

CONTENT PAGE

Foreword		4
About Namjai - Objectives & framework - Area of operation - Past trips	•••••	5
Project Trip 4 - Look - Address - Observe	•••••	9
Future Directions		21
Closing & Acknowledgements		24



FOREWORD

"NamJai", in Laotian, means passion and service with a heart. To the Lao people, it is the greatest and most noble quality that can be accorded to a person who serves with upmost dedication and devotion.

Project NamJai was born of the idea that anybody, regardless of circumstance or ability, can make a positive difference in the lives of others if the heart chooses to. This resonated with a group of medical students from NUS Yong Loo Lin School of Medicine, and united by this common purpose, an Overseas Community Development Project in Laos was initiated in March 2017.

Laos was identified among 6 low- to middle-income countries (as defined by World Bank in 2015) as having unsatisfactory health and healthcare outcomes. From data collected from World Health Organisation and Institute for Health Metrics and Evaluation, Laos performed poorly in the areas of overall life expectancy and mortality, child growth and development, maternal and child health, lung infection and cardiovascular disease amongst others.

Our four founding directors embarked on their first Recce Trip in August 2017 to establish partnerships with important local stakeholders, and conduct groundwork in the various villages. That laid the foundation for future trips which involved targeting identified health concerns and implementing innovative interventions to educate and empower.

At this juncture, Project NamJai would like to thank all mentors, advisors, coordinators, partners and sponsors for their unwavering support and guidance. Project NamJai will continue to evolve and make a positive difference in the lives of Laotians in the future and beyond.

With lots of Namjai,

PROJECT NAMJAI COMMITTEE 21 DECEMBER 2019

ABOUT NAMJAI

Project NamJai is an overseas community service project led by students from Yong Loo Lin School of Medicine, National University of Singapore (NUS). Established in 2017, we are an interventions- based project which aims to address healthcare gaps within the rural community in Vientiane province, Laos.

OBJECTIVES & FRAMEWORK



100K

Identify the health and healthcare needs of villagers in rural Laos.



ADDRESS

Execute interventions to address these needs



OBSFRVF

Conduct robust monitoring and evaluate to measure the efficacy of these interventions.



SUSTAIN

Build community capacity and empower villagers to execute these interventions in the long run

AREA OF OPERATION

As of now, we are implementing our interventions in 4 villages along the Highway 13 in HinHeub District in Vientiane Province — Pong Song Village (PS), Hin Tit Village (HT), Houay Dok Mai Village (HDM) and Phon Thong Village (PT).

Here is a map of the 4 villages and the nearest healthcare facilities.

For a better understanding of their physical access to healthcare facilities, we compiled the distances between the areas in kilometres.



	PH	DH	PS	HT	HDM	PT	MC
PH		29.2	34.5	36.1	39.3	43.1	43.1
DH			5.5	7.0	10.3	14.1	14.1
PS				1.5	4.8	8.6	8.6
нт					3.3	7.1	7.1
нрм						3.8	3.8
PT							0.0

We plan on moving to other villages in the long run after we obtain our long term objective of bringing sustainable interventions in the current area of operation.

PAST TRIPS

In the short span of 3 years, Project NamJai has established its presence in 4 Laos villages – Pong Song Village, Hin Tit Village, Houay Dok Mai Village and Phon Thong Village in Hinhueb District. Project NamJai has progressed from routine health screenings to focus on sustainable health education for villagers with limited access to affordable healthcare, significantly altering their healthcare-seeking behaviours. Through staying with villagers throughout our interventions and daily interactions on the ground, we have established heartfelt connections with the Laotians and impacted their lives significantly.

Project Namjai started in 2017, where we networked and coordinated with major local stakeholders in all our healthcare efforts – Singapore Embassy in Laos, World Health Organization, University of Health Sciences, and renowned local coordinator Mr Peter Tan. In our first interventions trip in May 2018, we visited the HinHeub District Hospital, Phon Thong Medical Centre, the Singapore Embassy and World Health Organisation in Laos, who have been extremely supportive in our endeavours to resolve pertinent issues in the Laotian healthcare system.

Since then, we conducted extensive research, questionnaires, and interviews to understand the lifestyle of the locals and the gaps to fill in. For example in May 2018 we conducted health screening on the locals, to establish a baseline quantitative measure of their health. From it, we learned that many of them suffer from abnormal capillary blood glucose, blood pressure and lipids level. This puts them at higher risk of Cardiovascular Disease Associated Chronic Conditions (CDACC) like diabetes, hypertension, and hyperlipidemia. Hence, since then we narrowed our focus to primary prevention of CDACCs through education, and also improving the local healthcare system's standards and capacity. Overall we seek to lower the risk of CDACCs in the villagers.

Our past trips' reports are viewable on our website: www.projectnamjai.com



PROJECT TRIP 4

OBJECTIVES

"Look"

This trip, we completed a total of 560 door-to-door interviews in 4 villages. The interview questions targeted their health seeking behaviours and their attitudes towards their health. Whilst executing door-to-door interviews, we also mapped out the village and constructed our own database and maps, thereby creating the crucial foundation to allow us to follow-up more effectively.

Additionally, we rallied the school staff for an interview to understand their needs, seek their input on our current interventions, and strive for future collaboration.

Beyond that, we inquired about the current healthcare institutions that are serving the local village communities to assess if there were any gaps that could be ameliorated.

We also looked to other established community projects conducted by reputable organisations in Laos, namely the World Health Organisation & The Singapore Embassy to integrate their approaches in our own interventions.

"Address"

Smoking cessation

For our trip in December 2019, we targeted our Smoking Cessation Programme for adults and children in specialised settings, and we placed our focus on education, correcting misconstrued mindsets, and promoting mutual encouragement within the village for a smoke-free lifestyle.

For our smoking cessation efforts, we went door-to-door in the villages to follow up with the smokers whom we assisted in our previous trips, and to reach out to more smokers that we previously did not contact. We conducted surveys to understand their smoking behaviours, and provided them with succinct and interactive handouts that contain key information on the effects of smoking, ways they can attempt to quit, and planners to assist with charting their progress. While many expressed concerns that they were hampered by social and psychological temptations to smoke, an encouraging number also acknowledged on the harms of smoking and pledged their commitment to quit along with our guidance.

While conducting the consultations, we also recruited ambassadors as part of our curative programme. These ambassadors were villagers who successfully quit smoking, and we hope that they can inspire other villagers to embark on their own journey to a smoke-free lifestyle. We also gathered ideas from our interviews with them on how we could make the community more conducive for smokers to quit.

As part of our preventive education, scenario-based and interactive lessons were conducted in classrooms to educate children, between the formative ages of 10 to 14, against the harms of smoking. The lessons consisted of 3 main portions - The Harmful Effects of Smoking, How To Say "No!" to Smoking, and a quiz to test their knowledge. The visual and interactive sessions aimed to create deeper impressions on the children on the harms of smoking, as well as present realistic situations that will help them foresee possible preventive measures they can take to avoid smoking.

ONE-TO-ONE CONSULTATIONS





SMOKING CESSATION



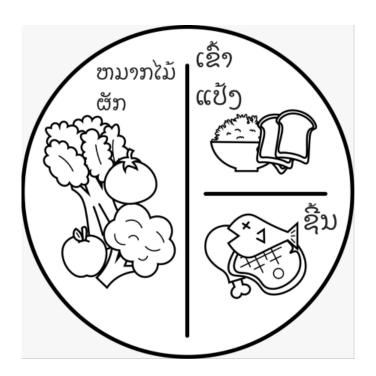
Healthy Eating

Moving forward from May 2019 where we educated the villagers on healthy eating habits as well as proportioning, we went door-to-door this December to assess the retention of knowledge on healthy eating habits and whether healthier cooking techniques were adopted.

This trip, we continued with our Interactive Healthy Plate intervention to educate the villagers on proper proportioning of macronutrients. First, we investigated their understanding through a plate piecing activity.

Villagers were given cutouts of various food items to form a "healthy plate" based on their own understanding. Following that, we corrected their misconceptions based on the plates they had formed and demonstrated the proper proportions. After our efforts, we got the villagers to piece together the healthy plate again and they were able to correctly proportion their food.

In addition, we expanded our healthy eating programme to target primary school children. Using the same activity, we taught the children the correct makeup of a healthy plate (as seen below). To enhance their engagement, we also gave them colour pencils to design their own healthy plate and displayed them on their classroom walls. The children thoroughly enjoyed the activity and took pride in their own designs.





INTERACTIVE HEALTHY PLATE



Zumba

Using upbeat Laotian folk music, our volunteers taught a self-choreographed Zumba dance routine to the villagers. Through dance moves which were simple yet effective, we hoped to provide the retirees and housewives an exciting workout which would encourage them to lead more active lifestyles. These retirees and housewives tend to lead more sedentary lifestyles. Dancing along with our volunteers, the women and elderly villagers were all smiles.

This trip, we included the additional element of strength training using resistance bands. These bands were given to the villagers and was trialed at Pong Song village, where villagers were taught different exercises using the bands to target various muscle groups.

Sports Carnival

To encourage an active lifestyle amongst the young while providing a fun and practical avenue for them to apply their knowledge on health-seeking behaviours, Project Namjai piloted a Sports Carnival for primary school students in Hin Tit Village. Students were educated on the benefits of having an active lifestyle, knowledge on recommended physical activity levels, as well as exercises to keep fit. All these aim to spark an interest in sports and exercise amongst the students, with the ultimate goal of developing their innate passion to enjoy these activities and keeping fit at the same time.

Following that, we got the students involved by organising a friendly sporting competition. The students were split into teams and the winning team was recognised for their teamwork and spirit. This seeks to encourage active participation and camaraderie amongst them. Sporting equipment were donated to the school, which are kept under the supervision of the teachers so that the students can organise their own sporting activities collectively.

Above all, the Sports Carnival aims to impart health and fitness knowledge in a fun and interactive manner, develop an intrinsic motivation amongst the children to exercise at their own free time, which will eventually result in a sustainable and independent improvement in their health-seeking behaviour in the long run.



ZUMBA





Capacity Building

Phon Tong Clinic - Dr Bualien

On this trip, we met with Dr Bualien from Phon Tong Clinic to understand the problems that the clinic faced and how we could assist them in meeting the primary healthcare needs of the villagers they served. Majority of these patients are from Phon Tong village and Houay Dok Mai village. Dr Bualien shared that they lacked resources to properly diagnose chronic diseases in the clinic. Thus, many patients with chronic ailments were referred to the Hin Heub District Hospital, located several hours away, to be treated. This resulted in issues with compliance as doctors are unable to confirm that the villagers seek treatment using the referral and continue with their medication.

HinHeub District Hospital - Dr Oneheung & Dr Ewonith

We also secured a meeting with the Dr. Ouneheung, Vice-President of HinHeub District Hospital and Dr. Ewonithm from HinHeub District Hospital. We enquired about their current capacity, scope of operations, limitations and how we could aid them. From the meeting, we learnt that the hospital saw a drop in funding after it stopped receiving aid from one of its major donors, the Luxembourg Agency for Development and Cooperation. As a result, they had to narrow its scope of operations and halt its community outreach efforts. They also lacked the spare capacity to provide much assistance to nearby clinics under them.

While the hospital does not experience major difficulties in carrying out day to day operations, they understand that their capacity to treat patients are very limited as the hospital lacks medication and has no equipment to screen patients for certain diseases. These patients have to be referred again to the provincial hospital, causing greater inconvenience.

World Health Organisation - Dr Josiah

During our meeting with Dr Josiah, Technical Officer representing the Non-Communicable Diseases (NCD) unit at World Health Organisation (WHO) Laos, we gained various insights on the healthcare landscape of Laos, as well as ways to modify our interventions to cater to the Laotian culture, enhancing their effectiveness. Dr Josiah mentioned that infrastructure in Laos is inadequate and much needs to be improved structurally. He believes that our project is headed in the right direction and that our primary prevention based interventions will be the best way to combat NCDs in Laos. We were also recommended to approach the Ministry of Health (MOH) for more guidance operationally, as WHO is an advisory, focusing on monitoring.





CAPACITY BUILDING

"Observe"

Our team conducted robust monitoring and evaluation to measure the efficacy of our interventions. Through measuring the outcome indicators of our project, we were able to cross sectionally & longitudinally analyse the impact of our interventions before setting our directions. Our project uses a Knowledges, Attitudes and Practices (KAP) framework to monitor the efficacy of our interventions.

Zumba

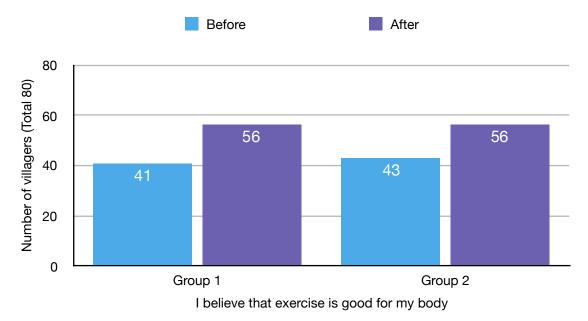
We assessed the villagers' changes in KAP towards exercise through Pre- and Post-Zumba surveys.

We found that after our session, the average rating of how much they liked exercising increased from 3.77 to 4.65 (out of 5). All of them expressed that exercising made them happy and majority mentioned that they will continue to exercise now that they have our posters and resistance bands.

The results are promising as it is indicative that our Zumba intervention is well-received and can be further adapted to ensure its sustainability.

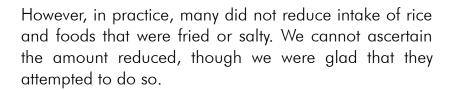
Sports carnival

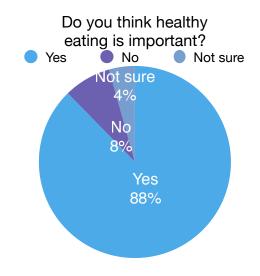
It was encouraging that the students were receptive to our educational efforts on promoting an active lifestyle, as more believed that exercise is important and beneficial to them, according to our survey results as seen in the chart below. In subsequent trips, we intend to broaden the reach of our carnivals to other villages. To track the effectiveness of our programme in future, we will be implementing a longitudinal survey to observe the behaviour and practices of the villagers.



Healthy eating

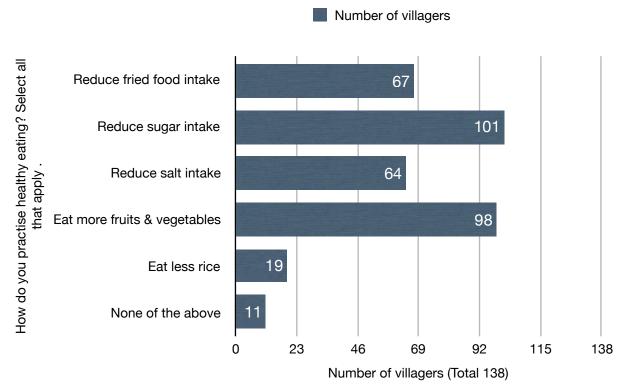
During our door-to-door surveys, we also asked the villagers about their eating habits to access their knowledge, attitudes, and practices towards healthy eating. Majority of those interviewed were women, who showed that they were aware of what healthy eating entails and its importance. Majority (68.3%) of surveyors mentioned that that they were making conscious efforts to eat healthier and are aware of the benefits of doing so.





We also found that fruits were hard to obtain, and were not commonplace in their diets. The villagers hence ate more vegetables, which were more accessible, with 84% of surveyors consuming at least 3 portions per day.

The women did also mention anecdotally that men did consume significantly larger portions of sticky rice so that they had sufficient energy for work, which usually involved manual labour. In future trips, our project may focus on empowering the women of the households to pass on their knowledge and practices to the men.



Smoking Cessation

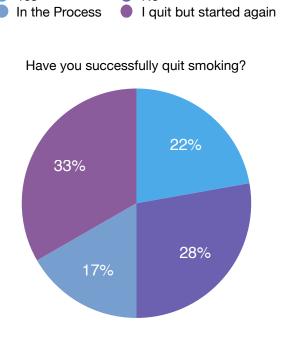
The surveys we conducted followed the 'Knowledge, Attitudes and Practices' framework. Through the surveys, we were able to better understand their smoking habits, and tailor our smoking cessation programme to suit their needs.

The results of the survey are as follows:

- None of the villagers were able to correctly identify all the harms of smoking.
- A high percentage of villagers were not well-educated on withdrawal symptoms, assuming that the dizziness they faced were indicative of high blood pressure, which deterred them from quitting.
- Many of the villagers were also unaware of common difficulties faced when trying to quit smoking.

The above establishes the lack of in-depth knowledge about their own smoking behaviour. In our future trips, we will focus on educating the villagers on the harmful effects of smoking, withdrawal symptoms and other potential problems that they will face during their journey of quitting smoking, and clarify any misconceptions that they might have.

Although a large majority (89.6%) of the villagers believe that quitting smoking is possible, slightly more than half (58.1%) feel that it is too late for them to benefit from quitting. In our future trips, we hope to change this mindset through testimonies from fellow villagers who have successfully quit smoking and other educational efforts. Additionally, we hope to empower them with the relevant skills and knowledge such that they can embark on their journey to a smoke-free lifestyle.



FUTURE DIRECTIONS

In our upcoming trip in May 2020, we hope to further our efforts in promoting accurate health education in the villages. We firmly believe that once armed with greater knowledge of a healthy diet and alternative lifestyle habits, Laotian villagers will be empowered to take ownership over their own health and have a significantly reduced risk of developing CDACC.

We hope to continue to inform the villagers of the long and short term impacts of chronic health diseases, and impart upon them ways to make a change before the symptoms manifest.

Smoking Cessation

We aim to revisit these villagers to check on their progress, and if necessary, guide them through any issues they may have encountered in their smoking cessation journey.

We also intend to provide a lesson plan in our next trip to educate the children on preventing smoking, on top of their national curriculum so that the school staff can conduct supplementary lessons.

During our door-to-door programme, we identified ambassadors with inspiring success stories that can empower other villagers to quit smoking. We are looking into creating a cinematic video and a brochure to make these ambassadors contactable to those that are experiencing difficulty in their quitting journey in hope that we can eventually create a smoke-free community.

Zumba

As our Zumba intervention was very well-received by the villagers, we hope to extend our Zumba intervention to schools as part of their physical education curriculum. This will help to cultivate the habit of regular physical activity since young which will be beneficial in the long-run.

We also intend to extend our resistance band initiative to other areas after receiving much positive feedback from the villagers in Pong Song village. Furthermore, we hope to introduce more exercise equipment so that the villagers will have more alternative ways to exercise. With a wider variety of physical activities offered, we seek to motivate the villagers to continue engaging in regular physical activity.

Sports Carnival

We are looking towards extending our sports carnival to other villages due to the excellent response from the children from Hint Tint Primary School. We will also be garnering support from the teachers to conduct regular physical education activities for the children, which we hope to enlighten and engage the children about keeping fit in the long run. Moreover, we believe that it will be beneficial to integrate key knowledge on healthy eating along with promoting physical activities so that the children can better appreciate how these factors come into play for a healthier lifestyle.

Healthy Eating

Majority of villagers recognise the importance of healthy eating and what constitutes a healthy diet. However, few actually act on that knowledge. Thus, in future trips, we aim to build on their pre-existing knowledge by implementing behavioural change models. These models are designed to help the villagers actively change their eating habits to healthier diets.

As we found that the villagers had difficulties obtaining fruits and fruits were not commonplace in their diets, we aim to adapt our interventions to cover foods that were more suited to the local context so that our methods are more applicable to the villagers.

Following up on our Healthy Eating Plates initiative that was rolled out in May 2019, we found out that more than half of the villagers did not use the plates as originally intended. This was because families usually ate in a shared "family dining" style where food groups were not pre-allocated to each family member on a plate. However, the Healthy Eating Plates were only effective if the food groups were already allocated to the individuals and each individual kept to the portions given. Thus, moving forward, we will be discontinuing the provision of healthy eating plates, and focusing more on changing their behaviours to target this issue.

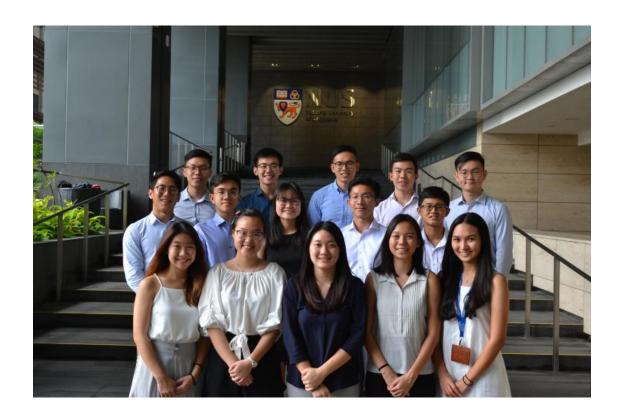
Capacity Building

As we have assessed the district hospital to be of relatively high capacity based on the information relayed to us, we will be focusing our efforts more on the clinics in the area that serve the villages under our purview and finding further avenues for collaboration between the district hospital and those clinics.

A significant partnership has also been forged with the renowned medical school in Laos strongly tied to a teaching hospital, University of Health Sciences (UHS), an important milestone in our mark towards sustainable healthcare provision for Laotian villagers. The Laotian medical students will be involved in Project NamJai as volunteer translators and will participate in all medical procedures and medical education we conduct. In the near future, we are optimistic that a sustainable healthcare system will be established between the villages and UHS. We are also looking into the possibility of greater collaborations with the students from the UHS that are required to complete a residential project as part of their curriculum, and this provides an opportunity for UHS to adopt Project NamJai.

Our priority in future trips would be to link up other local stakeholders to help provide them with diagnostic equipment that they require to operate daily. We believe that engaging local stakeholders is a more sustainable approach as compared to gifting them the equipment needed, as a local network would allow for the clinics to seek help and resources on their own, even after our project leaves the villages.

CLOSING & ACKNOWLEDGEMENTS



Project NamJai has concluded a fruitful Project Trip. We have gathered relevant and important information regarding the villagers' health and their needs in the 4 villages in VanKhy Municipality, Vientiane Province. We will continue to refine our education efforts in the area of cardiovascular disease prevention. In addition, many strong collaborations were forged and established in preparation for the 5th Project Trip in May 2020.

The Project NamJai committee would like to extend its sincerest gratitude to all partners and sponsors* for their generous support in helping to make our trips a success.

We will continue to work hard to improve the lives of Laotians.

Project NamJai Committee

^{*}Refer to List of Sponsors

LIST OF SPONSORS

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