republic.* Vientiane Capital, Laos: World Health Organisation.

6. Barennes, H., Tran, D.-S., Latthaphasavang, V., Odermatt, P., & Preux, P. M. (2008). Epilepsy in Lao PDR: From research to treatment intervention. *Neurology Asia, 13,* 2, 27-31.

7. Tran, D. S., Odermatt, P., Singphuoangphet, S., Druet-Cabanac, M., Preux, P. M., Strobel, M., & Barennes, H. (2007). Epilepsy in Laos: Knowledge, attitudes, and practices in the community. *Epilepsy and Behavior, 10,* 4, 565-570.

8. Choulamany, C. (2010). Programme Impact Self-Assessment Report: Community Mental Health and Development Project, *BasicNeeds Laos.*

9. Borikhamxay Provincial Public Health Department. (2008). Statistic Division: Borikhamxay population census.

10. BasicNeeds Laos. (2010). Project Proposal: Promoting mental health and development in Bolikhamxay province. *BasicNeeds Laos*.

11. Coton, X., Poly, S., Hoyois, P., Sophal, C., & Dubois, V. (2008). The Healthcare-Seeking Behaviour of Schizophrenic Patients in Cambodia. *International Journal of Social Psychiatry, 54,* 4, 328-337.

12. Baulac, S., Gourfinkel-An, I., Nabbout, R., Huberfeld, G., Serratosa, J., Leguern, E., & Baulac, M. (2004). Fever, genes, and epilepsy. *Lancet Neurology, 3,* 7, 421-30.

Appendix

Appendix 1: Questionnaire for district hospitals before BasicNeeds' intervention

Name of the hospital :					
Respondent Name :		1. Male:		2. F:	
Position:		Age:		Tel:	

Q1. District hospital staff:

1a. Number of practitioners:			1. Male:		2. Female:	
1b. Number of nurses:			1. Male:		2. Female:	
1c. Number of pharmacists :			1. Male:		2. Female:	
1d. Education:	1. Graduate in Laos	Diploma:		2. Graduate in foreign countries	Diploma:	
		Higher diploma:			Higher diploma:	
		Bachelor degree:			Bachelor degree:	
		Master degree:			Master degree:	
		Others:			Others	

1e. Before **BasicNeeds' intervention** at your hospital, How was mental health and epilepsy situation in your district?

.....
.....
.....
.....

1f. Before **BasicNeeds' intervention,** if there was patient with mental health disorder came to seek treatment at your hospital, what approaches did you use in terms of advice, treatment, and referral? -

.....
.....
.....
.....
.

1g. **Before BasicNeeds' intervention,** could staff provide treatment and diagnosis to people with mental health disorders (Mark X)

☐ Yes 1 ☐ No 2 (If no, skip to 1i)

1h. If yes, please specify name and position of those staff (if more than one staff, please write at the back of this questionnaire with question number '1h')

1. First and last name.....Position:.....
2. First and last name.....Position.....
3. First and last name.....Position:.....

1i. **Before BasicNeeds' intervention,** have there been any staff who took mental health care training (Mark X)

☐ Yes 1 ☐ No 2 (If no, skip to question Q2)

1j. If yes, please fill in information on table below:

	Name of staff who received mental health or epilepsy training	Trainer	Training topics	Funder
1.				
2.				
3.				
4.				

Q2. Drug management

2a. **Before BasicNeeds' intervention**, did your hospital receive any grants for revolving drug fund? (mark X)

☐ Yes 1 ☐ No 2 (If no, skip to question 2c)

2b. If yes, from whom?

1. .....
2. .....
3. .....

2c. Has your hospital had a free of charge service policy for the poor? (mark X)

☐ Yes 1 ☐ No 2 (if no, skip to question 2f)

2d. If yes, what procedures do you use to determine if individual is eligible to receive free service?

	Explain (Can choose more than one answer)	
Confirmation letter from patient's village leader that he/she is poor		1
Consideration by district hospital staff		2
Relatives or families of individuals make confirmation		3
Others (please explain)		4

2e. **Before BasicNeeds' intervention**, in a month period, how many patients did your hospital provide free services?

Number of patients.....

2f. How do you give out medication to patients? (Explain)

.....

.....

.....

g. **Before BasicNeeds' intervention,** at your hospital, did you have following types of medicine? (Mark X):

		If yes mark X	Price (kip)	Suppliers
1	Valium			
2	Phenobarbital			
3	Dormicum			
4	Largactil			
5	Haldol			
6	Nozinan			
7	Tryptanol			
8	Others(name)			

Q3. Mental health and epilepsy care services

Before BasicNeeds' intervention, please explain your approaches in providing services to patients with mental health and epilepsy disorders:

	Type of disorder	Treatment approaches		
		medication	Any counseling?	Refer to whom? (if any)
3a.	Epilepsy			
3b.	Depression			
3c.	Drug addict			
3d.	Alcoholic			
3e.	Schizophrenia			
3f.	Others (please specify names)			

Appendix 2: District health care workers in-depth interview

General Information

District :	Khamkeut	1	Viengthong	2	Bolikhan	3	ID :	

Interviewee name:		1. Male		2. Female		
Position:		Age:		Tel:		
Specialist in :						
Education:	Graduate in-country	1		Graduate from foreign country	1	
		2			2	
		3			3	
Interviewer name :				Date of interview:		

Main questions

Q1. Before BasicNeeds's intervention, how was the situation of mental health and epilepsy in your district?

.....
.....

Q2. Before BasicNeeds' intervention, what was your understand about mental health and epilepsy?

.....
.....
.....

Mental health training needs analysis (objective 2)

Q3a. Before BasicNeeds' intervention, what types of mental health disorders did you encounter the most in your district? Please explain symptoms.

.....
.....
.....

Q3b. Before BasicNeeds' intervention, did you think it was necessary to have mental health and epilepsy care services at your hospital?

Mental health ☐ Yes 1 ☐ No 2 (If no, skip to question Q3c)

Epilepsy ☐ Yes 1 ☐ No 2 (If no, skip to question Q3c)

- If yes, why?

.....
.....
.....

Q3c. Before BasicNeeds' intervention, approximately how many patients with mental health disorders and epilepsy came to seek help at your hospital?

Mental health disorder:.....persons Epilepsy: .....persons

Q3d. Before BasicNeeds' intervention, if you had patients with mental health disorders came to seek help, what approaches did you use to give them counselling, treatments, and referral?

.....
.....
.....

Q3e. Before BasicNeeds' intervention, if you had patients with epilepsy disorders came to seek help, what approaches did you use to give them counselling, treatments, and referral?

.....
.....
.....

Q3f. Before BasicNeeds' intervention, where did people with mental health and epilepsy disorders seeking help <u>first</u>?

<u>Number 1 is for first place, 2 is the second place, 3 and so on</u>

	List	Explain	
Health care center			1
District hospital			2
Provincial hospital			3
Tertiary hospital in Vientiane			4
Traditional medicine			5
Religious/ spiritual healers			6
others ( )			7

Heath care workers capacity analysis (Objective 5)

Q4a. Before BasicNeeds' intervention, have you ever been trained in mental health care?

☐ Yes 1 ☐ No 2 (If no, please skip to question Q4b)

If yes, what were the training topics and who were the trainers?

	Training topics	**Trainers**
1.		
2.		
3.		

Q4b. Before BasicNeeds' intervention, did you know the following disorders:

Disorder name	**Yes**	**No**	**Not sure**	**Explain**
Epilepsy				
Schizophrenia				
Depression				
Other mental disorders ( )				

Q4c. Before BasicNeeds' intervention, did you think mental health and epilepsy disorders were treatable?

☐ Yes 1 ☐ No 2 ☐ Not sure 3 ☐ Do not know 4

- If yes, how?

.....
.....
.....

- If no, please explain

.....
.....

- If not sure, please explain

.....
.....

Q4d. Before BasicNeeds' intervention, what did you think were the causes of mental disorders?

Mark cause 1, 2, 3 etc

	List	Explain	
Had a sin			1
Genetic inheritance			2
Physically abnormal			3
Chemical in the brain is abnormal			4
Not sure			5
Spirit possessed			6
Worrying			7
Others ( )			8

Q4e. Before BasicNeeds' intervention, what did you think were the causes of epilepsy disorders?

Mark cause 1, 2, 3 etc

	List	Explain	
Had a sin			1
Genetic inheritance			2
Physically abnormal			3
Chemical in the brain is abnormal			4
Not sure			5
Spirit possessed			6
Worrying			7
Others ( )			8

Q4f. Before BasicNeeds' intervention, were there any health care workers at your hospital who had some basic capacity to provide mental health and epilepsy cares?

☐ Yes 1 ☐ No 2 (If no, skip to question Q5a)

	Name	**Type of disorder they could treat**	**Where did they get training from?**	**Educational background**
1.				
2.				
3.				
4.				

Active organisations in district and livelihood opportunities (objective 3)

Q5a. Do you know any active organizations both public and private ones at your district? (Including nonprofit)

☐ Yes 1 ☐ No 2 (If no, skip to question Q5c)

Q5b. who are they?

	Organisation name	Type of work
1.		
2.		
3.		
4.		
5.		

Q5c. What occupation most people in your district do for a living?

Mark primary from: 1,2,3 etc.

	List	Describe	
Farming			1
Labor work			2
Handicraft			3
Textile woven/garment			4
Mechanical			5
Office workers			6
Others ( )			7

Q5d. What kind of business does your district have?

	Name	Type of business
1.		
2.		
3.		
4.		
5.		

Q6. Do you have any other comments?

.....
.....
.....

The end, say thank you to interviewee !!

Appendix 3: Script and questions for focus group discussion with people with mental health disorders and their Carers

Topic	Comments
Introduction **(1 mn)**	• The moderator introduces self and the team • Explain to participants that the discussion will last about 1,5 to 2 hours • Ask participants to kindly turn down or if possible switch off their mobile phone in order to avoid disturbance
Focus group Objectives (2 mn)	• Give explanation on the objectives of this activity, information is to feed into baseline study: The objective of this activity is to get your suggestions, attitudes and experiences on mental health in your community/district. All ideas and comments are valuable to the planning of the work of Community Mental Health and Development Project and we want to learn more about your mental health situation and challenge of mental health service in your district. Our specific objectives are: 1. Treatment needs; 2. General livelihood of our mentally ill patients
Permission request **(1 mn)**	• Ask participants' permission to use tape recorder to record the session, test the sounds and let them listen to the recorded sound • Ask their permission to take photos of the session
Participants Consent (3 mns)	• All participants have the right to answer to the questions and please do not be afraid or shy • All answers will be valued • Please respect the others, while other talking please do not interrupt, wait until he/she finishes her/his dialogue then you can express yours • we encourage all to talk in brief as to give opportunity for other to talk too • Do not be afraid that your answer would be right or wrong, please answer to questions naturally as how you feel about the issues. If you have different perspective from the other please do express • Your name would be kept as confidential and we will not display your name or give to other party • We encourage you to speak aloud so that the tape recorder can record your sentence

Topic	Comments
Participants introduction **(5 mns)**	• Participants introduce oneself names as she/he wishes the other to call her/him • Use paper scotch tape to write down the name of each participant and gently seal it to their shirt • Invite participants to have a coffee/tea break before the session begins

All questions are before intervention

a) Treatment needs:

1. What do you think causes your illness?
2. How long have you been sick?
3. When you started to falling ill, what action did you take at the time?
4. Who did you seek help/advice from?
5. Where did you seek for treatment at the time?
6. While and after that treatment, how was your illness condition?
7. Who had given you suggestion of where to seek mental health treatment?
8. How the illnesses effect you as well as your family?
    a. Probe: what were the impacts?
    b. Who was most affected?
9. Any impact on following areas:
    a. family income?
    b. social life?
    c. livelihoods?

b) Coping with Illnesses

10. How have you been coping with your illness?
    a. Who have given hands or advices to you?
    b. What type of advice/or help did you receive?
11. What is the most difficult aspect in taking care of yourself (mentally ill love ones)?
12. How did you cope with those difficulties?
    a. And what were the consequences?
13. How people in your village treat you?

a. Has it been a case that they said something to you (him/her) terrible because of your (him/her) disorder?
b. How about your experiences (his/her) attending ceremonies or festivals in your village?

14. How have your friends treat you?
    a. Did you meet up with them often?

c) Livelihood conditions

15. How was your (his/her) livelihoods before you attended the outreach clinic?
    a. What did you for a living?
    b. Who helped you with livelihood opportunity?
16. How did you find work? And where?
17. What are your skills or expertise?
    a. What would you like to do for work based on your skills and experiences?

The end of Focus group question guide.

Appendix 4: List of district health staff obtained mental health care training before BasicNeeds' intervention

	Trainee name	Trainers	Training topics	Funder
Bolikhan	Dr. Sisouvanh Dr. Bounkong Nurse. Somsi Dr. Orlasone Dr. Komkong	• MHU Mahosot: Dr. Bounhom Dr. Sisouk • Medical schools	Mental health and epilepsy care treatments	MoH
Khamkeut	Ms. Manithong Dr. Thanousack Dr. Amphone Dr. Bounmy Dr. Onsi	• MHU Mahosot: Dr. Bounhom Dr. Sisouk • Medical schools	Mental health and epilepsy care treatments.	MoH GTZ
Viengthong	Mr. Phet Mr. Somphone Mr. Buaphanh Mr. Souksavanh	Medical schools	Epilepsy and mental health disorders.	