MALARIA NEEDS ASSESSMENT

PHUNTSOKLING TIBETAN SETTLEMENT, ORISSA

Central Tibetan Administration Department of Health and Johns Hopkins University
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Executive Summary

A Knowledge, Attitude and Practice (KAP) survey about malaria was conducted in January-February 2013 to assess the knowledge of community members living within the Tibetan Phuntsokling settlement, Orissa. Community members in the Tibetan settlement of Orissa and the surrounding Indian community were surveyed. Two nurses from Menlha Hospital, Phuntsokling settlement, were trained to implement the malaria KAP survey. The survey was conducted over two weeks in the outpatient department of Menlha Hospital, and elicited 56 responses. It was also conducted as part of a Household survey, during which 204 people were interviewed. The Household survey about malaria was conducted during one week in February 2013 by volunteer interviewers trained to implement the malaria Household survey. The main object of this survey was to assess current usage of bed nets and household spraying by community members living in the Tibetan Phuntsokling settlement, Orissa. Both the KAP and Household surveys were translated from English to Tibetan language and both surveys were verified by external translators. 100% of respondents of the Household survey identified as Tibetan. Eligibility of the survey participants included consenting adults over 18 years of age and who lived in Camps 1-5 of Phuntsokling settlement.

Demographics

In the final data collection for the KAP and Household surveys, 260 surveys were included in the final data analysis. Overall, 96% of respondents identified as Tibetan and 4% as Indian nationals. To be considered eligible for the survey, participants had to be consenting adults over 18 years of age and who resided in Phuntsokling settlement or within a 5km radius of the settlement. The average age of the participants was >60 years, accounting for 50% of respondents. Females and males each accounted for 50% of the sample population. Of the respondents, 13% reside in Camp 1, 9% reside in Camp 2, 22% reside in Camp 3, 13% reside in Camp 4 and 43% reside in Camp 5, the largest in the settlement.

Objectives

The main objective of the KAP survey was to assess the knowledge, attitude and practices of the community about malaria control, prevention and treatment in order to provide essential information to guide future malaria education and malaria control efforts for the CTA DOH. The KAP survey also helps to identify attitudes and practices about LLIN use and indoor residual spraying use by populations in the targeted area. This is furthered assessed in detail using the household survey, which poses questions relating to use of bed nets, household spraying and other preventative measures. The Household survey also aimed to provide observations about bed net use and other prevention measures within individual community households. It is our aim that the KAP and Household surveys will provide critical information for the CTA DOH to guide future community education and malaria control efforts and better prioritize available funding for malaria control in affected Tibetan settlements.

Methods

KAP Survey:

Two nurses from Menlha Hospital, Phuntsokling settlement, were trained to implement the malaria KAP survey. Participants were randomly selected and interviewed by health workers trained in interviewing...
techniques. All KAP surveys were conducted from the outpatient department of Menlha Hospital, Phuntsoking settlement, Orissa. Every third consenting Tibetan adult who resided in the Tibetan settlement in Orissa, India, was asked a series of questions in the KAP survey. Every third consenting Indian who resided within a 5km radius of Tibetan settlements in Orissa, India, and who presented to Menlha Hospital for health care, was asked the same set of questions. Each participant was asked all questions in the KAP survey. The KAP survey was translated into Tibetan prior to initiation of the study. All results of the KAP survey were translated back to English for statistical analysis purposes. The KAP survey consisted of three questions relating to signs and symptoms of malaria, three questions about treatment, three questions about the severity of malaria, and seven questions about preventative measures (see Appendix A).

**Household Survey:**

Six volunteer interviewers were trained to implement the malaria Household survey and were recruited through USAID’s Tibetan Career’s Centre in Orissa. A training manual was developed by JHU and CTA DOH staff, which included specific instructions on how to conduct the household survey. This was used to train the volunteer interviewers prior to start of the survey. Participant households were randomly selected and interviewed by volunteer recruits. All Household surveys were conducted in Camps 1-5 of Phuntsokling settlement, Orissa by interviewers who worked in three teams of two. All camp leaders were notified of the intention to survey and permission was sought and received. Every second household was asked to participate in the survey.

The Household survey and training manual, was translated into Tibetan prior to conducting the survey. All results of the Household survey were translated back to English for compilation of results and analysis. The Household survey consisted of three questions relating to household spraying, eleven questions about bed nets and three observational questions whereby interviewers observed household nets and the outside perimeter of the surveyed households (see Appendix B).

The malaria needs assessment (KAP and Household survey) was approved by the Johns Hopkins Institutional Review Board.

**RESULTS OF KAP SURVEY**

**Key Points**

- The majority of respondents were able to identify fever and chills as symptoms of malaria (59% and 68% respectively)
- 77% of survey respondents say that they go to a local hospital or clinic for treatment
- 11% of survey respondents reported self-treatment for malaria
- 96% of respondents did not know how often they should get their house sprayed
- 81% of respondents did not know how often they should have their bed nets re-treated as methods for malaria prevention.
In the final data collection for the KAP survey from Menhla Hospital and Phuntsokling settlement, 260 questionnaires were included in the final data analysis. A total of 250 Tibetans (96%) and 10 Indians (4%) were interviewed using the KAP survey in Phuntsokling settlement, Orissa, India.

Figure 1. Have you or anyone in your family had malaria in the past two weeks?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>13%</td>
<td>87%</td>
</tr>
</tbody>
</table>

In the sample population, 13% (n=35) of respondents said that someone in their family had malaria in the past two weeks. It should be noted that cases diagnosed in the month of January are generally lower due to seasonal considerations. We would expect this number to rise in the Monsoon and Summer seasons due to optimal breeding conditions for the Anopheles mosquito.

Figure 2. How would you know if you or your family had malaria?

<table>
<thead>
<tr>
<th>Fever</th>
<th>Chills</th>
<th>Headaches</th>
<th>Bone/joint pain</th>
<th>Vomiting</th>
<th>Other</th>
<th>Diagnosed at Health Centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>150</td>
<td>100</td>
<td>50</td>
<td>50</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

In the sample population, 100% of respondents were able to provide at least one correct answer as to what the symptoms of malaria are. 59% of participants (n=154) identified fever as one of the main symptoms of malaria and 68% of participants (n=176) identified chills as a symptom.
The majority of the sample population (77%, n=216) reported that they go to a health facility for treatment of malaria. Of the sample (11%, n=30) reported that they would self-medicate and primarily with paracetamol, chloroquine, larigo or a combination of these as the primary medications used.

63% (n=164) of the sample population reported that malaria is a very serious disease, and 26% (n=67) reported that malaria is somewhat serious. Further, 18% (n=47), did not identify death as a complication of malaria.
When asked who are most at-risk for malaria, less than half of the sample population (38%) were able to correctly identify pregnant women, children under 5 years and old people as being most at risk.

Table 1. Which of the following helps to prevent mosquitoes?

<table>
<thead>
<tr>
<th></th>
<th>Helps a lot</th>
<th>Helps somewhat</th>
<th>Does not help at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spray in the home</td>
<td>46% (n=105 of 230)</td>
<td>47% (n=109 of 230)</td>
<td>7% (n=16 of 230)</td>
</tr>
<tr>
<td>Mosquito coil</td>
<td>67% (n=170 of 254)</td>
<td>27% (n=68 of 254)</td>
<td>6% (n=16 of 254)</td>
</tr>
<tr>
<td>Use a bed net</td>
<td>89% (n=215 of 242)</td>
<td>8% (n=20 of 242)</td>
<td>3% (n=7 of 242)</td>
</tr>
<tr>
<td>Wear protective clothing</td>
<td>59% (n=129 of 217)</td>
<td>36% (n=79 of 217)</td>
<td>4% (n=9 of 217)</td>
</tr>
<tr>
<td>Burn Leaves</td>
<td>26% (n=64 of 243)</td>
<td>53% (n=129 of 243)</td>
<td>21% (n=50 of 243)</td>
</tr>
</tbody>
</table>

The majority of respondents identified bed net and mosquito coil use as effective measures for preventing contact with mosquitoes; however, many fewer respondents identified spraying in the home and wearing protective clothing as important preventative measures.

Table 2. Which of the following helps to prevent malaria?

<table>
<thead>
<tr>
<th></th>
<th>Helps a lot</th>
<th>Helps somewhat</th>
<th>Does not help at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spray in the home</td>
<td>54% (n=87)</td>
<td>43% (n=66)</td>
<td>5% (n=8)</td>
</tr>
<tr>
<td>Mosquito coil</td>
<td>20% (n=14)</td>
<td>64% (n=45)</td>
<td>16% (n=11)</td>
</tr>
<tr>
<td>Use a bed net</td>
<td>92% (n=154)</td>
<td>7% (n=11)</td>
<td>1% (n=2)</td>
</tr>
<tr>
<td>Wear protective clothing</td>
<td>68% (n=91)</td>
<td>27% (n=36)</td>
<td>5% (n=6)</td>
</tr>
<tr>
<td>Burn Leaves</td>
<td>17% (n=32)</td>
<td>51% (n=94)</td>
<td>32% (n=60)</td>
</tr>
</tbody>
</table>

Conversely, the respondent’s answers about what can be done to prevent malaria do not reflect their
answers in the aforementioned question about how to prevent mosquitos. This suggests that some of the population does not know that mosquitos transmit malaria.

Figure 6. Bed nets are not needed when there are no mosquitoes out

<table>
<thead>
<tr>
<th>Agree</th>
<th>Disagree</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>17%</td>
<td>79%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Figure 7. I don't use a bed net when it is too hot

<table>
<thead>
<tr>
<th>Agree</th>
<th>Disagree</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>53%</td>
<td>20%</td>
<td>27%</td>
</tr>
</tbody>
</table>

In terms of bed net use, only 17% of the sample population believe that bed nets are required when there are no mosquitoes out. The most common reasons cited for using their bed net is for protection from mosquitos and malaria (47%, n=123). However, 27% (n=37) of respondents discard their bed net when the weather is too hot, demonstrating inconsistent use.
Knowledge regarding when bed nets should be re-treated was very poor. Only 19% (n=54) correctly reported that re-treatment should take place every 6-12 months, whereas 39% (n=99) of respondents did not know the answer. A limitation of this KAP survey is that we are unsure what type of bed net these respondents use at home, whether they require re-treatment or whether they have been permanently treated.

Knowledge about indoor residual spraying is also poor. Of the sample population, 96% did not provide the correct response. Homes should be sprayed every 9-12 months, and should occur prior to the monsoon season for greatest effect.
RESULTS OF THE HOUSEHOLD SURVEY

Key Points

- More than a third of respondents have not sprayed their house or had it sprayed in the past twelve months (44%)
- The majority of respondents (96%) have access to bed nets that can be used while sleeping but 66% did not sleep under this net the night prior to completing the survey
- 92% of survey respondents own bed nets which are imbedded with permanent insecticide
- 32% of survey respondents own bed nets with tears in them

The household survey was conducted in Camps 1-5, Phuntsokling settlement and 204 questionnaires were included in the final data analysis. 100% of respondents identified as being Tibetan.

Figure 10. Have you or anyone sprayed against mosquitoes in the past 12 months?

In the past 12 months, 53% (n= 107) of respondents claim that the interior walls of their dwelling have been sprayed against mosquitoes. Of the sample population, 66% (n= 134) say that the Government of India arranged for this service to be attended to, whereas 28% (n= 57) of houses were sprayed by a NGO.
Of the sample population, 96% (n= 190) of respondents say that they have at least one mosquito net per household which can be used while sleeping. 35% (n= 67) of respondents have one net, 53% (n= 101) have two nets, and 12% (n=23) have a total of three nets per household at their disposal.

69% of respondents report that their net(s) were provided by a NGO, and that 11% report that their net(s) were provided by the Government of India.
On the night prior to partaking in the survey, 66% (n=108) of respondents say that they did not sleep under a bed net. Of those that did (34%), only 52% of respondents reported that the nets were slept under for the entire duration of the night.

Interviewers reported that they observed permanently treated bed nets in 92% of dwellings. This is in contrast with reports from 68% of respondents who say that their net was already factory-treated with an insecticide to kill or repel mosquitoes.
Interviewers observed tears in 32% of bed nets.

Interviewers observed standing puddles of water around 14% of the observed households.

**Conclusion & Recommendations**

Overall, community knowledge about malaria and use of appropriate prevention measures, as surveyed in this baseline KAP and household survey is relatively good. It should be noted that the Tibetan term for malaria translates into English as ‘fevers and chills’, so 100% of respondents correctly identified these symptoms as symptoms of malaria. The majority of respondents (89%) also know that malaria is a serious disease. It is of concern, however, that many respondents did not acknowledge various measures such as burning leaves, using mosquito coils, wearing protective clothing, using bed nets and spraying in the home as useful preventative measures for combatting mosquitoes and malaria. There are also some concerns
with regards to the practical application of such measures. As Orissa is a recognised high-risk area for malaria in India, education which focuses on up-scaling the use of preventative measures in all seasons may help to decrease transmission risk in the community.

More education about how malaria is transmitted and the risks of transmission and the value of implementing preventative measures in activities of daily life are needed. This survey was conducted during the ‘low malaria season’; however, 13% of respondents reported that someone in their household (self or other) had been diagnosed with malaria in the fortnight leading up to the study. This finding highlights the importance of implementing malaria preventative measures even during the perceived low season and should be a target for further community education outreach.

The importance of education about evidence-based practices for malaria prevention within this community should not be underestimated. Bed nets are widely available and were found in 92% of respondent’s homes, yet environmental factors such as heat and perceived low-risk during the winter season have led to inconsistent use of available bed nets. Also, 32% have visible tears which render them ineffective. With regards to household spraying, at least 44% of respondents have not had their homes sprayed in the past 12 months, and 96% of respondents were not able to identify 9-12 months as the appropriate time for repeat spraying. Other areas which should be addressed in future educational efforts include: importance of early diagnosis and treatment, utilization of local health facilities, and risk of self-treatment for malaria.

**Distribution of Bed Nets**

Based on this needs assessment, bed net coverage in the Phuntsokling Tibetan settlement in Orissa is quite good. While it will be important to ensure that households receive new or replacement bed nets as needed, this survey indicates that malaria control efforts should also focus on education, treatment of bed nets, and indoor residual spraying. Also of note, there appears to be widespread availability of discounted or free insecticide treated bed nets that have been donated by local NGOs or provided at a highly subsidised rate (20 rupees per net) by the Government of India. Future bed net distribution should be coordinated with the GOI and other NGOs working in this region to avoid duplication of efforts and wasted resources.

Of those with bed nets, 43% of respondents acquired their nets more than 5 years ago and many are overdue for repeat insecticide treatment. This could be a more cost-effective measure than random distribution of bed nets. Community-based education, which explains that re-dipping needs to occur every 6-12 months and that torn bed nets should be repaired or replaced, is also essential.

**Early Diagnosis and Treatment Strategy for Malaria: An alternative method for healthcare delivery**

To complement standard healthcare delivery models, the CTA DOH could consider developing a broader healthcare delivery system for malaria control in the Tibetan settlements affected by malaria. An early diagnosis and treatment strategy has been implemented in South East Asia, which has been successful in reducing malaria transmission. Its main focus is to reduce the parasite reservoir in the local population.

The strategy involves recruiting volunteer malaria workers and training them in simple diagnostic and treatment protocols. Patients make a small payment to the volunteer malaria worker, which serves to motivate, reward and builds capacity. Volunteers are trained to collect blood smears which are then sent...
to a laboratory for testing. This creates a mechanism for monitoring program effectiveness and for accurate data collection. While this model has worked elsewhere in the world, we cannot know for certain whether it would work within Tibetan settlements. The CTA DOH may like to enlist CHW’s to aid in early diagnosis and getting people to appropriate healthcare facilities in a timely fashion.

**Malaria Education Video in Tibetan Language**

As part of the research for this malaria-based needs assessment, a request was made to Scientific Animations Without Borders (SAWBO), a project run by the University of Illinois at Urbana-Champaign, who have recently created an animated video that focuses on malaria prevention (see URL below). These videos can also be sent and downloaded to mobile phones. For the purpose of this project and as a donation to the CTA DOH, the following malaria animation has been produced in the Tibetan language to be used for education purposes.

Tibetan language:

[http://www.youtube.com/watch?v=XeehNlz3v_8](http://www.youtube.com/watch?v=XeehNlz3v_8)

English language:

[https://www.youtube.com/watch?feature=player_embedded&v=dnugDchZL10](https://www.youtube.com/watch?feature=player_embedded&v=dnugDchZL10)
Executive Summary

This report presents the findings of NGO Mapping for malaria control efforts in the areas surrounding the Tibetan settlement in Orissa, India. The activities described in this report were documented by Johns Hopkins University (JHU) staff, through direct communication with local organizations working in Orissa in October 2012. This communication was supported by the Central Tibetan Administration Department of Health (CTA DOH). Current malaria prevention and control measures, which serve the Tibetan population in Orissa were assessed and are summarized in this report. It is the intention that the information found herein will improve communication and coordination among partners working on malaria control in Orissa and to maximize the impact of CTA DOH malaria-based interventions in this region.

An online search was conducted of NGOs that provide malaria control services in Orissa. These NGOs were directly contacted and were also asked to suggest the names of other NGOs addressing malaria in the area. Each NGO was contacted with a list of intervention-based questions. Furthermore, information regarding geographical features of the Tibetan settlement and camps was collected from CTA DOH and the Tibetan Delek Hospital staff, with knowledge about this settlement in Orissa.

Of the seven NGOs located via the online search, only three responded to emailed questionnaires regarding their malaria control efforts in Orissa – Ripa International Community / RipaLadrang Foundation, Sakong Foundation and SACAL. Information about the remaining four NGOs was sourced from their respective websites; however, it is unknown if this reflects current project efforts. Three NGOs - CARD, PRAVA and SURAKSHA, do not have a current working website. Information about SURAKSHA was sourced from Indian welfare office websites.

This report is divided into three parts. Part I includes a brief overview of malaria in Orissa, and presents the findings of the conducted NGO mapping. Part II provides recommendations on how to capitalize on NGO activity to address malaria in the Tibetan population in Orissa, India. Part III supplies a list of NGOs in the area and supplementary details about each of the NGOs contacted throughout this investigation.

PART I

Overview

Malaria is a major cause of morbidity and mortality in India, and the CTA DOH and the Government of India (GoI) consider malaria control to be a very high priority. In India, there are approximately 2 million cases of malaria reported each year. Highly endemic areas contribute approximately 80% of the total burden of disease, with 20% of those cases being in the Indian State of Orissa. Within India, there are five Tibetan settlements in malaria endemic regions, including Orissa. A demographic survey conducted by the Planning Commission of Central Tibetan Administration (PC CTA) found the overall prevalence of malaria to be approximately 7% in these five settlements, with a morbidity rate of 3.3%. 
The NGOs in Orissa, which provide malaria control interventions for the Tibetan population represent a small minority of the NGOs working in this region but are responsible for a considerable portion of non-governmental activity in the exiled community. There is tremendous scope and range of activities run by these community-based NGOs and there is considerable diversity of institutional capacity and experience. There may be additional NGOs that address malaria in Orissa that have not been contacted for the purpose of this needs assessment due to the absence of a well maintained website or other available contact information.

**Geography**

In Orissa, there is one Tibetan settlement called Phuntsokling. Within this settlement, there are five camps: Chandragiri, Tanglipada, Lobering, Jeerang and Mahindragada. There is a distance of 1.5 kilometres between each camp. It should be noted that estimated population numbers of Phuntsokling vary considerably between sources. Based on a 2009 census, the CTA DOH estimates the Tibetan population to be 1,885 in Orissa, whereas local NGOs estimate the population to be 3,550. There are no Indians residing in the camps, but Indian families do reside within the settlement area.

Tibetan, Adivasi, Dalit and other local Indian communities are served by the 7 NGOs included in the mapping. These NGOs focus interventions in the following areas: Jeerang and Chandragiri camps in the Phuntsokling Tibetan Settlement, and Berhampur, Baleswar, Gajapati, Kalahandi, Koraput, Baragarh, Sonepur and Mayurbhanj Districts, Orissa. While there are some NGOs dedicated solely to Tibetans living in the larger camps of Jeerang and Chandragiri in the Phuntsokling Tibetan Settlement, other NGOs serve the camps within the Tibetan settlement as well as a wider area in the District.

**Areas of Specialization**

The scope and range of malaria-based activities of the NGOs working in Orissa is considerably large. Activities include household fumigation, bed net distribution, cultivating road drainage systems, drainage of waste-water, securing windows/door with screens, destroying larva, education & community awareness activities, establishing medicine depots and medical services for the diagnosis and treatment of malaria.

**Distribution of Insecticide-treated Bed Nets in Orissa**

**Government of India:**

Between May and June 2012, the Government of India (GoI) provided each family in Orissa one long lasting insecticidal net (LLIN) for every two persons. According to the GoI, these nets will last for up to 3 years. The GoI informed representatives from the CTA DOH that there was available stock to distribute to Tibetan residents in Orissa. The CTA DOH then visited the camps and created a list of families who required LLINs. The GoI charged 20 INR for each net to cover the cost of transportation. Prior to this, Tibetan families had to purchase nets from local stores at retail cost.

**RipaLadrang Foundation:**
From 2008 to 2011, RipaLadrang Foundation distributed insecticide treated bed nets to 567 Tibetan households in Phuntsokling settlement, 1,750 local Indian households, and an unknown number to old people’s homes, monasteries, nunneries and school hostels.

PART II

Recommendations

Maximize Collaboration

Based on this survey, there appears to be little to no collaboration between NGOs or between the CTA DOH and other NGOs addressing malaria control. Efforts to coordinate regular meetings between the CTA DOH, GoI and local NGOs could significantly improve coordination and collaboration of malaria control efforts through discussion of community priorities and planned interventions. An example of excellent NGO cohesion in India occurs in Pune each year where NGOs come together to exhibit their efforts for both intra-NGO networking purposes and to educate the public on their respective causes.6-7 A similar model could be implemented in Orissa for malaria control.

Within the past two years, at least 567 Tibetan households and 2750 Indian households in Orissa have been recipients of insecticide-treated nets (LLINs or ITNs), courtesy of NGOs in the area. Furthermore, an unknown number of Tibetan residents have received bed nets courtesy of the GoI. Whilst there appears to be some integration of efforts between the GoI and the CTA DOH, regular coordination between all parties would help to ensure that all households receive LLINs or ITNs and avoid duplicate distribution. A system should be developed to include the following information: number of nets distributed, location of distributed nets, status of insecticide treatment (permanent vs re-treatment).

PART III:

NGO’s WHICH SERVE THE TIBETAN POPULATION IN ORISSA, INDIA

Ripa International Community / RipaLadrang Foundation

Telephone No.: (212) 631-1188 (Skype – NYC)

Email: rigonorissa@yahoo.com;

info@ripaladrang.org


http://www.ripaladrang.org/

Project Name(s): Fight Against Malaria; Malaria Prevention Fund
NGO Description: Promotes, supports and preserves Tibetan Vajrayana Buddhism, in particular the Ripa Lineage

Malaria-Related Activities: Free diagnosis, treatment, ITN distribution for the poorest people; awareness program, supports screen for windows/doors of all houses, proper drainage of waste water, collection & analysis of annual data. RIC also procures King Fog for destroying the larva of mosquitoes, as well as insecticide treated bed nets, fumigator machines and fuel.

Partner Organizations: European based Padma Lings; US based Ripaladrang Foundation Ripa International, Padma Ling France, Germany, Spain, Switzerland & UK, Shambhala

Source(s) of Funding: International donors, predominantly from the USA.

Board of Directors: Alan Goldstein, JangchupGyatso

Programs Implemented and Beneficiaries (2008-2011):
- Household fumigation – Camp #1: 110 households, Camp #2: 30 households, Camp #3: 140 households, Camp #4: 55 households, Camp #5: 230 households. Within Tibetan Settlement Phuntsokling which has a total population of 3500.

- Insecticide treated nets distributed to 567 Tibetan households, 1750 local Indian households, and an indeterminate number to old people’s homes, monasteries, nunneries and school hostels in 2008, 2010 and 2011.

Sakyong Foundation
Telephone No.: 303.815.1588 (Skype)
Email: jvosper@sakyongfoundation.org

Website: http://www.sakyongfoundation.org/chandragiri/

Project Name: Chandragiri Malaria Relief Project

NGO Description: Promoting long term health for Tibetans in exile

Malaria-Related Activities: Build modern roads which promote adequate drainage to reduce pools of stagnant water

Partner Organizations: The DorjeKasung service organization, Boulder ShambhalaCenter

Source(s) of Funding: Donor directed contributions via website, annual grants, the Sakyong Fund, the DorjeKasung Endowment, Boulder ShambhalaCenter Endowment and the Shambhala People of Color Scholarship Fund

Board of Directors: SakyongMipham Rinpoche, Alexander Halpern, Jesse Grimes, Jeff Waltcher, Connie Brock, Jane Vosper
Recently Implemented Programs and Beneficiaries (2009-2012): Since 2009, Sakyong Foundation have been building paved roads, culverts and a drainage system in and leading to Chandragiri, Orissa. This is an ongoing process. They have a sufficient work force and the budget for this project is $50-80K.

Lepra Society
Telephone No. 0674 – 2551764 / 2550180 / 2552023 / 2552025 / 255185
Email: info@lepraehealthinaction.in
Website: http://www.leprasociety.org/malaria.html#

Project Name: Malaria

NGO Description: The society aims to support the National Health Programs in the prevention and control of Leprosy, TB, Malaria, Lymphatic Filariasis, HIV&AIDS and blindness

Malaria-Related Activities: Multiple projects in Orissa, community outreach, IEC activities, awareness generation through media, street plays, material distribution (posters, stickers etc.), consultation camps which include diagnostics & treatment. Servicing Kalahandi, Koraput, Baragarh, Sonepur, Mayurbhanj and Districts


Source(s) of Funding: As per partner organizations

Board of Directors: Dr.RanganadhaRao, Dr.Subbanna, Mr.Haris Chandra Singh, Mr. N. Chandrasekara

People's Rural Education Movement (PREM)
Telephone No.: 91-680-2343701
Email: jacobthundiyil@gmail.com
Website: http://www.prem.org.in

Project Name: Malaria Prevention and Control

NGO Description: Spread education, improve healthcare, implement livelihood initiatives, build capacity for good governance, and promote and protect the rights of children among marginalized communities

Malaria-Related Activities: Bed nets, spraying malathin, using neem oil, maintaining cow-shed cleanliness and proper water drainage, and establishing community medicine depots in 8 Districts including Chandragiri within the Gajapati District, Orissa

Partner Organizations: As per website - Plan International, UNICEF
Source(s) of Funding: Donor directed contributions via website, Partnership for Transparency Fund (PTF-USA), OXFAM Australia, Concern Worldwide

Board of Directors: Dr.JacobThundiyil and Dr.ChackoParuvanany

CARD
Email: http://cardodisha.com/
Website: cardganjam@rediffmail.com
Website expired 3rd January, 2013
Board of Directors: Suresh Chandra Sahu

PRAVA
Telephone No.: 06782-266137 (Skype)
Email: prava_bls@rediffmail.com
Website: http://www.prava.org/
Website expired December, 2012

SURAKSHA
Website: Expired

NGO Description: Serves the marginalized and downtrodden communities, vulnerable women & children and other weaker sections of the society with meaningful intervention of integrated approach.

Partner Organizations: The Hans Foundation

Board of Directors: Mr.S.Motilal Reddy

Recently Implemented Programs and Beneficiaries: Total expenditure for 2009-2010 INR 36,28,363; total income for same year INR 31,21,795.
Appendices

Appendix A

KNOWLEDGE, ATTITUDES & PRACTICES (KAP) SURVEY

SIGNS/SYMPTOMS

1. Have you or any members of your family had malaria in the last two weeks?
   
   Yes ☐  No ☐

2. How would you know if you or your family had malaria? (Have the head of household list symptoms and tick all that are named)

   a. Fever ☐  b. Chills ☐
   c. Headaches ☐  d. Bone/joint pain ☐
   e. Vomiting<sup>4</sup> ☐  f. Others<sup>4</sup> (convulsions, cough, diarrhoea) ☐
   e. Diagnosed at Health Centre ☐
   f. Other (specify)........................................................................................................

3. If malaria was diagnosed at a Health Centre, was it diagnosed by:

   a. Blood sample drawn (microscopy) ☐
   b. Finger prick (rapid diagnostic test) ☐

TREATMENT

4. For the last episode of malaria in your household, where did you go to get treatment?

   a. traditional healer ☐
   b. Tibetan Medicine ☐
   c. buy tablets from local pharmacy ☐
   d. visit local clinic/hospital ☐
e. take medicine I have at home  
Name of Medicine______________________

f. other (specify)..............................................................................................................................

5. When you or someone is your household has had malaria, what is the name of the medicine you have used to treat it?
..............................................................................................................................................................

6. How often do you take the medicine you answered in question 5?
..............................................................................................................................................................

SEVERITY OF MALARIA

7. How serious of a disease is malaria?
   a. Not at all serious  
   b. Somewhat serious  
   c. Very serious  
   d. I don’t know

8. Who in your family are most at risk from malaria? (Tick all that apply).
   a. mother  
   b. pregnant mother  
   c. all children  
   d. children under 5 years  
   e. father  
   f. old people

9. Which of the following are complications of malaria? (Ask each one-by-one).
   a. anaemia  
      a) Yes  b) No  c) Don’t know  
   b. abortion  
      a) Yes  b) No  c) Don’t know
c. convulsions  a) Yes  b) No  c) Don’t know

d. death  a) Yes  b) No  c) Don’t know

e. other........................................

PREVENTION & BED NETS

10. Which of the following helps to prevent mosquitoes? (Ask each one-by-one).

a. burn leaves  a) Helps a lot  b) Helps somewhat  c) Not at all

b. spraying in my home  a) Helps a lot  b) Helps somewhat  c) Not at all

c. mosquito coil  a) Helps a lot  b) Helps somewhat  c) Not at all

d. sleeping under bednet  a) Helps a lot  b) Helps somewhat  c) Not at all

e. wearing long sleeves or long pants

   a) Helps a lot  b) Helps somewhat  c) Not at all

11. Which of the following helps to prevent malaria? (Ask each one-by-one).

a. burn leaves  a) Helps a lot  b) Helps somewhat  c) Not at all

b. spraying in my home  a) Helps a lot  b) Helps somewhat  c) Not at all

c. mosquito coil  a) Helps a lot  b) Helps somewhat  c) Not at all

d. sleeping under bednet  a) Helps a lot  b) Helps somewhat  c) Not at all

e. wearing long sleeves or long pants

   a) Helps a lot  b) Helps somewhat  c) Not at all

12. Some people say they do not use their bed net when there are no mosquitoes out. Do you agree or disagree with this statement?

   a) Agree  b) Disagree  c) I don’t know
13. Some people say they do not use their bed net when it is too hot. Do you agree or disagree with this statement?
   a) Agree  
   b) Disagree  
   c) I don’t know  

14. What influences you to use your bed net?

15. How often should you re-treat your bed net?
   a) every 6-12 months  
   b) every 2 years  
   c) Not needed  
   d) I don’t know  

16. How often should your house get sprayed?
   a) every 6 months  
   b) every 9-12 months  
   c) every 2 years  
   d) I don’t know  

......................................................................................................................................................................................
# Malaria Indicator Survey, Orissa, India

## Household Questionnaire

Central Tibetan Administration Department of Health (CTA DOH)  
Johns Hopkins University

Developed in October 2012

<table>
<thead>
<tr>
<th>INTERVIEWER</th>
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</thead>
<tbody>
<tr>
<td>Interviewer Name</td>
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<tr>
<td>Date</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>IDENTIFICATION</th>
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<tbody>
<tr>
<td>Location (Settlement / Camp)</td>
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<tr>
<td>Name of Household Head</td>
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<tr>
<td>Name of Respondent</td>
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<tr>
<td>Place of Birth (Household Head)</td>
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<tr>
<td>Cultural Identity (Household Head)</td>
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</tbody>
</table>
### HOUSEHOLD LISTING

<table>
<thead>
<tr>
<th>Names of Usual Residents</th>
<th>Relationship to Household Head</th>
<th>Male or Female? Circle one</th>
<th>Does this person usually live here?</th>
<th>Did this person stay here last night?</th>
<th>How old is this person?</th>
<th>If this person is a woman between 15-49 years, please circle</th>
<th>If this is a woman are they pregnant? Please write answer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

**PROMPT:** Any small children not listed? Any long-term lodgers or friends that usually live here? Any temporary guests who stayed last night?
# Malaria Household Questionnaire

## Household Spraying

1. At any time in the past 12 months, has anyone sprayed the interior walls of your dwelling against mosquitoes?
   - a) Yes ☐
   - b) No ☐
   - c) Unsure ☐

2. How many months ago were the houses sprayed?
   - a) Past 3 Months ☐
   - b) 3-6 Months ☐
   - c) 6-12 Months ☐
   - d) >12 Months ☐

3. Who sprayed the house? *(Specify if person was family, friend or from an organisation or company)*

## Household Mosquito Nets

4. Does your household have any mosquito nets that can be used while sleeping? *(If NO, skip to question 15).*
   - a) Yes ☐
   - b) No ☐

5. How many mosquito nets do you have in your household?
   - a) 0-2 nets ☐
   - b) 3-5 nets ☐
   - c) >5 nets ☐

6. How long ago did your household obtain the mosquito net(s)?
   - NET 1:
     - a) Past 12 Months ☐
     - b) 1-2 years ago ☐
     - c) 3-4 years ago ☐
     - d) >5 years ago ☐
   - NET 2:
     - a) Past 12 Months ☐
     - b) 1-2 years ago ☐
     - c) 3-4 years ago ☐
     - d) >5 years ago ☐
   - NET 3:
     - a) Past 12 Months ☐
     - b) 1-2 years ago ☐
     - c) 3-4 years ago ☐
     - d) >5 years ago ☐

7. Where did you obtain the mosquito nets?
   - NET 1:
     - a) We purchased it ☐
     - b) Given by NGO ☐
     - c) Given by GoI ☐

---
| **NET 2:** |  
| --- | ---  
| a) Bought it |  
| b) Given by NGO |  
| c) Given by GoI |  
| **NET 3:** |  
| a) Bought it |  
| b) Given by NGO |  
| c) Given by GoI |  

8. When you got the net was it already factory-treated with an insecticide to kill or repel mosquitos?  

**NET 1:**  
| a) Yes | b) No | c) Unsure |  

**NET 2:**  
| a) Yes | b) No | c) Unsure |  

**NET 3:**  
| a) Yes | b) No | c) Unsure |  

9. Since you got the mosquito net, was it ever soaked or dipped in a liquid to repel mosquitoes? (If NO, then skip to question #11. If YES, then go to question #10).  

**NET 1:**  
| a) Yes | b) No | c) Unsure |  

**NET 2:**  
| a) Yes | b) No | c) Unsure |  

**NET 3:**  
| a) Yes | b) No | c) Unsure |  

10. How long ago was the last net soaked or dipped?  

**NET 1:**  
| a) < 6 months ago | b) > 6 months ago | c) Unsure |  

**NET 2:**  
| a) < 6 months ago | b) > 6 months ago | c) Unsure |  

**NET 3:**  
<p>| a) &lt; 6 months ago | b) &gt; 6 months ago | c) Unsure |</p>
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Why has the net not soaked or dipped?</td>
<td>a) Cost</td>
</tr>
<tr>
<td></td>
<td>b) Did not know it was necessary</td>
</tr>
<tr>
<td></td>
<td>c) Other reason: ______________________________________________________</td>
</tr>
<tr>
<td>12. Did anyone sleep under this net last night?</td>
<td>NET 1:</td>
</tr>
<tr>
<td></td>
<td>a) Yes  b) No</td>
</tr>
<tr>
<td></td>
<td>NET 2:</td>
</tr>
<tr>
<td></td>
<td>a) Yes  b) No</td>
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<tr>
<td></td>
<td>NET 3:</td>
</tr>
<tr>
<td></td>
<td>a) Yes  b) No</td>
</tr>
<tr>
<td>13. Who slept under this net last night? (List relationship to head of</td>
<td>NET 1: Household member(s) ___________________________________________</td>
</tr>
<tr>
<td>household)</td>
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</tr>
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<td></td>
<td>NET 2: Household member(s) ___________________________________________</td>
</tr>
<tr>
<td></td>
<td>NET 3: Household member(s) ___________________________________________</td>
</tr>
<tr>
<td>14. How long did each person sleep under a net last night?</td>
<td>Relationship to Head of Household:</td>
</tr>
<tr>
<td></td>
<td>a) Not at all</td>
</tr>
<tr>
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<td>b) Part of the night</td>
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<tr>
<td></td>
<td>c) All night</td>
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<tr>
<td></td>
<td>Relationship to Head of Household:</td>
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<tr>
<td></td>
<td>a) Not at all</td>
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<tr>
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<td>b) Part of the night</td>
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<td>c) All night</td>
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<td>b) Part of the night</td>
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<tr>
<td></td>
<td>c) All night</td>
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<tr>
<td>OBSERVATION</td>
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<tr>
<td>Ask the respondent to show you their net(s) in the household. <em>(If no nets to show, skip to question 18)</em></td>
<td></td>
</tr>
<tr>
<td>15. Is the mosquito net a permanent net or a pre-treated net?</td>
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<tr>
<td><em>Note: Permanent is a factory treated net that does not require any further treatment</em></td>
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</tr>
<tr>
<td>Pre-treated is a net that has been pre-treated but requires further treatment after 6-12 months.</td>
<td></td>
</tr>
</tbody>
</table>

| NET 1: |  |
|--------|  |
| a) Permanent |  |
| b) Pre-treated |  |
| c) Neither |  |
| d) Unsure |  |

| NET 2: |  |
|--------|  |
| a) Permanent |  |
| b) Pre-treated |  |
| c) Neither |  |
| d) Unsure |  |

| NET 3: |  |
|--------|  |
| a) Permanent |  |
| b) Pre-treated |  |
| c) Neither |  |
| d) Unsure |  |

| NET 1: |  |
|--------|  |
| a) Yes |  |
| b) No |  |

| NET 2: |  |
|--------|  |
| a) Yes |  |
| b) No |  |

| NET 3: |  |
|--------|  |
| a) Yes |  |
| b) No |  |

16. Are there tears in the net(s)?

| NET 1: |  |
|--------|  |
| a) Yes |  |
| b) No |  |

| NET 2: |  |
|--------|  |
| a) Yes |  |
| b) No |  |

| NET 3: |  |
|--------|  |
| a) Yes |  |
| b) No |  |

17. Is there standing puddles of water around the home?

| a) Yes |  |
| b) No |  |
1. Do you have any malaria programs running at the present time? If so, what are they and what are the commencement and closing dates?

2. What budget do you have to spend on malaria projects?

3. Are you implementing solely within Tibetan settlements? Please provide the name of the settlement/s. Do your activities extend to nearby Indian populations?

4. The estimated people reached for your projects

5. What your needs are, be it money, equipment, personnel etc.?

6. Do you know of any other NGOs in the area who are addressing the malaria situation?
References


Special Thanks

Dr. Tsering Wangchuk
Dr. Kerry Dierberg
Dr. John Oommen
Trinley Palmo
Tenzin Dolker
SAWBO
Emily Hurley
Jane Vosper
Jennifer Hunt
Jangchup Gyaltsen
Alan Goldstein
Elli Leontsini
Tsering Damdul
Tenzin Chonpel
Chime Gonpo
Dorjee Tsetan
Tenzin Dasey
Tenzin Dechen
Sonam Dolker
J’Belle Boddy