KINGDOM OF CAMBODIA

STUDY REPORT ON THE SITUATION OF NON-COMMUNICABLE DISEASES (NCD) PATIENTS LIVING IN CAMBODIA DURING THE COVID-19 PANDEMIC

ORGANIZED BY
HEALTH ACTION COORDINATING COMMITTEE(HACC)

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Abbreviations

HACC	:	Health Action Coordinating Committee
CNCDA	:	Cambodian NCD Alliance
MoPoTsyo	:	Patient Information Center
KHANA	:	Khmer HIV/AIDS NGO Alliance
LC	:	Louvain Coopération
CVD	:	Cardiovascular Disease
NCD	:	Non-communicable disease
LMICs	:	Low- and Middle-Income countries
PEN	:	Package of Essential NCD Interventions in Primary Care
GDP	:	Gross Domestic Product
FGD	:	Focus Group Discussion
WHO	:	World Health Organization
CPA		Complementary Packages of Activity
DPM		Department of Preventive Medicine, Ministry of Health
HIS		Health Information System

About the HACC and CNCDA:

The Health Action Coordinating Committee (HACC) is a network of civil society organizations working on health in Cambodia. Since 1995, HACC has been playing a significant role in coordinating and networking among NGO work on HIV and AIDS. Starting in early 2017, HACC expanded its role to coordinate and network among NGO's working on general health in Cambodia. HACC is a unique NGO network on health in Cambodia to provide regular and useful information sharing on health, to network and coordinate with NGOs and stakeholders in response to health, to represent the NGO's voice at national forums, to raise health awareness through campaigns, raise health related issues and advocate for change on important gaps in response to health.

HACC as Secretariat of the Cambodian NCD Alliance (CNCDA) has been awarded grants to accelerate the response to the coronavirus pandemic through the first Civil Society Solidarity Fund on Non-Communicable Diseases (NCDs) and COVID-19, which is now in its second year. The lack of inclusion of people living with NCDs has been at the epicenter of the pandemic ever since it began, due to their heightened vulnerability to severe COVID disease and death as well as the health system disruptions experienced in most countries around the world. This means that the urgent need for NCD action and investment – and for advocacy and pressure by NCD civil society – has never been greater. COVID-19, however, challenged its financial sustainability, and the difficulties of having to adapt to a more virtual work environment stalled advocacy efforts on the ground. The Solidarity Fund aims to address these challenges, supporting NCD civil society in continuing its important work as countries and health systems endeavor to rebuild better and fairer, leaving no one behind.

The Cambodian NCD Alliance (CNCDA) officially launched in March 2019 to call for greater action to tackle the rising burden of NCDs, put NCDs on the political agenda and build a new platform for collaborative action. The CNCDA is an informal alliance operating in Cambodia with its secretariat based in Phnom Penh. It has 22 members, including civil society, bilateral and multilateral agencies, academia, researchers, relevant ministries, government agencies, and patient groups.

EXECUTIVE SUMMARY

THE 3 STUDY OBJECTIVES

The 3 objectives are to study what are the real needs of people living with NCD during the COVID-19 pandemic and what are the policies needed to support those people and to make the results of the study known.

KEY FINDINGS

- During Covid-19 pandemic, most of the incomes and economies of households and families with non-communicable diseases patients were impacted negatively.
- During Covid-19 pandemic, there were disruptions in the provision of services for NCDs patients. As a result, it was more difficult and costlier for patients to go out and seek medical services, treatment and medicine.
- During Covid-19, many NCD's patients had difficulty to access treatments and medicine, such as diabetics, mental health patients, patients with high blood pressure and patients with other NCD's.
- Lower income NCD patients often could not get the care they could get before the pandemic.
- Public Hospitals and Health Centers using reimbursement from NSSF or HEF or government budget to buy NCD medicines on local markets are paying too much for NCD medicines when compared to world market prices for low cost generic medicines, resulting in inefficient use of government funds.
- In general, all dissemination activities for preventing NCDs in Cambodia were disrupted, often postponed both at public health services and private clinics.
- NCD patients reported that it was stressful for them when they cannot find a doctor for consultation and get medicine treatment on time during Covid-19 pandemic.
- In the Covid-19 pandemic, the NCD patients were having difficulties to get medicine treatment from referral hospitals, health centers and private clinics, because there were not enough medicines to distribute for NCDs patients.
- There was disruption of the care for NCD patients when the state or provincial governments announced lockdowns., the NCD patients found it difficult to go to referral hospitals or to private clinics for treatment and medical check-ups by doctors and other health workers.
- In period of Covid-19, health care cost of most NCD in Cambodia have been increased. This led to patients foregoing care and this affected their well-being and that contributed to reduced productivity.
- It is difficult to get detailed information of NCD patients and their access to health services during the period of the Covid-19 Pandemic.
- In some rural and urban areas, interviewed NCDs patients trust NCD services at government hospitals and HCs center that are supported by NGO's such as Patients Information Center (MoPoTsyo) and Louvain Cooperation (LC).

BACKGROUND

Non-communicable diseases (NCDs), notably cardiovascular diseases, cancers, diabetes and chronic respiratory diseases, are the leading causes of death and disability globally, affecting more people each year than all other causes combined. NCDs are responsible for over 64% of all deaths in Cambodia

With the population ageing, rise in multi-morbidity, longer life expectancies and increasing survival rates, more and more people are expected to live with the health burden of NCDs.

Due to their chronic and sometimes life-long nature, NCDs often require repeated interactions with the health system over long periods of time. This includes disease management involving access to essential medicines or rehabilitation services.

Not receiving the care needed often has devastating consequences for persons living with NCDs. The unmet burden of NCDs can lead to both health and economic consequences in Cambodia, for household and individual levels, resulting in severe disability, premature deaths, and billions of dollars in economic loss each year.

With the rapid spread of Covid-19 across the world, Cambodia is one country in which the capacities to address and respond to NCDs are limited and impacted. The virus has caused broad disruptions to health services while at the same time drawing attention to countries' NCD burden, as those living with NCDs are at increased risk of becoming severely ill with the virus.

The disruption of health services is particularly problematic for those living with NCDs who need regular care. Several examples are given to show how the disruption of NCD services has directly affected people. For example, the screening, identification, and referral health systems for chronic respiratory, cardiovascular, diabetes and cancer have all been affected by the Covid-19 pandemic which has resulted in a substantial decrease in cancer diagnoses and lower utilization of outpatient care diagnostic services and medical consultations among people living with Diabetes and Hypertension. Examples of this were found in public services, in non-profit private services and in private clinics.

Also, a reduction in admission to hospital of patients with acute coronary syndrome often results in increases in out-of-hospital deaths and long-term complications of myocardial infarction. Disruption in rehabilitation services for people with NCDs has potentially impacted their functional outcomes and consequently increased the burden of care.

These few examples, however, do not capture the whole picture all around Cambodia. There has not been comprehensive information gathered showing when and where disruptions of NCD related services have occurred nor the extent of those disruptions and the factors associated with those disruptions, nor the full picture regarding the omission of their inclusion in Covid-19 Strategic Plans. That information is needed to:

a) understand how Cambodia needs to be supported during its response to COVID-19
b) plan how Cambodia can build back better health systems with integrated NCD services while this pandemic gradually evolves to become endemic and also to be better prepared for future pandemics
c) shed light on the consequences of the disruptions in Cambodian people's lives.

METHODOLOGY AND APPROACH

The study reports on the situation of NCD) patients who are living during Covid-19 pandemic and the identification of their needs. it is the aim of the study to identify what would be helpful to e know from what are real needs of people living NCD during COVID-19 and what are the policy needs for supporting those people.

The consultant has facilitated and coordinated a number of consultative meetings both at national and subnational levels among NGOs and stakeholders on NCDs in Cambodia. The report will be used to share

with relevant stakeholders for information and as an evidence tool for advocacy with key decision makers for their support to NCD patients in Cambodia.

The consultant reviewed indicators in reports on main activities as part of the study. to report on the situation of NCD patients who are living during the covid-19 pandemic. In addition, the consultant analyzed the results from Focus Group Discussions and stakeholder meetings. Moreover, some stakeholders were selected for key informant interviews, for instance: NCD patients, other stakeholders and relevant NGOs.

The consultant makes references to existing documents from various sources to support the conclusions and recommendations for the current study report on the situation of NCDs patients who are living during covid-19 pandemic.

The responsibility for conducting key informant interviews with stakeholders lay with the Consultant, while responsibility for making appointments and preparing contact lists for contacts lay with Health Action Coordinating Committee. The responsibility for producing the draft study report and its revisions lay with the Consultant.

Question guide – (1). Focus Group Discussion with NCD's patients (2). Key informant interview with government stakeholder, and (3). Key informant interviews with relevant NGOs – was developed along with methodology design. However, it was sent to the Health Action Coordinating Committee and partnership for comment and feedback before finalizing in order to be used in the field. The questionnaire comprised 13 questions organized into the following five sections: Infrastructure, Policies and Plans, NCD-Related Health Services, Surveillance and Suggestions [for technical guidance from HACC].

RESULTS FROM FOCUS GROUP DISCUSSIONS

For this consultancy for HACC, the consultant had opportunities to meet with NCDs patients to conduct interviews at Referral Hospital Chamkar Leu (6) persons, Kampong Cham Province, at Referral Hospital of Ouraing Ouv District (6) persons, Tboung Khnom Province, (6) persons at Referral Hospital of Kompong Tralach District, Kampong Chhnang Province and (6) persons at Health Centre of Anlong Kangan, Sen Sok District, Phnom Penh. The 24 NCD patients had different diseases such as Diabetes, Chronic respiratory infections, Chronic kidney disease, Cardiovascular diseases, and Mental health problems.

During Covid-19 the patients living with their disease were affected and their family life was impacted, because it was difficult to travel from one place to the other for doing business and to find work to get income for their family. Most NCDs patients were impacted on income and the support for their families and on their access to medicine during Covid-19 pandemic.

The interviewed patients compared the situation before the outbreak of COVID19 and the situation once the pandemic reached their communities:

Before the outbreak of Covid-19, they got full experience to manage their disease, and had a lot of opportunities to have meetings and access medical consultations with doctors as that service was on time and regular, also with specific appointments for checkup on disease at referral hospital. Most of the NCD patients could get a prescription from a doctor for treatment and with that they could get prescribed medicines from the hospital pharmacy. The NCD patient could often consult a doctor to get treatment/medicine on time. NCDs patients were able to self-manage and could afford the required resources to pay for their treatment and medicine. This experience of living with a NCD or multiple NCDs changed and was impacted by the Covid-19 outbreak: It became very difficult for the people with NCD to get income, to travel to and from work and to get medicines and treatment.; all NCD patients were impacted during covid-19, because they could not access private clinics and some referral hospitals, because those were closed and because of lockdowns.

It was challenging for NCD patients since the start of Covid-19, because of disrupted possibilities for travel for NCD patients including patients with mental health problems, physical health problems. They could not

get health services nor get income for supporting their families and could not meet with doctor for consultation for treatment and get medicine, because the NCD patients must follow the rules of COVID19 prevention according to the conditions posed by the institutions. Many NCD patients were so scared of getting Covid-19 that they did not go to the Hospital or clinic.

The study report presents issues that are really needed by people living with NCDs in Cambodia during COVID-19. The study report shows the main issue of NCD patients living in Cambodia. It is impacted during Covid-19 such as diabetes and chronic respiratory disease, mental health.

HACC it is the representative on secretariat of the Cambodian non-communicable diseases (NCDs) Alliance (CNCDA) have been to accelerate the response to the coronavirus pandemic through the second phase of Civil Society Solidarity Fund on Non-Communicable Diseases (NCDs) and during Covid-19. The HACC would like to know of the situation of non-communicable Diseases (NCDs) patient is living through and impact of the pandemic, due to their heightened vulnerability to severe symptoms or death from Covid-19 as well as to the health system disruptions at some areas in Cambodia.

The main issue is the people who are particularly vulnerable to becoming severely ill and dying from the virus. It has exposed deeply rooted social and economic inequalities and has highlighted the urgent need for investment in NCD prevention and control for the benefit of healthy populations and resilient health systems.

Covid-19 pandemic has brought numerous challenges to our Cambodian society, including to most of the NCD patients who are living in rural areas and urban with limitations on their income and on their household economies, limitations on their travel and income generating activities. Also, they experienced difficulties in access of health services for treatment and medicine and even access to food they need to restore or maintain good health.

During Covid-19 the role of NCD civil society is important in raising awareness, ensuring access, promoting accountability and advocating for change. This has now become more crucial than ever. The Civil Society Organizations, affected communities and community-led efforts play a critical role in accelerating action from local to global levels, calling for change and building political momentum. Nevertheless, this rise in demand comes at a time when local, national and regional NCD alliances are faced with operational and financial challenges due to Covid-19.

This study synthesizes pieces of information on the impact of the Covid-19 pandemic on health services for NCDs. It shows that also in Cambodia a considerable degree of disruption of NCD services with urgent Chronic respiratory, Cancer, Diabetes, Cardiovascular diseases, rehabilitation and palliative care services has occurred.

As far as studied, this fact was seen to be consistent across all provinces and income groups but the actual circumstances surveyed showed great variation in the degrees of disruptions, types of disruptions and types of services that were most affected. The most common reasons for service disruptions were cancellation of elective care, lack of transport due to imposed lockdowns, insufficient staff and closure of hospital services. The information obtained through this study provides important insights on how Cambodia needs to be supported during the response to Covid-19 plan to build back better health system with integrated NCD services. With the spread of Covid-19 across Cambodia and in particular after the community outbreak in early 2021 and arrival of more contagious variants, its ability to address and respond to NCDs became seriously impacted. The situation so far shows a clear link between NCDs and Covid-19, as people with pre-existing NCDs appear to be much more vulnerable to becoming severely ill or even dying from the virus.

The study findings show that also in Cambodia essential services for hypertension management, diabetes or cancer have been disrupted. This draws much needed attention to Cambodia's NCD burden which already was leaving many people unattended before the pandemic. This disruption, coupled with the increased exposure to numerous behavioral risk factors for NCDs resulting from shifts to “modern” but more unhealthy diets, alcohol and tobacco promoted through commercial marketing practices that are or should be outlawed, polluted air, lack of physical activity but increased mental stress., The control measures adopted by Cambodia have undoubtedly protected people with NCDs from COVID19 before they could be vaccinated,

but at the same time they put them in a disadvantaged position with regards to their ability to maintain good control of their chronic condition.

The fear of contagion people with NCDs experience decreases the likelihood of these people seeking medical care, leading to worse health outcomes. The disruption of health services, however, is particularly problematic for those living with NCDs who need regular or long-term care. Our findings show that rehabilitation care is among the most commonly disrupted services. This disruption in detail reveals that a halt of admissions to inpatient and outpatient rehabilitation services and early discharge and reduction of activities not only has a huge individual impact on people with NCDs, but also a health system impact, as the level of rehabilitation demand after the crisis is expected to increase substantially.

One main reason for disruption of services outlined in Cambodia was the decrease in inpatient and outpatient volumes due to the cancellation of elective care and maintenance care for chronic conditions. These cancellations were observed in the majority of countries but were not necessarily due to government policies reducing inpatient services to emergencies. Many of the public hospitals which indicated such cancellations also indicated that access to inpatient services and outpatients had not been restricted through government policies but instead to prevent COVID19 transmission among patients and from patients to health staff once Hospitals had been assigned to care for COVID19 patients or in situations where health staff previously with care for NCD had been re-assigned different responsibilities related to the COVID19 pandemic

Another major reason for disruption of services is the closure of population-level screening programmes and lockdowns hindering access to the health facilities for patients.

The study revealed that the underlying causes for existing disruptions in NCD services vary across income groups, with disruptions to transport, insufficient PPE, insufficient staff, unavailability/stock out of essential medicines and services impacting Cambodia.

The study findings show that Cambodia has adopted alternative strategies to highest risk and continue to receive treatment for NCDs. The most widely used strategy, implemented in over two-thirds of countries, has been triaging. Triaging was present in Cambodia, as it already had a system of triaging which could be resorted to rapidly when the need arose

There have been different triage applications and approaches in each country based on government decisions but unfortunately no evidence so far provides a basis for comparison of the effectiveness of different models. WHO has published an algorithm for Covid-19 patient triage and referral for resource-limited settings during community transmission. The document outlines how countries can adopt an efficient triage system at all health facility levels (primary, secondary and tertiary) and how this will help the national response planning and case management system cope with patient influx as well as protect the safety of health-care workers.

The algorithm is intended for use by ministries of health, hospital administrators and health workers involved in response planning for Covid-19 and/or patient triage, management and referral. The other common mitigation measure adopted by countries was the increased use of telemedicine (advice by telephone or online means). Among the countries reporting service disruptions, are now using telemedicine to replace in-person consultations.

As expected, since use of telemedicine is highly dependent on availability of technology and expertise, it has been used more frequently in high-income countries as compared to low-income countries. However, the encouraging finding was that telemedicine was being utilized by over low-income countries and half of lower-middle-income countries that participated in the survey. There is still no published evidence on the mechanisms and response to telemedicine approaches used in countries to address the disruption of NCD services, but such information would be extremely important to understand how the use of remote health care can be improved and reach anyone in need.

This study found that in Cambodia NCD services are theoretically included in the list of essential health services in primary care but not specifically included in their Covid-19 national plans and often not reported

on. The study also found that scare resources in principle allocated for NCD were reallocated for the fight against COVID19,

This is despite abundant evidence showing that people with NCDs are more vulnerable to becoming seriously ill with the Covid-19 virus, and that they require access to treatment to manage their illnesses. Therefore, it is very important that health care services for people living with NCDs are included in national response and preparedness plans for Covid-19's further evolution and other pandemics. Only through inclusion of people with NCDs in their plans can countries "build back better" and strengthen their health services so that they are better equipped to prevent, diagnose and provide care for NCDs in the future.

More specifically, there is a critical need for concrete and practical guidance on the continuity of essential health and community services for NCDs. Monitoring the access to and continuity of essential health services for NCDs would be required. This opportunity could be utilized to develop systematic approaches to digital health care solutions. Focusing on Covid-19-related activities and continuing to provide essential services is important not only to maintain people's trust in the health system to deliver essential health services but also to minimize an increase in morbidity and mortality from other health conditions.

These results thus reflect the situation found by the national consultant during 2021-Q3 when the outbreak had occurred and Cambodia's extraordinary vaccination effort was still requiring an all-out effort. . As a key informant survey, the survey responses reflect the views of the NCD focal point in the ministry of health and civil society organizations and could not be validated in detail. it is inevitable that in such a rapidly evolving situation responses are nevertheless limited by the information available at a given point in time.

A broader but similarly structured survey on service disruptions due to Covid-19 was implemented by WHO in the weeks following the present survey, which contained a few overlapping items. A comparison of the results of both surveys showed a good degree of consistency but with the inevitable reductions or improvements in service availability depending on the evolution of the pandemic with most severe disruptions starting only in 2021-Q2 when the vaccination effort came into full swing and the lockdowns began to be applied until it became clear that the pandemic could no longer be contained

RESULTS FROM STAKEHOLDERS

For this consultancy, I had an opportunity to meet the Cambodian NCDs alliance for an interview with stakeholder questionnaires using a qualitative approach. I had further interviews with Dr. Kol Hero as Executive Director of PMD of the Ministry of Health, Dr. Sam Ath, theTechnical Advisor of NCDs of WHO, Dr. Khem Thann as Program Manager of Louvain Coopération, and Dr. Choub Sokchamreun Executive Director of KHANA and Mr Maurits van Pelt, MSc, LL.M as Executive Director of Patient Information Center (MoPoTsyo). These meetings were held in Phnom Penh, Cambodia for an interview with stakeholders through a Zoom call.

A. Infrastructure

All ministry of health staff with responsibility for NCDs and their risk factors were reassigned for supporting the Covid-19 efforts either full time or along with routine NCD activities. Many NCD staff were reassigned for working full time on Covid-19, a situation that was common in the public hospitals with Covid-19 patients. Other health facilities reassigned staff thus only partially or delegated part of their NCD staff to work on Covid-19 full time or had some or all staff working part time on the Covid-19 response.

Some government funding initially allocated for NCDs had been reassigned to non-NCD services due to Covid-19 response efforts. Many interviewed partnerships in Cambodia did not know the exact answer to this question and roughly half reported that no funds had been reassigned to date. Thus, only 1-25% of the government funds had been reallocated from NCDs to non-NCD services. It is worth noting that nearly a third of Cambodia responded and added a comment in their response indicating that there is not normally a budget for NCDs so they have given this response because there is nothing to be re-allocated. However,

the widespread large shortages of NCD drugs in the public services lead us to conclude that the funds normally used for NCD drugs must have been spent on other important items. The shortages translated into official encouragement of public services to complement the shortages through purchases of the NCD drugs on the market using the government budget and the user fees collected from patients. This in turn led many of the public facilities to hand-out prescription medicines for periods of up to one week only, as the free market prices in Cambodia for these drugs are multiple times higher than the world market prices, In other words, by dispensing medicines for only one week, the Hospitals could increase the frequency of medical consultation (= payment of the user fees) and thus increase their revenue to a level that is high enough to buy the prescription medicines on the local markets to fill the shortages in government supplies. This shift to procurement of NCD drugs against market prices by the local public health facilities created inefficiencies in the use of the reimbursements from Ministry of Economy and Finance and National Social Security Fund respectively for social health protection schemes called Health Equity Fund and the premium-based NSSF. , Moreover, the practice of dispensing medicines to chronic patients for only 1 week causes patients to abandon care as they face increased cost of travel and cost of time lost and fear contracting the infection while waiting at the hospital together with other untested patients.

B. Policies/ Plans

Only 20% of the national plan of Cambodia to ensure the continuity of NCD services was included in the list of essential health services in their national Covid-19 response plan. Low- and lower-middle-income countries were markedly less likely to include NCDs in their Covid-19 response plans than upper-middle- and high-income countries. Cambodia has included NCDs in the list of essential services in their national COVID-19 plan, for cardiovascular disease services, cancer services and diabetes services.

Additionally, the majority of responding services in Cambodia are for chronic respiratory diseases and for chronic kidney disease, while around half also reported including dental services and rehabilitation services. On the other hand, the Ministry of Health, Cambodia did not include chronic respiratory disease services in their national Covid-19 plan Finally, it must be said that although cessation of services was not part of the national plan, the cessation of services was widely practiced as part of local policies and work-plans in order to cope with the extra workload from the COVID19. .

There was additional funding allocated for NCDs in the government budget for the Covid-19 response, although a considerable number of Cambodian interviewed (1-25%) were unable to answer this question. but MoH PMD reported that some additional funding had been allocated for NCDs (1-25% versus all other regions).

In terms of disruption of activities, Cambodia reported some disruption to ministry of health NCD activities planned for the current years. Besides public screening programmes for NCDs, which WHO and MOH advised to suspend during the pandemic, official programs and projects including medical consultation services and diagnostic services for NCD were most likely to report disruption to the implementation of NCD and suspension of mass communication campaigns.

The WHO Package for Essential NCDs (PEN) training and its implementation in primary health care was disrupted in Cambodia hampering access further. Finally, interviewed stakeholders report they are impacted on activities related to the implementation of the WHO HEARTS technical package.

Some indicators of ministry of health NCD activities were impacted. Civil servants were invited to provide a description of these other NCD activities. Among their answers and comments, policy- and guideline development was most commonly noted as being affected followed by activities related to training and conferences that were canceled or postponed.

C. Non-Communicable Diseases (NCDs) Health Services

The government policies pertaining to the access of essential NCD services at primary, secondary and tertiary care levels for both inpatient and outpatient services during the Covid-19 pandemic were impacted.

There was a clear relationship between the transmission level of Covid-19 and the restrictions on access to essential NCD services. The access to outpatient services was restricted to various degrees, including reporting many degrees of temporary closure including total closure. The NCD outpatient services were often restricted on access when health staff got infected and had to isolate, creating shortages of staff. In other situations, the whole hospital was dedicated exclusively to COVID19 care, with patients being referred to other facilities, creating higher travel cost.

In most hospitals the access to the inpatient NCD services was impacted as NCD services were only open for emergency inpatient with NCD. The non-emergency inpatient services were often temporarily closed. Overall inpatient and outpatient services were in principle open, but had temporarily restricted access to both or had restricted access to only outpatient services. But other facilities closed outpatient services to maintain inpatient services for emergencies only.

There are three categories of support for the organizational sustainability and resilience of national and regional NCD alliances, ensure a strong and unified NCD civil society response to Covid-19, support advocacy and communications efforts to raise the voices of people living with NCDs, and shape the pandemic's legacy for building back better and fairer. With the support of the solidarity fund, alliances were able to step up their advocacy and communications efforts to promote the needs of people living with NCDs within government plans and policy measures to respond to COVID-19, contributing to "building back better" as a legacy of the pandemic.

The response to these challenging times, all partners in the Cambodian of NCD Alliance (CNCDA) such as Preventive Medicine Department, Development Partners and NGO's, coordinated in the HACC network, such as Patient Information Center (MoPoTsyo), Louvain Coopération and KHANA, have leveraged its programmes and partnerships to launch in July 2020 the first-of- its-kind Cambodian Civil Society Solidarity Fund on NCDs and COVID-19.

In an effort to contribute to building back better during and beyond Covid-19, the Ministry of Health and Cambodian NCD Alliance (CNCDA) launched a new long-term strategy to make the case for integrating NCD action into broader health agendas, including health security and pandemic preparedness.

The initiative supported alliances to involve and support people living with NCDs, having their views considered and their voices heard in diverse civil society activities. A lot of people living with NCDs were engaged through consultations, training and project development efforts by CNCD alliance, in NGO's such as MoPoTsyo, Louvain Coopération, and CNCDA led by HACC. Moreover, communication campaigns, including with the media, raised awareness of NCDs and the needs of people living with NCDs with calls for increased political action during the pandemic.

The government policies on access to inpatient and outpatient services have disrupted a number of NCD-related services. There was some disruption to one or more of the eight services listed in the questionnaire. In general, for Cambodia, rehabilitation services were the most likely to be impacted, partial disruption and complete disruption. Rehabilitation services were particularly less impacted in Cambodia.

About half of interviewees reported complete or partial disruptions to hypertension management services or diabetes and diabetic complication management services, with lower-middle-income patients being somewhat more likely to report disruptions of these services than other income groups. Asthma services, palliative care services and urgent dental care were also generally not disrupted.

Although cancer treatment services and services for cardiovascular emergencies were less widely reported as disrupted, this masks marked differences across income groups. While half of low-income respond disruptions to services for cardiovascular emergencies, high-income did not respond any disruptions. Likewise, low-income patients reported on disruptions to cancer treatment services more often when compared to high-income respondents.

It is important to note that maintaining access to inpatient and outpatient services does not imply that there are no disruptions to service. On the contrary, well over half of interviewed Cambodians reported that while

both their outpatient and inpatient services were open, there were disruptions to one or more of the NCD-related services.

A decrease in inpatient volume due to cancellation of elective care was the most commonly reported cause. These cancellations were not necessarily due to government policies reducing inpatient services to emergencies, however, as just over half of interviewed persons had reported in the previous question that access to inpatient services had been restricted through government policies.

Closure of population-level screening programmes and lockdowns hindering access to the health facilities for patients was also reported by people in the countryside. Interviewed individuals exported that impacts on staffing, closure of outpatient disease-specific clinics and insufficient PPE were one of the main causes of disruption to NCD-related services.

The government-mandated closure of outpatient NCD services resulted in a decrease in outpatient volume due to patients not presenting. Also a lack of inpatient services/hospital beds was among the main causes of disruption.

Finally, the unavailability/stock outs of essential medicines or technologies were causing disruptions to NCD-related services. COVID19 pandemic has thrown the spotlight on a structural problems related to the availability of essential medicines that NCD patients with chronic condition should be receiving in sufficient quantities for enough days to keep their disease under control. Due to COVID19 related disruptions not only were the shortages larger than before but concerned important anti-diabetic medicine such as Metformin, which are indispensable as first choice for people with Type 2 diabetes. Also, the lack of a monitoring system of availability of these essential NCD medicines in primary care came to light. Health staff voiced their frustration with having to increase the frequency of service utilization to raise sufficient revenue from user fees from patients to be able to buy the medicines on the free market for filling the gaps in government supplies. Other stakeholders suggested a raise in the level of user fees in primary care, which would perhaps not even be necessary if only low-cost generic medicines were available at world-market prices from reliable international sources who specialize in the supply of such low-cost generics to many developing and middle income countries at unbeatable prices.

The overall prevalence of various disruptions hides differing patterns by income group. Some underlying causes, namely disruptions to transport, insufficient PPE, insufficient staff, and unavailability/stock out of essential medicines and services were far more likely to be reported by low- and lower-middle-income patients. The lack of government supplies of medicines for NCD to the public services was also reported by civil servants at many levels of the health system. The public health facilities had been urged to complement shortages in NCD medicines by raising their revenue from user-fees. The public health facilities could do this by requiring their chronic patients to return more often than before for refilling their prescription medication. However, in Cambodia the user fees cannot cover the NCD medicines sold against free market prices. The situation has led many patients, afraid as they were to catch COVID19 during exposure to many other patients at the health facilities, to simply forego the care they needed to keep their condition under control, be it blood sugar or blood pressure. This must have led to increased vulnerability and premature death from COVID19 and or increased health related expenditures.

Another causes showed the opposite trend, with greater frequency in the wealthier income groups. Only a decrease in inpatient volume due to cancellation of elective care was consistently high across all income groups, with a slightly greater frequency among upper-middle- and high-income patients.

Most commonly respond that they used triaging to identify priorities to overcome the disruptions to NCD-related services, with countries with any disruptions responding to the use of this technique to overcome disruptions. Triaging not was widely used across all regions showing no notable no notable exception of Cambodia, where just a single stakeholder responded utilizing this strategy.

Telemedicine was also very widely used to overcome service disruptions within Cambodia responding with use of this new technology. There was a trend of increasing utilization of telemedicine as the income level increased, although even low-income patients of those with service disruptions reported utilizing this

technology. Redirection of patients with NCDs to alternate health care facilities, novel supply chain and/or dispensing approaches for NCD medicines by sourcing from more expensive free-market sources but also by task shifting/role delegation using Peer Educators for Diabetes and Hypertension to alleviate the burden on public health staff were each reported as one of the many different means to overcome service disruptions in Cambodia.

D. Surveillance

Five stakeholders said that the ministry of health does not collect or collate data on NCD-related comorbidities in COVID-19 patients. The majority of countries in all regions except Cambodia responded affirmatively. Responses to this question were consistent across all income groups.

E. Suggestions

The ministry of health (MOH) is invited to provide suggestions of tools or technical guidance WHO could develop related to NCDs during the COVID-19 outbreak. This question was open- ended, and responses were numerous and varied, but a few patterns emerged from the data. The most commonly requested in Cambodia was the issue of availability of essential medicines for NCD conditions such as diabetes and hypertension, besides technical guidance on continuing NCD prevention and control programmes during the pandemic, such as how to ensure continuity of essential NCD services without jeopardizing patient or health care provider safety, as well as guidelines for possible drug interactions between patients' current NCD-related medication and those to treat the virus.

Civil society organizations joined with experts from Ministry of Health and development partners in asking for official registration (in Hospital Formula of 1000 tablets per pot of 14) low-cost generic medicines that the MoH Guideline for Management of Diabetes and Hypertension recommends for use in Primary Care. An official registration of these medicines could create opportunity for sustainable financing of NCD services in Primary Care. This would also address the current inefficiencies in the use of funds for reimbursing Hospitals and Clinics serving NCD patients entitled to Health Equity Fund or National Social Security Fund. These social health protection programs would then obtain a much higher value for their expenditures. But most importantly of all, low income groups and middle income groups would no longer have to return unnecessarily frequently to the health facility to raise its revenue.

About a dozen countries specifically asked for guidance on utilizing telemedicine or Health technologies to provide care and support for NCD patients and a similar number requested support on developing communication materials addressing NCDs and their risk factors in the context of the pandemic.

MOH and development partners can design a system for monitoring how much chronic patients with NCD actually spend comparing it with what they should be spending in primary care to live with their condition.

LIMITATIONS

The data that could be collected is limited, including the data on market prices of the essential drugs for NCD patients that must be prescribed according to the MoH SOP for Management of Diabetes and Hypertension in Primary care (2019). Much of the collected data are not more than anecdotal and deserve to be studied systematically and professionally in order to set a robust baseline for measuring progress in the coming five to ten years. Also, there was imitated budget to study NCD patients living during the Covid-19 pandemic in Cambodia. The time reserved for the study is limited, and seems a little tight for the detailed analysis.

The data/information collection during COVID-19 encountered difficulty in doing interviews through Focus Group Discussion and meeting stakeholders. Disruptions occurred due to weak internet; being unable to probe for details; and observation of overall situation in the NCD patients target villages.

The study had to be planned and carried out in circumstances where Cambodia as well as the world are suffering Covid-19 outbreak worldwide. In connection with situation of NCDs patient are responding to

changing strategies with regards to provision of health services for NCD patients. The study had to make sure that the selected methodology was suitable for government and NGOs partnership and Cambodian NCDs Alliance so it can be supported and be realized and completed on time.

CONCLUSIONS AND RECOMMENDATIONS

- This study has highlighted effects of the Covid-19 pandemic on NCD services generally. It revealed varying degrees of temporary disruptions to NCD services – a finding that has been consistent across all provinces r and income groups.

- The disruption of services has been particularly problematic for those living with NCDs who need regular or long-term care to maintain control of their conditions. Patients were hampered in seeking services due to lockdowns, fear of getting infected with COVID19 at hospitals and clinics, disruption in organized travel and transportation, reduced income, and higher cost of seeking health care, due to higher transportation cost created by the need of health facilities to increase utilization frequency for higher user fee income in order to pay for NCD medicines at local market prices. .

- Because all human and financial resources were focused on the pandemic of COVID19, there were even less resources available for the regular NCD care provision compared to the situation before COVID19. There was lack of availability of medicines for NCD in the public service. Referral Hospitals and Health Centers were urged to fund their procurement of lacking NCD medicines through the existing user fee systems. But the local market prices of the NCD medicines are relatively high when compared to world market prices and the approved user fees.

- Some health facilities that used to provide care for NCD patients were temporarily closed or re-assigned for COVID19 patient care. This contributed to NCD patient problems to find other facilities and to higher health related expenditures in particular higher travel cost.

- Encouraging findings of the survey were that alternative strategies like triaging and telemedicine have been adopted by many in Cambodia to address the disruptions, and continuity of NCD services has been ensured income operational districts.

- The National Covid-19 Masterplan includes the creation of multi-sectorial provincial committees led by the provincial governors. Plans are being developed to build capacity at provincial and district level around key priority areas.

- The National COVID-19 Masterplan includes the creation of multi-sectorial provincial committees led by the provincial governors. Plans are being developed to build capacity at provincial and district level around key priority areas. The MOH has published Infection Prevention and Control (IPC) SOPs for COVID-19 in Cambodia. The government has launched an Interactive Voice Response (IVR) tracking system to automatically receive incoming and outgoing calls from the 115 response hotline, aiming to ease congestion and quickly identify potential COVID-19 cases.

- However, to build back better health systems during and after the crisis, governments need to commit and ensure that people living with NCDs do not experience disruptions to essential health services including access to low-cost generic medicines through registration of the most important low-cost generic medicines in hospital formula (1000 tablets per pot) so they can be imported and distributed according to demand for these items by the provinces and public health facilities.

- There is ample room for optimization of the reimbursements for Health Equity Fund and NSSF based on the Prakas through registration of low-cost generics in hospital formula from reliable distributor of such medicines. If the Ministry of Health allows these registrations, it opens the possibility to import low cost generics and increase their availability throughout the country. This will reduce the need to

raise user fees. This will protect the lower income NCD patients against catastrophic health expenditure.

- Countries need to tackle the impacts of NCDs in their national Covid-19 response and preparedness plans to develop strengthened health systems with integrated NCD care for future health emergencies. NCD prevention and management is the insurance policy to improve population health and mitigate the impact of any future crisis.

- The Government of Cambodia and the Ministry of Health should consider the impact of income and economics with NCD patients and can find a good way to assist NCDs patients in the impact of income and economic provide with health services without payment during Covid-19. The government and NGOs NCD alliance should work closely with MoH and donors for supporting NCD patients who lose income during Covid-19.

- During the Covid-19 the health services and quality of individuals for NCD patients are determined by a complex set of interrelated factors. Such complexity means that measures to promote and protect health and well-being cannot be confined to the health sector alone. Designing and implementing public policies that improve quality of life requires the active involvement and engagement of other sectors of society in all steps of the process.

- The MoH and WHO and NCDs alliance should consider a good way for NCDs patients to understand tools and material within easy access with doctors and go to referral hospitals district to non-communicable diseases (NCDs) for treatment and medicine during Covid-19. The royal government and ministry of health should provide budget via CIP so that they could work with each HC and support Peer Educator Networks, VSHGs to NCDs message or follow up.

- To be addressed to historic underinvestment in NCDs considering that HSP4 and new National Strategic Plan for the Prevention and Control of NCDs are being developed, Peer Educator Networks for Diabetes and Hypertension continued and expanded, while financing through Revolving Drug Funding should be encouraged as a strategy for sustainable financing of NCD services in Primary Care.

- The low-cost generic drug prices of well-established international experienced suppliers dedicated to quality and long term relationships with governments or nonprofit institutions around the developing world create a realistic opportunity for Cambodia to offer sustainable affordable care for Cambodian NCD patients in the coming 5 to 10 years, either by allowing a local company to import them as registered drugs or to import through CMS or combination or by finding any other cost effective solution that satisfies all the stakeholders creating a win-win for all.

- The MoH and NCD NGOs partnership alliance, should take action all health services to NCDs patient during Covid-19 and work closely with local authorities to provide health services in case the NCDs patients need some support during Covid-19 and should spend less on health services of NCDs in rural areas and urban areas.

- Need to strengthen national governance to include non-communicable diseases (NDs) in national Covid-19 plan

- Prevention and case management of NCDs require both intra and inter-sectoral coordination, examples of which are given in the note. Coordination among the different programs needs to be strengthened to implement the Health Strategic Plan 2013-2027 priority areas, including maternal and child health, communicable diseases, health system strengthening, and NCD.

- NCD is working all together across sectors to improve health and influence its determinants is often referred to as inter-sectoral action on health services. The following guidance aims to present some simple steps that policy-makers can take to work across sectors more systematically in order to improve the health services of their citizens and health equity among NCD patient communities.

- The organization and functioning of the MOH-led Task Force for NCD alliance should be strengthened by reviewing its terms of reference and its membership to take action with NCD patient during Covid-19. A high-level coordination mechanism should be established at the MOH to integrate planning, programming and operation of the separate MOH task forces appointed to guide the implementation of the inclusion of NCD.

- Need to be include the prevention, early diagnosis screening and appropriate treatment of NCDs is essential PHC services and UHC benefit packages

- Strengthen institutional capacity by improving staff abilities to interact with other sectors (e.g. public health expertise, overall understanding of public policies, politics, economics, human rights expertise etc.), in order to identify inter-sectoral opportunities and communicate potential co-benefits.

- Develop accountability mechanisms by means such as Community Led Monitoring Mechanisms (CLM) promoting open access to information, meaningful public/civil society participation at all levels, disclosure, grievance and ombudsperson functions. Utilize relevant sections of human rights treaties, and reporting mechanisms mandated by international agreements, to support integration of health determinants across sectors.

- Provide national guidance for the development and use for digital health solutions for NCDs self-care and the provision of medical care at home if resources permitted

- Enhance community participation throughout the policy development, implementation, including chronic patient group representatives in regular monitoring and evaluation processes, creating dedicated channels such as hotline, Facebook/Messenger groups and through regular public consultation/hearings, disseminating information using mass media, web-based tools and facilitating the equal and meaningful involvement of constituency/NGO representatives at all levels.

REFERENCES

- NCD Alliance Solidarity Fund Report
- A global NCD agenda for resilience and recovery from Convid-19
- National Multispectral action plan for the prevention and control of non-communicable Diseases 2018-2027
- National Strategic Plan for Prevention and Control of non-communicable Diseases in Cambodia
- Covid-19 Rapid Assessment lockdown situation in Phnom Penh
- Knowledge Brief Health, Nutrition and Population Global Practice
- National Standard Operation Procedure for Diabetes and Hypertension management in primary care 2019

ANNEXES

ANNEX 1: Work Plan and Schedule
ANNEX 1: Questionnaire
ANNEX 3: Draft Comparison of drug prices from some international suppliers and in-country prices

Work-Plan and Activity
for Study on the Situation of NCD' patients at the time of Covid-19 -HACC
In Kampong Cham, Tboung Thnomg, Kampong Chhnang Province, and Sen Sok District, Phnom Penh

Date/time	Activity	Contact/ Location
For Focus Group Discussions		
October 15th- 2021 (Morning)	Travel and conduct interview with NCD's Patient's in Referral Hospital at Srok Chamkar Leu, Kampong Cham Province	Consultancy, HACC and LC,
October 15th 2021 Afternoon	Travel and conduct interview with NCD's Patient's in Referral Hospital of Ouraing Ouv District, Tboung Thnomg Province	Consultancy, HACC and LC
October 16th 2021 (Morning)	Travel and conduct interview with NCD's Patient's in Referral Hospital of Kompong Tralach District, Kampong Chhnang Province	Consultancy, HACC and MoPoTsyo
October 16th 2021 (Afternoon)	Travel and conduct interview with NCD's Patient's in Health Centre of Onlong Kragngan, Sen Sok Distract, Phnom Penh	Consultancy, HACC and MoPoTsyo
For Stakeholder		
October 22th, 2021	**Conduct interview and Information Collection with Stakeholder and Partners**	**Consultancy, and HACC Coordinator with Stakeholder and Partners**
08.00-09.00 am	Dr. Thann Khem	LC ☐ Phone/Zoom ☐ In office
09.00-10.00 am	Maurits van Pelt,MSc, LL.M	MoPoTsyo ☐ Phone/Zoom ☐ In office
11.00-12.00 am	Dr. Yel Daravuth	WHO ☐ Phone/Zoom ☐ In office
02.00-3.00 pm	Dr. Choub Sokchameun	KHANA ☐ Phone/Zoom ☐ In office
03.00-4.00 pm	Dr. Kol Hero	Director of PMD ☐ Phone/Zoom ☐ In office

Hope HACC can be support consultancy to draft mission odder to submitted paper to Referral Hospital at Srok Chamkar Leu, Kampong Cham Province, Referral Hospital of Ouraing Ouv District, Tboung Thnomg Province, Referral Hospital of Kompong Tralach District, Kampong Chhnang Province and Health Centre of Onlong Kragngan, Sen Sok Distract, Phnom Penh and arrangement with stakeholder for conduct based on schedule identify and change as well as.

Question Guide for Focus Group Discussions

List of themes: experience of physical/social distancing; experience of travel restrictions and impact on access to services and medicines/treatment; access to care in general; management of disease/condition in general; knowledge of specific risks for PLWNCDs; economic impact of COVID-19 on health and wellbeing; impact of COVID-19 on lifestyle – unhealthy behaviors such as drinking, smoking, buying unhealthy food/beverages; impact of COVID-19 on mental health.

Questions:

Opening question

1. Which non-communicable disease are you living, for how long with and how has this disease impacted/effected yours and your family's life?

Introductory question

2. Before the outbreak of COVID-19, what was your experience of managing your disease?

   Prompts: Where did you get your treatment/medicine
   How often did you get your treatment/medicine?
   How did you manage to pay for your treatment/medicine?
   Who supported you with your treatment/medicine in regard to financial support, emotional support, etc.

Key questions:

3. Has your experience of living with a non-communicable disease, or multiple NCDs, changed or been impacted by the COVID-19 outbreak in any way this year?

   Prompts: Has your experience stayed the same or been more challenging since the start of COVID-19? Do you have any concerns?
   Any changes to your mental health, physical health, or your existing disease/s or condition?

4. Have you experienced any disruptions/changes to the availability of health services since the start of the COVID-19 outbreak?

   Prompts: *What kind of disruptions?*
   When did this happen?
   What about in March and April when travel restrictions were implemented, and people were practicing physical/social distancing?

5. Since the start of the COVID-19 have you always been able to access medicine/treatment to manage your disease when you need it?

   Prompts: if not, is it because you can't afford it or because the medicines/treatments are not available?

6. Are you aware/do you understand that having a non-communicable disease, particularly diabetes, heart disease or hypertension, increases the risk of severe illness from COVID-19?

   Prompts: if you are aware/have knowledge about this, how did you hear about the increased risks?

7. Or, has the COVID-19 outbreak and economic impact resulted in any changes to yours or your household's income and your ability to afford health care and medicines?

Prompts: Have you or members of your household lost jobs or income as a result of COVID-19? Permanently or temporarily? Has the economic impact of COVID-19 affected your physical or mental health in any way?

8. In the past 6 months, since the COVID-19 outbreak, what has been your experience of trying to maintain a healthy lifestyle (i.e. healthy lifestyle - eating healthy food, not smoking or drinking alcohol, limiting sugary drinks, being physically active).

   Prompts: Has it been easier or more difficult to have a healthy lifestyle during this time? What has become more difficult/challenging for you?

Ending question

9. Finally, is there anything connected to your experience living with a non-communicable disease/s which has not been discussed that you feel strongly about and would like to bring up now?

STATEHOLDER QUESTIONANIRES

Who is the focal point who provided the responses?

Name:	:	
Position:	:	
Organization:	:	
Country:	:	
Telephone and Email Address:	:	

INFRASTRUCTURE

1. **Are the Ministry of Health (or equivalent institutes) staff with responsibility for NCDs and their risk factors being reassigned/deployed to help with overall COVID-19 response?**

   ❍ Yes - All staff supporting COVID-19 efforts full time
   ❍ Yes - All staff partially supporting COVID-19 efforts along with routine NCD activities
   ❍ Yes - Some staff supporting COVID-19 efforts full time
   ❍ Yes - Some staff partially supporting COVID-19 efforts along with routine NCD activities
   ❍ No
   ❍ Don't know
2. **How much of the government (or Ministry of Health) funds initially allocated for NCDs have been reassigned to non-NCD services due to COVID-19 response efforts?**
   ❍ None or not yet ❍ 1-25% ❍ 26 -50%
   ❍ 51-75% ❍ 76 -100% ❍ Don't know

POLICIES AND PLANS

3. **Is ensuring continuity of NCD services included in the list of essential health services in your country's COVID-19 response plan?**
   IF RESPONSE IS "No/Not Yet" or "Don't Know", SKIP TO QUESTION 5.
   ❍ Yes ❍ No / Not Yet
   ❍ Don't know (Kindly upload your country's COVID-19 response plan if available)
4. **Which NCD services are included in the list of essential health services of your country's COVID-19 response plan?**
   a. Cardiovascular diseases services
      ❍ Yes ❍ No
   b. Cancer services
      ❍ Yes ❍ No
   c. Diabetes services
      ❍ Yes ❍ No
   d. Chronic respiratory disease services
      ❍ Yes ❍ No
   e. Chronic kidney disease and dialysis services
      ❍ Yes ❍ No
   f. Dental services
      ❍ Yes ❍ No
   g. Rehabilitation services
      ❍ Yes ❍ No
   h. Tobacco cessation services
      ❍ Yes ❍ No
   i. Others (please specify other NCD services included in the list of essential services) ....
5. **Is there additional funding allocated for NCDs in the government budget for the COVID-19 response?**

❍ Yes ❍ No
❍ Don't know

6. **Which of the following Ministry of Health NCD activities planned for this year have been postponed because of COVID-19? (check all that apply)**
   ❍ None
   ❍ Implementation of NCD Surveys
   ❍ Public screening programs for NCDS
   ❍ WHO Package for Essential NCDs (PEN) training and implementation in Primary Health Care
   ❍ WHO HEARTS technical package
   ❍ Mass communication campaigns
   ❍ Others (please specify what other NCD activity/activities have been postponed due to COVID-19)

NCD – RELATED HEALTH SERVICES

7. **During the COVID-19 pandemic, what are the government policies for access to essential NCD services at primary, secondary and tertiary care levels? (please answer for both outpatient and inpatient services)**
   a. ❍ Outpatient NCD services are open
      ❍ Outpatient NCD services are open with limited access and/or staff or in alternate locations or with different modes
      ❍ Outpatient NCD services are closed
      ❍ Don't know
   b. ❍ Inpatient NCD management services are open
      ❍ Inpatient NCD management services are open for emergencies only
      ❍ Inpatient NCD management services are closed
      ❍ Don't know
8. **Which of the following NCD-related services have been disrupted due to COVID-19?**
   IF RESPONSE TO ALL SUBQUESTIONS IS "Not disrupted" OR "Don't know", SKIP TO QUESTION 12

   a. Hypertension Management
      ❍ Completely disrupted ❍ Partially disrupted
      ❍ Not disrupted ❍ Don't know
   b. Cardiovascular emergencies (including MI, Stroke and cardiac Arrhythmias)
      ❍ Completely disrupted ❍ Partially disrupted
      ❍ Not disrupted ❍ Don't know
   c. Cancer Treatment
      ❍ Completely disrupted ❍ Partially disrupted
      ❍ Not disrupted ❍ Don't know
   d. Diabetes and Diabetic Complications Management
      ❍ Completely disrupted ❍ Partially disrupted
      ❍ Not disrupted ❍ Don't know
   e. Asthma services
      ❍ Completely disrupted ❍ Partially disrupted
      ❍ Not disrupted ❍ Don't know
   f. Urgent dental care
      ❍ Completely disrupted ❍ Partially disrupted
      ❍ Not disrupted ❍ Don't know
   g. Rehabilitation services
      ❍ Completely disrupted ❍ Partially disrupted

❍ Not disrupted ❍ Don't know

h. Palliative care services

❍ Completely disrupted ❍ Partially disrupted

❍ Not disrupted ❍ Don't know

9. What are the main causes of this disruption(s)? (check all that apply)

❍ Closure of outpatient NCD services as per government directive

❍ Closure of outpatient disease specific consultation clinics

❍ Closure of population level screening programs

❍ Decrease in outpatient volume due to patients not presenting

❍ Decrease in inpatient volume due to cancellation of elective care

❍ Inpatient services/hospital beds not available

❍ Insufficient staff to provide services

❍ NCD related clinical staff deployed to provide COVID-19 relief

❍ Insufficient Personal Protective Equipment (PPE) available for health care providers to provide services

❍ Unavailability/Stock out of essential medicines, medical diagnostics or other health products at health facilities

❍ Government or public transport lockdowns hindering access to the health facilities for patients

10. What approaches are being used to overcome the service disruptions to NCD management and prevention in public sector health facilities? (check all that apply)

❍ Telemedicine deployment to replace in-person consults

❍ Task shifting/role delegation

❍ Novel supply chain and/or dispensing approaches for NCD medicines (e.g. anti-hypertensive, insulin, painkillers, antibiotics) through other channels

❍ Triaging to identify priorities

❍ Redirection of patients with NCDs to alternate health care facilities

11. What are your country's plans to re-initiate any suspended NCD services?

....

....

SURVEILLANCE

12. Is the Ministry of Health collecting or collating data on NCD-related comorbidities in COVID-19 patients?

❍ Yes ❍ No

❍ Don't know

❍ Not applicable

OTHER SUGGESTIONS

13. Are there any technical guidance or tools that you would suggest WHO to develop related to NCDs during COVID-19 outbreak?

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....

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....