



FINAL EVALUATION REPORT
OUTCOME HEALTH OF THE DGD 2017 - 2021 PROGRAM IN
CAMBODIA

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LIST OF ABBREVIATIONS

| | |
|-------|---|
| ANGCs | Actors of Non-Governmental Cooperation |
| CCA | Common Context Analysis |
| DMHSA | Department of Mental Health and Substance Abuse |
| DPHI | Department of Planning and Health Information |
| FGD | Focus Group Discussion |
| HMIS | Health Management Information System |
| IPD | Inpatient Department |
| JSF | Joint Strategic Framework |
| LC | Louvain Coopération |
| MH | Mental Health |
| NCDs | Non-Communicable Diseases |
| NGOs | Non-Governmental Organizations |
| PMD | Preventive Medicine Department |
| SSC | Social Services Cambodia |
| TPO | Transcultural Psychosocial Organization |
| TWG | Technical Working Group |
| VCD | Village Community Development |
| VHSG | Village Health Supporting Group |

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- Centre for Child and Adolescent Mental Health (CCAMH)
- Department of Mental Health and Substance Abuse (DMHSA)
- Preventive Medicine Department (PMD)
- Social Services Cambodia (SSC)
- Transcultural Psychosocial Organization (TPO)
- Mlup Baitong

We are also appreciative of key stakeholders who contributed useful information for the revaluation of the project. They came from the provinces of Kampong Cham, Tboung Khmum, and Kampong Speu, and represented provincial health departments, operational districts, referral hospitals, and health centers.

Finally, we would like to thank the project's final beneficiaries for providing us with vital information about the project's impact.

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SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS

INTRODUCTION:

Diagnosing and treating non-communicable Diseases (NCDs) were a relatively new program area in Cambodia. The government had yet to effectively address the problem due to a variety of factors such as appropriate training and strengthening of health system operations. Despite the existence of a health strategic plan for NCDs, the government continued to place a low priority on diabetes, hypertension, and mental health.

In 2016, four Belgian University NGOs decided to join forces and strengthen their synergies. Uni4Coop is a single Belgian Development Cooperation-funded program (DGD). The program was created using a context analysis that included feedback from all Belgian Actors of Non-Governmental Cooperation.

The five-year project (2017-2021) was developed and carried out by governmental and non-governmental partners. The project aimed to support Cambodian people, especially the vulnerable groups have access to the high-quality comprehensive Non-Communicable Diseases services (diabetes, hypertension, and mental health) through promotion, prevention, treatment and rehabilitation, contributing to a long and healthy life.

OBJECTIVES OF THE EVALUATION

The general objective of the final evaluation is to assess the performance achieved of all components of the mental health in the target population in relation to the “health outcome” objective with a view to informing LC, partners and donors and providing suggestions and recommendations for improving subsequent interventions.

More specifically, the purposes of this final evaluation are to:

- Verify, on the basis of the progress and performance of the project, whether the expected changes have been achieved by the end of the project;
- Analyze the following 5 usual CAD criteria: relevance, effectiveness, efficiency, impact and sustainability;
- Analyze the impact of the planned partnership relationships and participatory implementation of this project;
- Propose recommendations and suggestions for improvement (preparation of the second phase of the 2022-2026 strategic frameworks) regarding partnership relationships

METHODOLOGY OF THE EVALUATION

The project evaluation used a combination of quantitative and qualitative approaches. An inception report was created with the support of the LC team, which included data collection tools and a detailed work plan for project evaluation. A desk-based review of relevant project documents, in-depth interviews with implementing partners, two Focus Group Discussions (FGDs) with stakeholders and 4 beneficiary case studies (2 females) were used in the project evaluation data collection method.

RESULTS OF THE EVALUATION

Relevance

The project met the demands and needs of beneficiaries and helped achieve the priorities of stakeholders (authorities, partners, and donors). The project helped beneficiaries in improving their access to and quality of care for non-communicable diseases (diabetes, hypertension, and mental health) through promotion, prevention, treatment, and rehabilitation. According to the project report, from 2017 to 2021, 2792 new cases (65.97% females) accessed treatment from mental health services. The project was based on a Common Context Analysis (CCA) completed in 2015 and validated by Cambodia's Minister of Cooperation and Development. The project adapted its action to the intervention setting and its evolution. For example, because parents of children with disabilities had difficulty seeking appropriate therapy/intervention in psycho-social counseling, the project provided additional online training and refresher courses on psycho-education and case management, including the expected referral process to a more selected therapist. The project was created following national and international policies, as well as strategies and approaches. The project's objectives are broadly consistent with Joint Strategic Goal 2: Improve Access for All Vulnerable People and Contribute to Health Quality (A to F). It also contributes to SDG 3 of the Sustainable Development Goals (SDGs) of ensuring healthy lives and promoting well-being for all.

Effectiveness

The project's objectives were met because the majority of the activities were completed as planned. Some actions were delayed in execution due to the Covid 19 pandemic, but this did not affect the delivery of the result. To respect Covid-19 measures, some intervention adaptations were carried out: 1) therapy and counseling sessions were scheduled over the phone. CCAMH educated partners and local governments on the benefits of Tele-Mental Health activities; 2) online webinars were used to organize workshops, training, and meetings; and 3) online supervision activity was carried out. Most of the outputs were of good quality as reported by beneficiaries. The average level of satisfaction among the project's direct beneficiaries increased from 70% to 100% in 2021. The level of proper diagnosis for mental health illness by health staff increased from 30% (out of 60 cases as baseline) to 100%.

According to TPO's organizational capacity-building assessment in 2019, 95% of partners increased their capability in clinical knowledge and practice as well as monitoring and evaluation. The new NCD information system for diabetes and hypertension management is being implemented and tested in Battambang and Kampot provinces.

While the delivery of NCD services can continue to be improved, the project contributed and strengthened various points for all dimensions, including patients, communities, service providers, facilities, and policymakers, according to the holistic approach. Cambodia has declared its commitment to achieving Universal Health Coverage by 2025. Up to 2020, the Ministry of Health has established 450 mental health and substance abuse services nationwide. Since 2017, around 100,000 mental illnesses accessed public mental health services annually.

Efficiency

The necessary resources are mobilized and optimized throughout the project. The project was executed by governmental and non-governmental partners with expertise in Non-Communicable Diseases (diabetes, hypertension, and mental health), such as CCAMH, SSC, TPO, Mlup Baitong, DMHSA, and PMD. Because existing resources were utilized, the project was implemented at a low cost (human resources and administrative means). The project took advantage of the fact that there were less expensive solutions for the same goals. Because some operations were co-implemented, costs were reduced and time was saved. The majority of the funding was committed to supporting the institutional partners (PMD and DMHSA). The same resources were used to meet the project's specific needs. For example, the project discovered that parents of children with disabilities struggled to locate appropriate therapy/intervention in psychosocial counseling. The project then provided additional online training and refresher training on psycho-education and case management, as well as the expected referral procedure to a more qualified therapist. To optimize the process, minor changes were made to inputs such as budget and human resources. LC's mental health initiative expanded its support to three more health centers in 2019. The project discovered that parents of children with disabilities struggled to locate appropriate therapy/intervention in psychosocial counseling. In 2020, the DMHSA asked LC to help fund a community mental health pilot project, which is a new priority for them. Despite utilizing all of the project's resources, community-based activities were reduced in year 5 due to a lack of work allowance assistance for community members (VHSG and VCD).

In the project, various types of interaction and resource sharing were used, and duties and tasks were assigned to LC and its partners in the most efficient way feasible. Six partners managed the project, each with their own set of duties and obligations to meet the project's objectives. LC has scheduled individual meetings with several NGOs to learn about their projects, project strategies, and areas of competence in the fields of mental health, diabetes, and high blood pressure. Interactions between non-governmental partners and the DMHSA were not so productive in terms of information sharing and responsibility because of limited networking. The project explicitly established the synergy for specific actions. The roles and responsibilities of partners are based on their experience and responsibilities by the partnership strategy. However, due to a lack of a coordination mechanism, the link between partners and partners at the community level was not as strong as it could have been.

However, in terms of information sharing and accountability, interactions between non-governmental partners and the DMHSA were less beneficial. It is believed that this department has systemic administrative barriers that prevent partners from functioning and carrying out field activities. Increased communication and networking would improve the project's intervention. Barriers to effective collaboration include, for example, LC and partners' inability to connect with and receive paperwork from DMHSA.

Impact

The project helps Cambodians, particularly vulnerable groups, in gaining access to high-quality mental health services that contribute to a long and healthy life. During the 5 years, the total number of new mental health cases in adults who accessed the health facilities was 2792 (65.97% were females). The project's gender-related measures were fully implemented. They are more aware of prevalent mental diseases specificity by gender and/or age including depression and anxiety and are more likely to seek therapy and speak with health professionals. For instance, 65.97% of females received mental health services. LC made significant contributions to the improvement of the public health system at both the national and local levels by providing technical assistants, facilitation, networking and budget support.

LC was able to raise issues from the field, promote relationships with staff and diverse partners at the national level, and participate in policy, guidelines, and strategic development. LC assisted PMD in setting up a database system and training them on how to manage, use, analyze, and report data.

The study and research results were produced in collaboration with TPO, CCAMH, and universities such as UCL, ITM, and the IOM organization. The results of these studies were shared with government counterparts, development partners, and other interested parties. LC partners attended the provincial-technical working group for health (Pro-TWGH) to present project achievements and share experiences. Capacity building was done through training, coaching, and follow-up support. There was a relationship with Mlup Baitong, which assisted people with mental health issues and their families to begin revenue-generating activities and other agricultural operations. The Social Services of Cambodia (SSC) provided community social workers with training on a variety of mental health topics. Volunteers for children's development (VHSGs) received training and follow-up support from CCAMH.

Sustainability

The project's sustainability strategy was well defined. A wide range of national and local partners and stakeholders contributed to the action's long-term viability. Different dimensions of sustainability have been defined and implemented by partners in terms of intervention impact, and technical, financial, and social sustainability. This intervention had met the populations' identified needs, and/or the project's activity had been transferred to other stakeholders who could continue it. The project helped to improve district-level management of the public health system. It also increased the acceptance of mental health issues, both among family members and professionals. In the third year, the project evaluated technical staff such as doctors and nurses to see if they have all the necessary skills and knowledge to do their jobs properly. The initiative provides technical and financial support to MH health services at referral hospitals and health services. According to the project report, the percentage of doctors who correctly diagnose mental diseases has climbed to 86.7%, which is a final target (55%). The attitude of social workers, who serve as a link between communities and health care facilities, is strengthened.

However, more time and greater synergy are required to achieve the project's long-term goal of the project. Even if some partners operate independently as LC is phased out, they still require LC financial assistance to adequately incorporate NCD into government programs.

RECOMMENDATIONS

- 1) A few patients stated that their families referred them to Khmer traditional healers because they were unaware that mental health services were available at the center level. Because medicines for their problems were not available at their health centers, some patients preferred to receive services at referral and provincial hospitals. Therefore, community awareness-raising activities should be expanded based on IEC's NCD prevention materials and available resources. The app system for NCD prevention/management should be maintained indefinitely.
- 2) Despite receiving training on mental health problems, VHSG and VCD members requested additional training on how to identify and provide basic counseling skills. In addition, although initiative training was provided for mental health training to health center personnel, the majority of health center staff requested refresher training on the treatment of mental health problems for specific diagnoses. They also requested additional counseling skill training sessions.
- 3) Due to a lack of trained staff in mental health services, some health centers were limited in their ability to provide comprehensive mental health therapy to patients. Training sessions should be provided to more health center staff.
- 4) Some district referral hospitals did not refer patients to health centers for follow-up care. The project's next phase should focus on follow-up referral and care coordination between district referral hospitals and health centers. This will be reduced transportation costs, and medical costs and save time for patients.
- 5) Medicines for people with mental illnesses were sometimes unavailable due to stock shortages. As a result, health care facilities typically only provided them with medications for two weeks to store some for future patients. Some drugs for people suffering from psychotic disorders were not available through the healthcare system. Therefore, PHD and OD should anticipate a better medication supply strategy for patients with mental illnesses, as some medications are inaccessible owing to stock shortages. Furthermore, some psychotic disorder medicines were not available in the healthcare system.
- 6) Due to other priority needs for implementing a pilot project on community mental health services in Kampong Speu, the development of DMHSA's database was postponed. The next phase of the project should collaborate with DMHSA to develop a database on MH that can be used as evidence-based information for policy advocacy, which is critical to assisting in public health management. Furthermore, decision-makers should consider the process of clinical improvement, the expansion of healthcare systems, and information-sharing channels.
- 7) LC should continue to strengthen the coordination mechanism among the partners (TPO, CCAMH, SSC, Mlup Baitong) and national level by developing a long-term strategy.
- 8) Integration of child and adolescent mental services at the referral hospital and health center level due to a lack of knowledge and clinical skills for children on how to recognize a problem and help them. Community-based activities were identified as critical for connecting and referring people with mental health problems to service providers. Work allowance assistance for community members (VHSG and VCD) is required to carry out this action. The project should advocate and lobby the government to fund these activities.

- 9) A screening tool for the expansion of mental health services in Cambodia was developed, so the valuation of a screening tool for the expansion of mental health services in Cambodia is needed.
- 10) Reinforcement of the cross-referral of patients toward adequate mental health and rehabilitation services. Training of government health staff on referral mechanisms, the concept of mental health, and the rights of people with disabilities. The quarterly coordination meeting between TPO social workers and physical rehabilitation center social workers is organized.

1. INTRODUCTION

1.1 Context of the intervention

Treating non-Communicable Diseases (NCDs) were a relatively new program area in Cambodia, and the government had yet to effectively address the problem due to a variety of factors, including a lack of financial and human resources, as well as the low level of medical knowledge, and practice of medical professionals providing these services. Despite the existence of a health strategic plan on NCDs, the government continued to place a low priority on diabetes, hypertension, and mental health, and the implementation of these services at the level of referral hospitals, health centers, and the community level, has faced some challenges.

Concerning the epidemic of non-communicable diseases facing Cambodia, this cannot be solved by the Ministry of Health alone and requires strong collaboration and support from Non-Governmental Organizations (NGOs) and other development partners. They need to work together to implement the actions to strengthen the comprehensive chronic care system including the high quality and accessibility of the service for NCDs, an initiative of a holistic model of mental health care and support, clinical guidelines & policy development, and relevant evidence based-research to reduce the burden of these preventable and costly diseases in Cambodia.

In Cambodia, medical practitioners' education and clinical training were insufficient for providing high-quality diagnoses and treatment of mental health. Furthermore, the central medical store's supply of pharmaceuticals for the treatment of various ailments was mainly insufficient, and people were not sufficiently informed on disease prevention and treatment.

The inability of the poorest to pay for health care and rehabilitation services, the difficulty of physical access, limited information about aid schemes, some traditional beliefs, and socio-cultural practices, and a lack of faith in public health care facilities are all factors that limit access to health care and rehabilitation services.

In 2016, four Belgian University NGOs (ECLOSIO formally named ADG-Aide au Développement Gembloux), FUCID, Louvain Coopération (LC), and ULB Coopération) decided to join forces and strengthen their synergies by forming the entity "Uni4Coop" and cooperating on the implementation of a single Belgian Development Cooperation-funded program (named DGD in this file). Two of the four Belgian universities' Non-Governmental Organizations (NGOs), ECLOSIO and LC, operate the Uni4Coop Program in Cambodia. The program was created using a context analysis that included feedback from all Belgian Actors of Non-Governmental Cooperation (ANGCs) working in Cambodia. It was in line with a Joint Strategic Framework (JSF) that outlined similar aims and goals for all of DGD's sectoral interventions. The Context Analysis examines the state of Cambodian civil society, decentralized authorities, and government institutions, as well as the factors that contribute to their strengthening. It resulted in the identification of several actors who could intervene in the growth of the sectors, such as partnerships, synergies, and complementarities.

In Cambodia, the Uni4Coop initiative is addressing two sectors: health and agriculture/rural economy; ECLOSIO is working in the agriculture and economic sector, while LC is working in both the health and agriculture and economic sectors. The Uni4Coop initiative is broken down into Specific Objectives per country, sector, and non-governmental partners.

1.2 Objectives of the intervention

The non-communicable disease (NCDs) Care Support Project was implemented by governmental and non-governmental partners. The project's Specific Objective (#3) over the five years (2017-2021) was as follows:

| Specific Objective | Partners, synergies/collaborations |
|---|---|
| Cambodian people, especially the vulnerable groups have access to the high quality of comprehensive Non-Communicable Diseases services (diabetes, hypertension, and mental health) through promotion, prevention, treatment and rehabilitation, contributing to a long and healthy life. | <p>Partners:</p> <ol style="list-style-type: none"> 1. Centre for Child and Adolescent Mental Health (CCAMH) in Kampong Cham and Tboung Khmum province 2. Department of Mental Health and Substance Abuse (DMHSA) in Kampong Cham and Kampong Speu provinces 3. Preventive Medicine Department (PMD) in Phnom Penh, Battambang and Kampot provinces 4. Social Services Cambodia (SSC) in Tboung Khmum province 5. Transcultural Psychosocial Organization (TPO) in Kampong Cham and Tboung Khmum provinces. 6. Mlup Baitong in Kampong Cham province <p>Synergies/collaborations:</p> <p>UCL medical students, Humanity & Inclusion, VVOB, ITM, Belgian ANGCs working in Cambodia The University of Washington.</p> |
| <p>Results:</p> <ul style="list-style-type: none"> ● Result 1: To contribute to the promotion and the strengthening of NCD policy, guideline development and advocacy both at the national and sub-national level ● Result 2: To strengthen information evidence-based, research and other capitalization on MH, DM and HTN ● Result 3: To strengthen the quality and accessibility of NCD services (MH, DM and HTN) for Cambodian people, including vulnerable groups, people with disability and old people. ● Result 4: To establish and strengthen community-based MH, DM, HTN care and support to protect and promote a healthy diet and MH well-being in the Cambodian population ● Result 5: To strengthen the capacity of partner organizations to improve management and technical skills as well as to ensure their sustainability. | |

1.3 Activities deployed during this intervention

- Development of research, studies, and assessments with presentation and implementation of the recommendations.
- Database set up (patient's records, health performance indicators, and active screening to identify the presence or absence of risk factors) and training support on database management for PMD and DMHSA
- Meetings and lobbying with PMD & DPHI (Department of Planning and Health Information) to integrate more relevant data on NCD into the HMIS system.
- Medical staff training, mentoring and coaching, and follow up support (in referral hospitals and health centers)
- Health education, psycho awareness-raising/campaigns, and fieldwork among villages and families in the communities.
- Training of village volunteers, volunteers for children development, community social workers, and commune council for women and children
- Set up self-help groups for mental health and parenting groups targeting small-scale farmers and rural families affected by the increasing costs of NCDs.

2. OBJECTIVES OF THE EVALUATION

2.1 General objective

The general objective of the final evaluation is to assess the performance achieved of all components of the mental health in the target population in relation to the “health outcome” objective with a view to informing LC, partners and donors and providing suggestions and recommendations for improving subsequent interventions.

2.2 Specific objectives

More specifically, the purposes of this final evaluation are to:

- Verify, on the basis of the progress and performance of the project, whether the expected changes have been achieved by the end of the project;
- Analyze the following 5 usual CAD criteria: relevance, effectiveness, efficiency, impact and sustainability;
- Analyze the impact of the planned partnership relationships and participatory implementation of this project;
- Propose recommendations and suggestions for improvement (preparation of the second phase of the 2022-2026 strategic frameworks) regarding partnership relationships

3. EVALUATION METHODS

3.1 Tools and Methods

To answer the evaluation's aims, the project evaluation employed mixed methods, quantitative and qualitative approaches. Before collecting field data, an inception report was created with LC, which included data gathering tools and a work plan.

- **Desk-based review:** The project's documents have been reviewed, including the mid-term assessment report. In addition, technical reports such as national and international guidelines, policies, and strategies for Non-Communicable Diseases (NCDs) and Mental Health were reviewed.
- **In-depth interviews with implementing partners:** The following implementing partners were interviewed online: LC, CCAMH, DMHSA, PMD, SSC, TPO, and Mlup Baitong.
- **In-depth interviews with relevant stakeholders:** Face-to-face interviews with key stakeholders were done. The provincial health department, operational district, referral hospital, and health center representatives from Kampong Cham, Tboung Khmum, and Kampong Speu provinces were interviewed.
- **Two Focus Group Discussions (FGDs) with stakeholders were held,** one for each province (Kampong Cham and Tboung Khmum). Each group had six participants (three females), including representatives from the Village Health Support Group (VHSG), Village Community Developments (VCDs), Community social workers, and patients.
- **Four beneficiary case studies were collected.** Participants who benefited from the project were interviewed to confirm the project's impact (2 female).

3.2 Team and organization of data collection

Team leaders conducted a half-day meeting to review all data-gathering techniques, including interview skills, data recording, and transcribing and summarizing each interview. Two national consultants (1 facilitator and 1 notetaker) conducted the interview, both of whom have a background and extensive expertise in project evaluation and data gathering.

3.3 Data process and analysis

Processing qualitative data: The interviewer and interviewee's words were precisely replicated in transcription, as well as contextual interview factors that were critical to interpreting the encounter.

When making an audio recording was not practicable, another option was on-the-spot transcription. In this sort of transcription, thorough notes are taken during the interview and then completed immediately afterward to clean up and explain the discourses acquired.

On-the-spot note-taking: During the interview, the interviewer took notes. The interviewer, on the other hand, listened to the interview recording as soon as possible to:

- Ensure that essential data was transcribed,
- Clarify/adjust certain information, or
- Complete the transcription by including many precise verbatims.

Data analysis: To achieve the project evaluation objective, analysts used a desk examination of existing project documentation, descriptive statistics, and theme qualitative analysis.

4. RESULTS OF THE EVALUATION

4.1 Relevance

4.1.1 Needs identification:

The population's problems and needs for Non-Communicable Diseases were identified by different Belgian ANGCS (Actors of Non-Governmental Cooperation) engaged in Cambodia and analyzed with different needs of different types of beneficiaries. A Cambodian Joint Strategic Framework (JSF) is developed based on a Common Context Analysis (CCA) completed in 2015 and validated by Mr. De Croo, Cambodia's Minister of Cooperation and Development, at the end of December 2015. The CCA involved various participants, to analyze the current strategic documents, relevant actors, context-related risks, intervention domains/sectors and approaches, identification of opportunities for complementarity and synergies between organizations, and the role of local partners.

4.1.2 Need response:

The activities of the project have been identified among the target group and responded to the population's problems and needs on Non-Communicable Diseases, particularly mental health problems according to JSF. In Cambodia, the Uni4Coop program focuses on two areas: health and agriculture/rural economy; ECLOSIO focuses on agriculture and economics, while LC focuses on both health and agriculture and economics. Health thematic initiative focused on non-communicable disease (NCD) care support and was executed by both government and non-government partners.

4.1.3 Quality of the intervention strategy:

The project evaluation shows that the project's objectives were met thanks to the well-funded interventions strategy and activities, which included ensuring that Cambodians, particularly vulnerable groups, had access to high-quality Comprehensive Non-Communicable Diseases services (diabetes, hypertension, and mental health) through the promotion, prevention, treatment, and rehabilitation, contributing to a long and healthy life. This project contributed to the quality of health and better access for vulnerable patients. According to the project report, 2792 new cases (65.97% females) accessed treatment from mental health services from 2017 to 2021.

4.1.4 Coherence with national and international policies, and strategy and approaches:

The intervention of the project was consistent with national and international policies, strategies, and approaches. This NCD project was developed in partnership with local partners, national and subnational government colleagues, and the general public. It focuses on diabetes, hypertension, and mental health issues in Cambodia. The project's goals are generally in line with Joint Strategic Goal 2: Improve Access for All Vulnerable People and Contribute to Health Quality (A to F). It also contributes to the Sustainable Development Goals (SDGs) objective 3 of ensuring healthy lives and promoting well-being for all people of all ages. Furthermore, it contributes to the achievement of the SDG's first goal, which is poverty reduction. In addition, it coincides with the Ministry of Health's health development Goals 3 and 4, which call for a decrease in non-communicable disease morbidity

and mortality, as well as a decrease in the negative impact on human health caused by major public health concerns.

4.1.5 Adapting the project's intervention to meet the needs:

The existence and quality of beneficiaries' demands and problems were monitored and addressed through project intervention adaption. However, the interventions generally followed the priorities of the target group, partners' organizations, and donors.

- According to the project report, because parents of children with disabilities had difficulties when seeking appropriate therapy/intervention in psycho-social counseling, the project provided additional online training and refresher courses on psycho-education and case management, including the referral process to the more selected therapist, as expected.
- The existing database system for the Preventive Medicine Department (PMD) was assessed and defined as a new database system that was developed in 2020 with financial support from the World Diabetes Foundation (WDF) through WHO and co-financing from ARES through ITC and DGD, taking into account specific functionalities that correspond to health management related to diabetes and hypertension in Cambodian patients. In April 2020, LC signed a project contract with the World Health Organization (WHO) and the Institute of Technology of Cambodia, intending to conduct an assessment and develop a new database system for LC's government partner PMD.
- Initially, LC and its partners planned to work in two hospitals and six health centers. In response to the needs, the Operational District Director and the Health Center Director requested to expand to three more health centers in 2019. LC and its partners work in two hospitals and nine health centers including Chamkar Leu and Oraing Ov Referral Hospitals, Chamkar Andoung, Chamkar Kaosou, Chey Yo, Speu, Bos Knor, Preah Thiet, Tnal Keng, Damril and Tuol Sophy Health Centers in the operational districts of Chamkar Leu and Oraing Ov respectively in the provinces of Kampong Cham and Tboung Khmum.
- In 2020, the DMHSA has requested LC to support the pilot project on community mental health, which is a new priority for them. In response to this request and new priority, LC together with DMHSA has developed a pilot project on community mental health and a budget plan from January to December 2021. This pilot project is implemented by DMHSA with monitoring and follow-up visits from LC staff in 2021.

4.2 Effectiveness

4.2.1 Achievement of results:

The project's objectives were met because the majority of the activities were carried out as planned. Due to the Covid-19 pandemic, some actions were delayed in execution, although this had no impact on the delivery of the result.



- **Result 1 (R1): To contribute to the promotion and the strengthening of NCD policy, guideline development and advocacy both at the national and sub-national levels.**

This result was achieved with a 92% completion rate of 3 planned activities. This explains that 11 of the 24 Pro-TWGH sessions for 2021 were canceled due to the Covid 19 pandemic. TPO personnel attended 77% of Pro-TWGH meetings (annual) on average.

- **Result 2 (R2): To strengthen information evidence-based, research and other capitalization on MH, DM and HTN**

95% of the 6 activities were implemented as planned. The project has completed 18 research topics in five years overreaching the target (10 research topics). In addition, 8 research topics have been presented at local and international conferences and other events (annual) from 2019 to 2021. Meetings and lobbying with PMD & DPHI (Department of Planning and Health Information) to integrate more relevant data on NCD into the HMIS system were implemented. The database was created solely with the PMD, rather than with the DMHSA, as planned at the start of the project. The DMHSA's initial priority for assistance was the creation of a database system. However, in year 4, they reported that they priority on community MH more than the database system. They decided to run a pilot project on community MH with LC.

- **Result 3 (R3): To strengthen the quality and accessibility of NCD services (MH, DM and HTN) for Cambodian people, including vulnerable groups, people with disability, and old people.**

All (5) activities were completed, and the project's results were achieved as expected. According to the project report, health personnel increased their rate of proper diagnosis of mental health illnesses from 55% to 100% by 2021. By the end of 2021, 100% of patients reported being satisfied with the service provided by the project-supported OPD mental health staff. In terms of the level of satisfaction, 69.8 % said they were extremely satisfied, while 30.2 % said they were moderately satisfied. TPO found that all doctors and nurses working in mental health services were more empathic and optimistic with patients and their families than those working in other departments of the same hospital in 2021.

- **Result 4 (R4): To establish and strengthen community-based MH, DM, HTN care and support to protect and promote a healthy diet and MH well-being in the Cambodian population**

98% of 12 activities under result 4 were implemented as planned while project results were achieved accordingly. During the 5 years, a total of 171 cases (66 males, 105 females) were referred by the Village Health Supporting Group (VHSG). In addition, a total of 51 cases (31 males, 20 females) were referred by OPD staff to other services. In total, there were 222 referrals done by VHSG and nurses. According to the findings, positive attitudes have increased from 11.84 % to 31.07 %, while negative attitudes have decreased from 71.47% to 38.54%. It was noticed that in 2021, the interview between pre-test and post-test did not have enough time because Covid 19 pandemic disrupted the project's community work, home visits, and community campaign.

- **Result 5: To strengthen the capacity of partner organizations to improve management and technical skills as well as to ensure their sustainability.**

85% of the 3 activities were completed as scheduled. Some activities were delayed and canceled; however, this delay did not affect deliverable outputs. First, Standard Operating Procedure (SOP) on Community Mental Health which is informed by one separate pilot study that took place in collaboration with LC and the DMHSA in Kampong Cham and Kampong Speu from January 2021 until 31 December 2021. SOP is a training manual that utilizes a training-of-trainers approach, such that participants can train colleagues at health facilities and community-based organizations. This SOP is finalized and it will be printed in 2022 after layout design. Second, different from what was originally planned, the database was built entirely with the PMD and not with the DMHSA. The development of a database system was the DMHSA's main priority for assistance. In year 4, they suggested that community mental health was a higher priority than database development. A pilot project on community mental health was launched in 2021 in Kampong Speu. The delay in some activities did not impact the expected result.

According to TPO's organizational capacity-building assessment in 2019, 95% of partners increased their capability in clinical knowledge and practice as well as monitoring and evaluation. The new NCD information system for diabetes and hypertension management is being implemented and tested in Battambang and Kampot provinces.

4.2.2 Quality, access, and utilization of services provided:

Most of the outputs were of good quality. Before 2020, patient satisfaction questionnaires were completed by OD monitoring staff. After the project stopped incentive support, social workers completed this questionnaire in 2021. According to TPO's satisfaction survey on mental health services provided by health personnel, the average level of satisfaction among the project's direct beneficiaries was increased from 70% (baseline) to 100% in 2021. The level of proper diagnosis for mental health illness by health staff increased from 30% (out of 60 cases as baseline) to 100% in 2021.

To ensure beneficiaries' access, quality, and utilization of services, the project applied comprehensive approaches (patients, communities, service providers, facilities, and policymakers). This approach was to determine the degree of connectivity between the primary, and secondary levels. While some program aspects can continue to be improved for the next phase of the project, the project contributed and strengthened various points for all dimensions, including patients, communities, service providers, facilities, and policymakers, according to the holistic approach. First, patients' sociocultural attitudes, knowledge, and perceptions about mental illness and treatment improved. Second, more community involvement and support for mental health services. Providers of mental health care improved their knowledge and competence, motivation, temporal availability, empathy, and communication with their patients. For mental health services, health facilities have more medicines and equipment available, as well as qualified personnel, continuity, and comprehensiveness of care. In addition, the roles of policymakers are more supportive of mental health services in terms of the legislative framework and resource allocation.

Cambodia has declared its commitment to achieving Universal Health Coverage by 2025. This provides a strong opportunity to expand integrated mental health services to increase the geographically health care coverage for people with mental illness. Up to 2020, the ministry of

health has established 450 mental health and substance abuse services nationwide. Since 2017, around 100,000 mental illnesses accessed public mental health services annually.

The following were reported by implementing partners and key stakeholders.

| Comprehensive approaches | Strengths | Needs to be improved |
|--|---|--|
| Patients: sociocultural beliefs, knowledge, and perception of the disease, and the possibilities of existing treatments. | - The majority of patients indicated that mental health services were available in their community and that they could easily obtain them. The majority of patients agreed that the availability of mental health services at health centers was beneficial, and they did not have to spend a lot of money to get those services at district and provincial referral hospitals. its Cambodia is primarily Buddhist, with 80% of the population practicing Theravada Buddhism, 1 % practicing Christianity, and the majority of the remaining population practicing Islam, atheism, or animism. The majority of patients confirmed that they were treated with respect when seeking mental health services, and they were pleased with the services provided by their community members (VHSG and VCD), such as identification, basic counseling, and referrals. | - Two patients (2 females) and one family member (1 male) were unaware of the mental health care provided at the health centers. - Only two patients (1 female and 1 male) stated that they preferred to receive services at referral and provincial hospitals because medicines for their problems were not available at their health centers. - Only one patient (1 female) stated that before arriving at the hospitals, she was referred to Khmer traditional healers by their families because she was unaware that mental health services were available at the center level. - Patients believed that their mental illnesses were uncommon and unusual in the community when compared to other illnesses. When they were diagnosed with this ailment, they worried about what would happen to their lives in the future. - A lack of understanding of how to prevent mental health problems and other NCD diseases. Some patients refused to receive mental health services because they did not want others to know about their mental illness. |
| Community: participation, Community support | - VHSG, VCD members, and community social workers received mental health training and gained | - Although the majority of VHSG and VCD members had received training on mental health issues, they wanted additional training on how |

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| | <p>confidence in their ability to raise awareness of mental health services, identify people in villages who have mental health problems, and refer them to mental health services at health centers. They were committed to assisting people with mental illnesses because it makes them happy to help people with mental illnesses. "We are happy and proud of our work," they said. We are a part of the community."</p> | <p>to identify and provide basic counseling skills.</p> <ul style="list-style-type: none"> - A financial incentive system was introduced to support staff working in mental health service delivery to motivate them and improve their work performance. In the fourth year of the program, this system was cut since the number of patients for mental health services increased, which generated an increase in hospital revenue through the user fee system. -Only one health center staff (1 female) said that a few cases of children with mental illnesses were brought to the health center's care. This could be due to a lack of knowledge about how to recognize a problem and help with the necessary medicines and services for children. -Refresher training on the treatment of mental health problems for specific diagnoses was requested by the majority of health center staff. They also demanded more counseling skill training sessions. |
| <p>Care providers: Knowledge & competence, Motivation, Temporal availability, Empathy, and communication.</p> | <ul style="list-style-type: none"> - The initiative provided mental health training to the health center personnel, and they were able to provide basic interventions (such as counseling and prescription of medication) to people with mental illnesses, as well as provide referrals if they couldn't deliver the intervention. <p>Most health center staff confirmed that patients were pleased with the health center's service provider, including communication and</p> | |

| | | |
|--|---|---|
| | demeanor according to the satisfaction survey. | |
| Health facilities and cares organization: Availability of medicines and equipment, availability of qualified personnel, continuity & comprehensiveness of care (consultation, lab, referral, follow-up, management of complications), coordination of care between stakeholders, use of information system | <ul style="list-style-type: none"> - Health centers offered a wide range of medications for people suffering from mental illnesses. - Activities such as supervision and coaching helped to increase capacity in the treatment of mental health problems. <p>The role of the VHSGs, VCD, CSW, and Community Health Management Committee was crucial in informing people about the availability of mental health services at the primary care level.</p> | <ul style="list-style-type: none"> - According to a health center staff report, some health centers were limited in their ability to provide comprehensive mental health therapy to patients due to a lack of trained staff in mental health services. - Follow-up cases at home were likewise infrequent. - Two health center employees report that referrals of patients were not working properly, even though a referral guide was in place. Some health centers (district referral hospitals) did not refer patients to health centers for follow-up care. - During the follow-up sessions, the staff did not undertake a thorough assessment of the patients. They only gave medicine and no counseling because they needed to see more patients. - There were times when medicines for people with mental problems were unavailable due to stock shortages. As a result, health facilities typically only provided them with the medications for two weeks to store some for other patients. Some drugs (Ametrine and Diazepam) for people with psychotic disorders were not available at the healthcare level. |
| Dimensions related to roles of policymakers: Legislative Framework, Resources Allocation | <ul style="list-style-type: none"> - Mental health services were available at the health facilities, which was in line with the Ministry of Health's objective to bring services | <ul style="list-style-type: none"> - One concern was that the data or information on child and adolescent mental health problems were not yet incorporated into the Health Information System (HIS). As a result, the project would need to |

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| | <p>closer to people in their communities.</p> <ul style="list-style-type: none"> - Mental Health Services are integrated into the MPA and CPA guidelines. - MoH/DMHSA is involved in the management and operation of mental health projects in Kampong Speu and Kampong Cham. <p>OD is involved in mental health training as well as the monitoring and evaluation of RH and HC staff's work.</p> | <p>demonstrate the evidence to request a system change from the Ministry of Health in the future, as CCAMH staff have been requested to attend a provincial technical working group on health meetings.</p> <ul style="list-style-type: none"> - Cooperation between the Ministry of Health and NGOs remains limited, particularly at the national and provincial levels. |
|--|---|--|

4.2.3 Consideration of, and adaptation of the strategy to, context constraints and changes:

The difficulties were recognized and tracked. The project was suitably adapted to context constraints and changes. The pandemic of Covid-19 had an impact on the project's implementation and outcome. For example, because of Covid-19 restrictions in the targeted areas (Chamkar Leu and Orang Ov), the number of new mental health cases (adult and children) were reduced by 15% in 2021 (from 660 to 564 patients), and some health personnel tested positive for Covid-19.

To respect Covid-19 measures, some intervention adaptations were carried out:

- Therapy and counseling sessions were arranged via phone call. CCAMH introduced partners and local governments to the advantages of the Tele-Mental health activities.
- Workshops, training, and meetings were organized via online webinars.
- Online supervision activity was conducted.

4.3 Efficiency

4.3.1 Resource utilisation in the project

The resources (human, financial, logistical, and project management) were used optimally. The project used the appropriateness of human resources to project objectives. The project was executed by governmental and non-governmental partners with expertise in Non-Communicable Diseases (diabetes, hypertension, and mental health), such as CCAMH, SSC, TPO, Mlup Baitong, DMHSA, and PMD.

The project made use of administrative resources and managerial capabilities that were appropriate for the project's goals (including meetings, opportunities for exchange, monitoring tools, etc.). The implementing partners' budget was mostly utilized to support staff and operating costs. The majority of the operating costs were related to training. The funding for CCAMH and SSC was mostly used to support operating costs, with a minor part of the budget going to support staff costs for monitoring and follow-up visits. During the Covid 19 pandemic, meetings and training were held via

the internet (online), which resulted in cost savings. Because existing resources were utilized, the project was implemented at a low cost (human resources and administrative means). Civil servants and community focal persons, such as VHSG, VCD, and community social workers, were in charge of implementing and monitoring the project. In years 4 and 5, some of the support for government counterparts was reduced. In addition, in year 5, the project did not set aside any funds for home visit activities.

The project took advantage of the fact that there were less expensive solutions for the same goals and that there were options that had more impact for the same money. For instance, although the project's location and objectives were the same, the implementation of the project did not overlap among the implementing partners. Because some operations were co-implemented, costs were reduced and time was saved. The consultant cost to help set up the database management system and for training, and support was charged for the majority of the funding that was committed to supporting the institutional partners (PMD and DMHSA), with the remainder going to project monitoring and follow-up visits.

The same resources were used to respond to the project's specific needs. The project discovered, for example, that parents of children with disabilities struggled to locate appropriate therapy/intervention in psychosocial counseling. The project then provided additional online training and refresher training on psycho-education and case management, as well as the expected referral procedure to a more qualified therapist. In addition, the initiative expanded its support to three more health centers in 2019 in response to the requests of the Operational District Director and the Health Center Director.

Small changes were made relating to the inputs used to optimize the process. Most adjustments were made to the interventions. A shift in priority has been determined in collaboration with the Department of Mental Health and Substance Abuse (DMHSA). In 2020, the DMHSA has asked LC to help fund a community mental health pilot project, which is a new priority for them. In response to this request and new priority, LC and DMHSA have prepared a community mental health pilot project and funding plan for 2021. DMHSA conducted this pilot project in 2021, with LC staff monitoring and following up. Even if all of the project's resources were used, community-based activities were reduced in year 5 due to a lack of work allowance assistance for community members (VHSG and VCD).

4.3.2 Interaction/Resource sharing

Different types of interaction and resource sharing were used in the project, and duties and tasks were allocated between LC and its partners in the most efficient way.

Six partners managed the project, each with their own set of duties and obligations to meet the project's objectives. 1) TPO is very knowledgeable about community mental health services for adults and has a wide range of skills in clinical mental health services and community mental health services. 2) SSC is an expert in social worker training, a critical component of a comprehensive approach to NCD care. 3) CCAMH specializes in children and adolescents with mental health issues and takes a holistic approach to disability. 4-5) DMHSA and PMD are governmental agencies and are

essential to the project's long-term sustainability. 6) Mlup Baitong played a role in facilitating training and providing support to beneficiaries who were referred by health partners and the Referral hospital or HC for livelihood activities. Mlup Baitong provided small-scale farmers beneficiaries of LC's Food & Economic Security project to targeted beneficiaries.

At various stages of the project, all partners were involved in the implementation of program strategies. LC has scheduled individual meetings with several NGOs to learn about their projects, project strategy, and areas of competence in the fields of mental health, diabetes, and high blood pressure, as outlined in the project and partnership agreements. LC also met with institutional partners to discuss their needs and potential partnership. The partners' specific strategy is determined based on their individual experiences and areas of competence. The support and their tasks are defined individually at the national, provincial, operational district, and community levels, depending on the nature of their activity.

However, in terms of information sharing and accountability, interactions between non-governmental partners and the DMHSA were less beneficial. It is believed that this department has systemic administrative barriers that prevent partners from functioning and carrying out field activities. Increased communication and networking would improve the project's intervention. Barriers to effective collaboration include, for example, LC and partners' inability to connect with and receive paperwork from DMHSA.

4.3.3 Synergies and cooperation

The synergy for specific actions was explicitly established in the project. Partners' roles and responsibilities with their experience and responsibilities following the partnership strategy. However, due to a lack of coordination mechanisms, the link between partners and partners at the community level was not as satisfactory as it should be. Partners reported that they requested regular partner meetings. It is recommended to be established partner meetings and meet regularly (one per month).

- **Synergy 1: Local partners**

Amongst the local partners, they joined research focusing on lessons learned from the implementation of a comprehensive community MH approach in Kampong Cham and Tboung Khmum. Sharing of educational materials such as leaflets and posters and health promotion messages was implemented.

According to the report, 18 research topics were completed in five years and overreached the target (10 capitalization topics). In addition, 8 research topics have been disseminated at national and international conferences and other events (annual) from 2019 to 2021.

- **Synergy 2: Children**

CCAMH facilitated community outreach activities for further screening of children with mental health troubles and to refer them to appropriate services. With SSC, the project provided follow-up

support to community social workers who were responsible to provide education and counseling to women and children affected by different forms of violence.

For example, CCAMH conducted health screening, early detection, and referral services to 432 children (202 boys and 230 girls) by 2021. 71 children with disabilities (30 boys, 41 girls) got home-based care, referrals, and follow-up. Furthermore, SSC provided clinical and social care to children in Tboung Khmum province who were victims of gender/domestic violence and sexual abuse.

- **Synergy 3: Universities**

With the cooperation of the Kampong Cham Provincial Health Department, ARES, University of Washington, and UCL, an average of 5 Belgian medicine students in their 6th or 7th year were placed to undertake clinical practice in the provincial hospital of Kampong Cham. The financial support from ARES to conduct a study in collaboration with ITC aimed to conduct an in-depth study on currently available e-health systems in Cambodia to provide recommendations for implementing a secured and integrated e-Health Information System used at the national level and deploying it. Due to some reasons such as DPM's needs, limitation of human resources, and budget, PMD decided to develop an NCD information system for the management of diabetes and hypertension with the technical support of LC's collaboration partner (ITC).

With the technical support from the University of Washington, a study was conducted to validate a screening tool for the expansion of mental health services in Cambodia.

Synergy 4: Disabilities

Humanity & Inclusion (HI) for the reinforcement of the cross-referral of patients toward adequate mental health and rehabilitation services; training of government health staff on referral mechanisms, the concept of mental health, and the rights of people with disabilities. There is also an opportunity to work with Humanity & Inclusion to improve cross-referral for people with disabilities seeking mental health services and to refer chronic mental health patients to rehabilitation centers. The quarterly coordination meeting between TPO social workers and physical rehabilitation center social workers is organized to provide feedback on the results of cross-referral.

Synergy 5: Education

VVOB, joint research in the assessment of children's learning issues and their relationship with potential psychosocial issues, and for developing a tool that can be used by the teachers at primary school to detect children with psycho-social problems and how to help them improve their learning.

Synergy 6: All Belgian ANGCs

A regular meeting with Belgian ANGCs in Cambodia is held to review the progress of synergies and complementaries. LC takes the role of JSF leader in Cambodia. LC organizes JSF coordination meetings among JSF members and also Strategic Dialogue meetings every year. For instance, a Joint Annual Review meeting was organized on 1st December 2021, participated by the Belgian actors including Louvain Cooperation, Eclasio, VVOB, ACV-CSC, Oxfam, WWF, APOPO, Humanity & Inclusion, and WSM. The objectives of the meeting were 1) To reflect and learn from each partner

about the design, execution, monitoring, and evaluation of their programs and 2) To develop potential additional synergies.

The Joint Strategic Framework (JSF) of Belgian Organisations received financial support from the three Non-Governmental Actor federations, ACODEV – Fiabel – ngo-federatie, aimed at promoting collective learning within the JSFs Cambodia. With this support, a toolbox for measuring the effectiveness of programs working on behavioral change was developed in 2019. Following this study, the Behavioral Change M & E workshop was organized, with the participation of Belgian partners.

Synergies 7: non-Belgian partners:

- Saint Paul Institute (SPI), in the last year of the program (and as an anticipation of the collaboration with SPI on the new program) two SPI students of the last year of Social Work were placed in one of LC's partner organizations to do their internships (3 months).
- IOM and Plan International provided financial support for a study on Migration Impacts on Cambodian Children and Families Left behind. The technical support was also provided by IOM's Migration Health Division and University of Hong Kong technical experts.
- The collaboration from internal experts in the support of Continuing Medical Education, Dr. Jacques Van Hoof from the Netherlands, and Kathrin Schmitz, Freelance.
- Co-financing from Else Kröner Fresenius Stiftung (EKFS), a Foundation in Germany, also provides the funds for the implementation of a comprehensive care approach for mental health in Cambodia for three years from 2019 to 2022.

4.4 Impact

The project helps Cambodian people, especially the vulnerable groups, to have access to the highest quality of mental health services through promotion, prevention, treatment, and rehabilitation contributing to a long and healthy life. According to the report, over five years, there were 2792 new mental health cases among adults who accessed treatment (65.97% were females). This indication was completed 90% of the time on average (with the expected result of 3100 in five years for TPO). Three new OPDs have contributed to the achievement of this Indicator of Verification (IOV) since 2020 as an expansion of the scope of the project.

Similarly, 277 new mental health cases in children and adolescents who got clinical assistance at a health facility were reported (37.90% were females). The gender-related measures included in the project were fully implemented. The measures have had the desired effect. Female patients had a higher contact rate in all years. Male children/adolescents have a higher contact rate in all years.

Attitudes toward mental health in the community have shifted over time. The transformation in community attitudes has been a significant adjustment. People are becoming more understanding of mental health concerns and supportive of those who suffer from them. They are more aware of prevalent mental diseases specificity by gender and/or age including depression and anxiety and are more likely to seek therapy and speak with health professionals.

Several efforts, including health education, preventative health care, health inspections, routine health screenings, disease diagnosis and treatment, and early detection of emergent public health

risks, have been taken and are still being taken. Providers of services and decision-makers are aware of their roles and responsibilities concerning NCDs, including mental health issues. This reform has assisted in the management of the public health system.

The roles and responsibilities of LC were satisfied by all implementing partners. LC played a good role in the improvement of the public health system at both the national and local levels.

National level:

Since 2015, LC has been a member of the NCD core team and the sub-technical working group on mental health and substance abuse. LC was able to raise issues from the field, cultivate relationships with staff and diverse partners at the national level, and participate in policy, guidelines, and strategic development as a result of this membership.

LC assisted PMD in setting up a database system and training them on how to manage, use, analyze, and report data in response to their request. Technical training, mentoring, and follow-up visits were provided by partner personnel at the national level to their sub-national staff. They also assisted with project monitoring and evaluation to gain a better understanding of the project, as well as providing strategic intervention advice, reinforcing project implementation, and increasing collaboration with staff and other partners working at the operational district level.

The study and research results were produced in collaboration with TPO, CCAMH, and universities such as UCL, ITM, and the IOM organization. The results of these studies, as well as assessments and a best practice model, were shared with government counterparts, development partners, and other interested parties.

Provincial-level:

LC partners attended the provincial-technical working group for health (Pro-TWGH) to raise the issues, and challenges, present project achievements, share experiences among health NGO partners, and build a relationship with the government as well as among NGO partners. They also joined the annual operational plan meeting to integrate the project planning into the government plan. This enabled the government to improve the use of their resources and avoid duplication of resource supply. Moreover, they worked closely with focal persons at the provincial health department who are responsible for the overall management of mental health and substance abuse, diabetes, and high blood pressure governmental projects and the coordination with NGO partners.

Operational district level:

TPO worked to address mental health in general, particularly adult mental health, in collaboration with key implementing partners at the operational district level. CCAMH specialized in child mental health. SSC worked to prevent violence against children, while Mlup Baitong assisted persons with mental illnesses, diabetes, and high blood pressure in receiving benefits from food and economic security operations. Capacity building was done through training, coaching, and follow-up support. The monthly MH technical team meeting, which included doctors, nurses, TPO, SSC, and CCAMH, was held to share experiences, discuss case management, guidelines, counseling skills, and other

pertinent issues, as well as provide training and refresher training to improve their clinical knowledge and experiences.

Community-level:

TPO provides training for VHSGs and community social workers on a variety of mental health topics, including mental health first aid (MHFA) and counseling. The Social Services of Cambodia (SSC) provided community social workers with training as well as follow-up training. Volunteers for children's development received training and follow-up support from CCAMH. There was a relationship with the Mlup Baitong organization, which assisted people with mental health issues and their families, as well as persons with diabetes and hypertension, to begin revenue-generating activities and other agricultural operations that provided more income.

A pilot project of the cross-referral for a person with a disability who needs mental health support at health facilities and persons with mental health disorders who need rehabilitation support at the Physical Rehabilitation Center has been done in cooperation between LC and HI and with local partner TPO. Education initiatives and campaigns were carried out to raise awareness about mental health problems. The initiative provided training and follow-up support on their facilitation and communication skills because the VHSGs, Commune Council for Women and Children (CCWC) played such a significant role.

Case study 1:

Ms. Kanha (nickname) is a mentally ill woman who was raped and lived with her father and three other siblings until she had a one-year-old daughter. Every day, Kanha and her children are cared for by their father (widowed father), who also has to take care of their children and grandchildren, do all the housework, and cultivate some vegetables to support the whole family.

In 2013, Kanha was treated in Kampong Cham Provincial Hospital which covered all medical costs and transportation. In 2015, she was treated at the Chamkar Leu District Referral Center, and then in 2018, she was treated at a mental health clinic, where social workers and nurses visited patients and their families and gave psychological education therapy. Partner organizations such as Mlup Baitong provided agricultural materials (vegetables, chickens, ducks) with the help of the village chief, commune council, district level, doctors, and partner organizations such as Mlup Baitong. In addition, she received help from the project including food, and she received assistance from local authorities during the Covid-19 pandemic.

This assistance began in 2013. This assistance from local authorities, including food, as well as parental care, the administration of medicine, and the provision of shelter improved her welfare. The Health Center provides patients with free medication every two to three months, with TPO social workers and nurses visiting every month for the first month and then every two to three months.

As a result, her family situation is better because she has a father, brothers, sisters, and children. The family's position improved after TPO & local partner assisted them since their sick children

recovered from their illnesses and were able to assist with home duties, care for their children, and supply them with rice. The father can go work on some of the farms without having to worry providing all household supplies.

The 'chain of burden' is removed from patients who have recovered from their severe mental illnesses. She can look after their children, wash their clothes, wash dishes, cook rice, harvest rice for them, and converse with family, children, relatives, and friends. What a fantastic opportunity, especially after the TPO & government partner assisted the patient in getting better.

Her family hopes that in the future, patients will be able to care for themselves and farm chickens, ducks, and vegetables to sell for a living and finance their children's education. Her father wishes for his daughter to see that her life will be better in the future than it is now.

Case study 2:

Ms. Pech (nickname) is a 56-year-old woman with a nickname. She is married and the mother of six girls. She is a farmer with a little plot of land in the Chbar Morn region of Kampong Speu province. Her three children work as seamstresses in a clothing factory. For the past 15 years, Ms. Pech has suffered from insomnia, inability to eat, exhaustion, and headaches.

She had already sought treatment for her condition at the Provincial Referral hospital before treatment at the health center supported by the project. Then, after being notified by a member of the Village Health Supporting Group, she received her treatment at Rokar Khpuos health center supported by the project.

Her life has changed dramatically since that time. She gets a good night's sleep and can complete her tasks. She stated that she was able to easily access this mental health service because it was close to her home. She also stated, "I don't pay a lot of money for this service, but it's very useful to me." "I can do all kinds of housekeeping, such as selling, farming, caring for six children, and looking after the house," she added. She has faced some difficulties a challenge, such as when the health center runs out of medicine, which forces her to borrow medicine from other patients for temporary use until the health center has medicine again.

She is overjoyed and grateful to the health center's staff, the organization, and the donations that helped her.

Case study 3:

Mr. Lucky man (nickname) is 62 years old and a widower. He lives in Rokarthom commune, Chbar Morn district, Kampong Speu province, with his farmer children. He has a mental health issue, and he frequently struggled with sleep and talking to himself. In addition, he is unable to perform any work or occupation.

In 2013, his children took him to Kampong Speu Provincial Referral Hospital for treatment. Then in 2021, his family was able to access mental health services at Rokar Tep Health Center thanks to a project funded by the Village Health Supporting Group. He was then taken to a medical facility. Staff from the health center visited him at his home to check on his health.

He reported that he felt better after taking the medication "I can communicate with members of my family and the community. I am also capable of looking after myself ". As a challenge, he has encountered difficulties when the health center runs out of medicine because he is unable to sleep and his family is unable to communicate effectively with him.

His family members are overjoyed that their father has recovered and that he can now work outside to supplement his income. His family member (daughter-in-law) stated, "I'm thankful for the support from the organization and donors who help her father-in-law."

Case study 4:

Pork (nickname) is a 16-year-old boy from a poor farmer family who lives with his parents in Chamkar Angdoun commune, Chamkar Angdoun district, Kampong Cham province. The boy was born in a different condition than the other children because he has an extra spot on his head at the back, similar to a thumb, and his teeth have grown out abnormally.

Because of his condition, others have renamed him "Pork," and other children are scared of him and find him repulsive due to the strange teeth that protrude from his mouth. Pork is a gentle boy who is slow to talk to other people, has poor memory due to mild mental retardation, and has poor understanding. He is often blamed and bullied by his friends, and he is ashamed of being born differently from other children because he cannot learn, is older, and still learns at a low class.

A volunteer for child development identified the boy, and the Caritas-CCAMH community team visited him at home to gather more information from his parents. He and his mother have been involved in a parent support group for children with special needs for the past two years. Then he participated in inclusive play activities with other children in his village, participated in health and hygiene activities, and made regular home visits to teach activities daily living skills.

Pork has become an interesting boy after receiving training from staff, also from VCD, and primarily his parents have improved significantly from before, not fearful of others like before, brave to talk with other children, and able to help with some household works such as washing hands before eating, bathing, cleaning himself, brushing teeth, washing his clothes, and preparing school materials by himself, and especially now he is going to school at 2nd grade.

Pork's parents expressed gratitude to the CCAMH community team for providing a community-based inclusive development program and a parent support group at the village level to share experiences and train the child in activities of daily living skills, as well as other encouragement.

4.5 Sustainability

4.5.1 Sustainability strategy

The project had a clearly defined sustainability strategy. The action's long-term sustainability was aided by a variety of national and local partners and stakeholders.

4.5.2 Analysis of the different dimensions of sustainability

Impact of intervention:

The project helped to improve district-level management of the public health system. The transformation is long-term. When the deployment of a more patient-centered approach has a tangible impact on the operation of mental health services It has already been demonstrated that the project can improve people's perceptions of public health systems, hence improving their trust in them and their usage of other services. It also increased the acceptance of mental health issues, both among family members and professionals.

Technical sustainability (control by partners and support for beneficiaries in the longer term):

When the deployment of a more patient-centered approach has a tangible impact on the operation of mental health services It has already been demonstrated that the program can improve people's perceptions of public health systems, hence improving their trust in them and their usage of other services. It also increased the acceptance of mental health issues, both among family members and professionals.

To gain more cooperation from them, the initiative involves national technical experts from DMHSA in training, facilitation, and follow-up visits. In the third year, the project evaluated the technical competence of technical staff such as doctors and nurses to see if they have all of the necessary skills and knowledge to do their jobs properly, provide accurate examinations and appropriate treatment for patients, and fully implement treatment outcomes and clinical protocols. According to the report, the percentage of doctors who correctly diagnose mental diseases has climbed to 86.7%, which is a lofty target (55%).

Financial sustainability (partners and/or beneficiaries' ability to cover recurring costs)

The goal of the initiative is to improve the public health system. The initiative provides technical and financial support to MH health services at referral hospitals and health services. The incentive system is designed to encourage support personnel who work in mental health service delivery to enhance their work performance. Now that mental health treatments are available to the public, the number of people who use them is growing, resulting in a rise in hospital revenue through the user fee system. From year 5 onwards, this work allowance for VHSG to support the identification and referral of patients to health care services in the project's target region was gradually reduced.

Social sustainability (beneficiaries' control over the intervention):

Low-income and low-resource patients, such as those in Cambodia, benefit from integrated mental health, community, and livelihood assistance strategies. The attitude of the social worker, who serves as a link between communities and health care facilities, is bolstered. VHSOs were helped by social workers to better fulfill their tasks. VHSOs and Health Center employees can collaborate more closely for the benefit of patients with the help of social workers. In addition, working with the OD allows provincial and national peers to take ownership of the project, assuring sustainability and stakeholder buy-in for the various initiatives as well as accountability for the project's outcomes.

4.5.3 Exit strategy

As a consequence of the assistance from LC and the experiences of employees in managing the project for five years, individual personnel's capacity, as well as the capacity of the organization's management, has grown. Even if some partners autonomously as LC phases out, they still require financial assistance to adequately incorporate NCD and mental health care into government programs. To achieve the project's goal, more time and great synergy are required.

5. CONCLUSION

Cambodia's government had yet to effectively address the problem of non-communicable diseases (NCDs), despite having a health strategic plan on NCDs and placing a low priority on diabetes, hypertension, and mental health. Uni4Coop is a five-year project (2017-2021) that aims to support Cambodian people, especially the vulnerable groups have access to high-quality NCD services through promotion, prevention, treatment, and rehabilitation, contributing to a long and healthy life.

The project was based on a Common Context Analysis (CCA) completed in 2015 and validated by Cambodia's Minister of Cooperation and Development. According to the project report, from 2017 to 2021, 2792 new cases (65.97% females) accessed treatment from mental health services. They reported in year 4 that they had received funds for the database system from other sources and had instead decided to run a pilot project on community MH with LC. The DMHSA's initial priority for assistance, however, was the development of a database system. LC's mental health initiative expanded its support to three more health centers in 2019.

DMHSA has asked LC to help fund a community mental health pilot project, which is a new priority for them. Six partners managed the project, each with their own set of duties and obligations to meet the project's objectives. The project's gender-related measures were fully implemented, with 65.97% of females receiving mental health care. The project helps Cambodians, particularly vulnerable groups, in gaining access to high-quality mental health services that contribute to a long and healthy life.

The initiative offers technical and financial assistance to MH health services at referral hospitals and health care facilities. According to the report, the percentage of doctors who correctly diagnose mental illnesses has risen to 86.7%, a final target (55%). Social workers' attitudes, who serve as a link between communities and health care facilities, are strengthened.

6. RECOMMENDATIONS

- 1) A few patients stated that their families referred them to Khmer traditional healers because they were unaware that mental health services were available at the center level. Because medicines for their problems were not available at their health centers, some patients preferred to receive services at referral and provincial hospitals. Therefore, community awareness-raising activities should be expanded based on IEC's NCD prevention materials and available resources. The app system for NCD prevention/management should be maintained indefinitely.
- 2) Despite receiving training on mental health problems, VHSG and VCD members requested additional training on how to identify and provide basic counseling skills. In addition, although initiative training was provided for mental health training to health center personnel, the majority of health center staff requested refresher training on the treatment of mental health problems for specific diagnoses. They also requested additional counseling skill training sessions.
- 3) Due to a lack of trained staff in mental health services, some health centers were limited in their ability to provide comprehensive mental health therapy to patients. Training sessions should be provided to more health center staff.
- 4) Some district referral hospitals did not refer patients to health centers for follow-up care. The project's next phase should focus on follow-up referral and care coordination between district referral hospitals and health centers. This will be reduced transportation costs, and medical costs and save time for patients.
- 5) Medicines for people with mental illnesses were sometimes unavailable due to stock shortages. As a result, health care facilities typically only provided them with medications for two weeks to store some for future patients. Some drugs (...) for people suffering from psychotic disorders were not available through the healthcare system. Therefore, PHD and OD should anticipate a better medication supply strategy for patients with mental illnesses, as some medications are inaccessible owing to stock shortages. Furthermore, some psychotic disorder medicines were not available in the healthcare system.
- 6) Due to other priority needs for implementing a pilot project on community mental health services in Kampong Speu, the development of DMHSA's database was postponed. The next phase of the project should collaborate with DMHSA to develop a database on MH that can be used as evidence-based information for policy advocacy, which is critical to assisting in public health management. Furthermore, decision-makers should consider the process of clinical improvement, the expansion of healthcare systems, and information-sharing channels.
- 7) LC should continue to strengthen the coordination mechanism among the partners (TPO, CCAMH, SSC, Mlup Baitong) and national level by developing a long-term strategy.
- 8) Integration of child and adolescent mental services at the referral hospital and health center level due to a lack of knowledge and clinical skills for children on how to recognize a problem and help them. Community-based activities were identified as critical for connecting and referring people with mental health problems to service providers. Work allowance assistance for community members (VHSG and VCD) is required to carry out this action. The project should advocate and lobby the government to fund these activities.

- 9) A screening tool for the expansion of mental health services in Cambodia was developed, so the valuation of a screening tool for the expansion of mental health services in Cambodia is needed.
- 10) Reinforcement of the cross-referral of patients toward adequate mental health and rehabilitation services. Training of government health staff on referral mechanisms, the concept of mental health, and the rights of people with disabilities. The quarterly coordination meeting between TPO social workers and physical rehabilitation center social workers is organized.

7. ANNEX

7.1 List of persons met for project evaluation

| N | Name | Position | Institution |
|----|-----------------------------|--------------------------------|-----------------|
| 1 | Dr. Khem Thann | Acting Director | LC |
| 2 | Ms. Giuliana ZEGARRA | | LC |
| 3 | Dr. Bhoomikumar Jegannathan | Project Director | Caritas-CCAMH |
| 4 | Ms. Sok Dearozet | Program Manager | Caritas-CCAMH |
| 5 | Mr. Poeng Lyamato | Community Nurse | Caritas-CCAMH |
| 6 | Ms. Ellen Moniti | Executive Director | SSC |
| 7 | Dr. Chhim Sotheara | Executive Director | TPO |
| 8 | Ms. Noun Bopha | Social Worker | TPO |
| 9 | Ms. Heng Kanha | Social Worker | TPO |
| 10 | Mr. Om Sophana | Executive Director | Mlup Baitong |
| 11 | Mr. Ouk Sophal | Bureau of Planning | DMHSA |
| 12 | Dr. Muy Seanghorn | Deputy Director | PMD |
| 13 | Mr. Ly Kimse | Chief of Mental Health Program | PHD K.Cham |
| 14 | Dr. Sok Vantha | Chief of Medicine Management | OD Chamka Leu |
| 15 | Ms. Im Sok Choeun | Nurse | RH Chamkar Leu |
| 16 | Mr. Bun Thea | Nurse | HC Chamkadong |
| 17 | Ms. Chea Sam Arn | Beneficiary | HC Chamkadong |
| 18 | Ms. Chin Nary | Beneficiary | HC Chamkadong |
| 19 | Mr. Long Khhorn | Beneficiary | HC Chamkadong |
| 20 | Ms. Sun Nich | VHSG | HC Chamkadong |
| 21 | Ms. Horn Srey Yong | Beneficiary | Chamka Leu |
| 22 | Ms. Khoeun Sokun | Beneficiary | Chamka Leu |
| 23 | Ms. Sree Srey Sros | Nurse | HC Speu |
| 24 | Mr. Yi Mong La | VHSG | HC Speu |
| 25 | Mr. Sok Thul | VHSG | HC Speu |
| 26 | Mr. Soun Ratha | Officer | PHD Tbong Khmum |
| 27 | Ms. Vann Sokunthea | Officer | OD Ou Reang Ov |
| 28 | Ms. Chea Seameng | Officer | OD Ou Reang Ov |
| 29 | Dr. Yean Seanghong | Deputy Director | RH Ou Reang Ov |
| 30 | Dr. Our Kimleang | Medical Doctor | RH Ou Reang Ov |
| 31 | Mr. Phan Sambath | Chief of HC | HC Thnal Keng |
| 32 | Mr. Eng Vibol | Nurse | HC Thnal Keng |
| 33 | Mr. Hean Seng Leang | Chief of HC | HC Preah Theat |

| | | | |
|-----------|----------------------|--------------------------------|----------------|
| 34 | Ms. Soung Chanmalyda | Nurse | HC Preah Theat |
| 35 | Ms. Hoa Kimhor | Nurse | HC Preah Theat |
| 36 | Mr. Khean Thy | VHSG | HC Preah Theat |
| 37 | Mr. Ouch Sam On | VHSG | HC Preah Theat |
| 38 | Ms. Kong Nareth | VHSG | HC Preah Theat |
| 39 | Ms. Phai Ean | Beneficiary | HC Preah Theat |
| 40 | Ms. Kean Sokchea | Beneficiary | HC Preah Theat |
| 41 | Ms. Sem Sros | Beneficiary | HC Preah Theat |
| 42 | Ms. Sem Sokea | Beneficiary | HC Preah Theat |
| 43 | Dr. Ly Lalin | Vice-chief of Bureau, | PHD K. Speu |
| 44 | Ms. Chun Rasy | Chief of Mental Health Program | PHD K. Speu |
| 45 | Mr. Sok Doeun | Office | OD K. Speu |
| 46 | Mr. Chim Saroeun | Chief of HC | HC Rokar Tep |
| 47 | Ms. Chea Toch | VSHG | HC Rokar Tep |
| 48 | Ms. Prom Pich | Beneficiary | HC Rokar Tep |
| 49 | Mr. Sim Sun | Beneficiary | HC Rokar Tep |

7.4 Schedule of field data collection

| No | Data collection | Who | February | | | | March | |
|----------|--|--------------------------|----------|----|----|----|-------|--------------|
| | | | W1 | W2 | W3 | W4 | W1-W3 | How |
| 1 | KII with implementing partners | | | | | | | |
| | | LC | | 8 | | | | Online |
| | | CCAMH | | 9 | | | | Online |
| | | SSC | | 9 | | | | Online |
| | | TPO | | 9 | | | | Online |
| | | Mlup Baitong | | | 16 | | | Online |
| | | DMHSA | | | 16 | | | Online |
| | | PMD | | | 16 | | | Online |
| 2 | KII with relevant stakeholders | | | | | | | |
| | Kampong Cham | 1 PHD | | | | 24 | | Face-to-Face |
| | | 1 OD | | | | 24 | | Face-to-Face |
| | | 1 Referral hospital | | | | 24 | | Face-to-Face |
| | | 2 health centers | | | | 24 | | Face-to-Face |
| 3 | KII with relevant stakeholders | | | | | | | |
| | Tboung Khmum | 1 PHD | | | | | 4 | Face-to-Face |
| | | 1 OD | | | | | 4 | Face-to-Face |
| | | 1 Referral hospital | | | | | 4 | Face-to-Face |
| | | 2 health centers | | | | | 4 | Face-to-Face |
| 4 | Kampong Speu | 1 PHD | | | | | 18 | Face-to-Face |
| | | 1 OD | | | | | 18 | Face-to-Face |
| | | 1 health center | | | | | 18 | Face-to-Face |
| 5 | Focus Group Discussion | | | | | | | |
| | Kampong Cham | 2 FGDs | | | | 25 | | Face-to-Face |
| | Tboung Khmum | 2 FGDs | | | | | 5 | Face-to-Face |
| 6 | Case studies with beneficiaries | | | | | | | |
| | Kampong Cham | 1 Beneficiary (1 Female) | | | | 26 | | Face-to-Face |
| | Tboung Khmum | 1 Beneficiary (1 Male) | | | | | 6 | Face-to-Face |
| | Kampong Speu | 2 Beneficiary (1 Female) | | | 18 | | | Face-to-Face |