LOGISTICS
REHABILITATING
HEALTH FACILITIES
Centre, East, North-West, South-West, West Regions at the Heart of the Plan

COVID-19 VACCINATION
Vaccines save lives

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Editorial

CONTINUOUS SUPPORT TO THE GOVERNMENT

WHO has played an active role in the implementation of six operational phases in the COVID-19 response in Cameroon. The first three phases (from 06 March to 30 December 2020) were marked by the outbreak and spread of the pandemic in all the regions of the country as well as community transmission which led to a drastic drop the socio-economic activities in the infected areas. These phases required an extensive mobilization of human resources and a proportional increase in logistics. The support of WHO, assisted by other partners in Cameroon, consisted of the mobilization of its entire staff, i.e. 161 people with 39 experts dedicated to the response to COVID-19 and a donation of 10.8 tonnes of various material and equipment.

The next three phases, which run from January to June 2021, were dedicated to mitigating the socio-economic impact of COVID-19 and resuming all planned activities/events such as back to school/academic year, sport competitions, normal life in companies/government offices and elections. Unfortunately, these activities did not resume in full swing as planned because the country was struck with the 2 waves which was a result of the circulating of the British and the South African variant. During this period, WHO did not relent its technical and financial support to the government. Among this support there was the rehabilitation of health infrastructures in certain regions of the country.

The significant reduction in funding did not stop WHO from maintaining its teams in all regions of the country, including in unsecured areas. In addition to technical support activities, WHO provided Personal Protective Equipment (PPE) and various biomedical equipment at both central and regional levels. For example, for the North-West and South-West regions, WHO through the Pandemic Emergency Financing Facility (PEF) funded by the World Bank, provided equipment including 2 vehicles, 40 desktop computers, 100,000 masks, 4,000 safety goggles, 95,000 treatment or examination gloves, among others.

As far as rehabilitation is concerned, WHO supported the revamping of intensive care units in nearly ten health facilities in the Centre, East, North-West, West and South-West regions. In addition to this important rehabilitation plan, a sustainable opportunity for the response against COVID-19 in Cameroon, WHO Cameroon paid close attention to COVID-19 vaccination, from the reception of vaccines to the monitoring of severe Adverse Events after Immunization (AEFIs), including sensitization of communities and various targets. Increasingly, the organization focuses on the risk of arrival of a third wave of contamination, and particularly on the organization of the CAN Total Energies 2021 African Cup of Nations without an increase in COVID-19 cases.

Once again, the WHO Representative office in Cameroon, together with other health partners, renews its commitment to continue to provide technical and financial support to the Government of Cameroon until the final victory against the COVID-19 pandemic. WHO is thankful to the partners who have enabled the organization to increase its capacity to support the Government of Cameroon in its continuous efforts.
battle against COVID-19. Special thanks to the World Bank, the African Development Bank (ADB) and the European Union Delegation in Cameroon who are actively involved in the rehabilitation of health infrastructures.

Dr Phanuel Habimana,
WHO Representative in Cameroon.
WHO TOGETHER WITH THE IMS-COVID-19 CAMEROON

14 donors
15 050 851 USD raised

18
Laboratory units
314 044 PCR tests
1 420 789 RDT tests
100 Samples in Dakar
200 positive samples in Kinshasa

47 328 500 XAF
Intra Action Review (IAR)
11 595 000 XAF
New Covid-19 national plan 2024
14 video conference kits handed to the MoH
10 ZOOM licences for all the regions

119 723
School actors screened

410
CHW trained in EBS-EWARS

344
Personnel trained in Rapid Response Teams (RTT)

01 RTT manual developed

33/49
BHPs in service

6 000
Tests / week on average

Nearly
320 000 passengers registered within 39 weeks

243
Vaccination sites

391 200 Astra - Zeneca doses

200 000 Sinopharm doses

153 AEFI followed up

03 medicalised ambulances
02 field vehicles
01 PCR machine
110 respirators
27 intensive care units in rehabilitation

04 Databases created,

400 District staff trained,

50 situation reports (SITREPs) published

20 Dashboards shared

100 Samples in Dakar

200 positive samples in Kinshasa

27

14

18

47

11

14

10

04

03

20

314 044

1 420 789

100

200

391 200

200 000

153

01

02

01

110

27

PCR tests

RDT tests

USD raised

Intra Action Review (IAR)

New Covid-19 national plan 2024

video conference kits handed to the MoH

ZOOM licences for all the regions

School actors screened

CHW trained in EBS-EWARS

Personnel trained in Rapid Response Teams (RTT)

RTT manual developed

Vaccination sites

Astra - Zeneca doses

Sinopharm doses

AEFI followed up

medicalised ambulances

field vehicles

PCR machine

respirators

intensive care units in rehabilitation

PCR tests

RDT tests

USD raised

Intra Action Review (IAR)

New Covid-19 national plan 2024

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ZOOM licences for all the regions

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CHW trained in EBS-EWARS

Personnel trained in Rapid Response Teams (RTT)

RTT manual developed

Vaccination sites

Astra - Zeneca doses

Sinopharm doses

AEFI followed up

medicalised ambulances

field vehicles

PCR machine

respirators

intensive care units in rehabilitation
RESOURCE MOBILIZATION AND ACKNOWLEDGEMENTS TO PARTNERS

WHO received funds from several financial partners

<table>
<thead>
<tr>
<th>Amount (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>50000</td>
</tr>
<tr>
<td>100000</td>
</tr>
<tr>
<td>150000</td>
</tr>
<tr>
<td>200000</td>
</tr>
<tr>
<td>250000</td>
</tr>
<tr>
<td>300000</td>
</tr>
<tr>
<td>350000</td>
</tr>
<tr>
<td>400000</td>
</tr>
</tbody>
</table>

AFD : Agence Française de Développement
CERF : United Nations Central Emergency Response Fund
DFATD : Department of Foreign Affairs, Trade and Development
DEVCO : DG for International Cooperation and Development
ECHO : Directorate - General for European Civil Protection and Humanitarian Aid Operations
KBFUS : King Baudouin Foundation United States
PEF : Pandemic Emergency Financing

14 donors
15 050 851 USD mobilized
COORDINATION, PLANNING AND MONITORING/EVALUATION
SET TO STRENGTHEN THE COVID-19 NATIONAL COORDINATION

The support to the national coordination with joint activities between the WHO-IMS and the CCousp-IMS was reflected through:

- Support from the World Health Organization (WHO) and the European Union (EU) to the Ministry of Public Health to conduct the Intra Action Review (IAR) of the COVID-19 response in Cameroon. The IAR aimed at assessing the health response to COVID-19 in Cameroon at the central and regional levels from 6 March to 31 December 2020, and making recommendations to improve preparedness and response capacities to COVID-19 and other public health emergencies. The IAR took place from 22th to 26th February 2021 in Kribi in the South Region and participants included Incident Managers, Heads of Offices, Sections and Units of the COVID-19 Incident Management System at the central and regional levels, Technical and Financial Partners and representatives of Governors. Besides, the review highlighted the weaknesses encountered during the first year of the response, evaluated implementation, good practices and challenges. The main outcome of the meeting was the development of an operational action plan to correct short and medium term shortcomings and consolidate achievements. The financial support was estimated at XAF 47,328,500.

- Technical and financial support for the revision of the national COVID 19 response plan amounting to XAF 11,595,000.

- Support for the decentralization of the COVID 19 response in the health regions and districts with

WHO IMS IN BUEA

47 328 500 XAF
Intra Action Review (RIA)

11 595 000 XAF
New Covid-19 national plan 2024

14 video conference kits handed to the Ministry of Public Health

10 ZOOM licences for the regions
the recruitment and deployment of 64 national staff and 4 international staff to the 10 regions of the country. In addition, to ensure coordination at all levels of the health pyramid, WHO provided 11 video conferences and 14 kits. One video conference installed at the Ministry of Public Health and one in each regional delegation of public health, one to the Secretariat General (SG), 1 to CCOUSP and one to the conference room of the ministry. To better support decentralization, Zoom licenses were offered to facilitate online meetings in all 10 regions.

- Participation in 21 virtual meetings of regional delegates on Wednesdays chaired by the Minister of Public Health. The main purpose of these meetings is to harmonize the response actions throughout the country. WHO helped Cameroon in identifying and prioritizing investments to realise in the regions by joining efforts to curb the second wave.

Keeping the WHO-IMS on alert throughout the response by organizing four types of coordination meetings: central coordination meetings, project meetings, regional coordination meetings and general meetings of WHO Cameroon staff. In total, approximately 80 meetings were held from 04th January to 30th June 2021, notably 42 central coordination meetings, 18 regional coordination meetings, 16 project coordination meetings and 4 general meetings that gathered all the staff.

The summary objective indicator for monitoring and evaluation indicates that more than 60% of the technical and financial support activities foreseen in the Office Country Response (OCR) plan have been fully implemented.
BAMENDA, DISCUSSION BETWEEN THE WHO REPRESENTATIVE AND THE REGIONAL DELEGATE
Management of COVID-19 data and information

DYNAMIC DATABASES COMBINED WITH CAPACITY BUILDING OF HEALTH DISTRICTS

THE DIFFICULT DATA PATH

Since January 2021, the persistent data feedback problems encountered since the IMS was activated have been adequately addressed. Therefore, four databases have been better structured with the daily technical support of WHO. They include: investigation, contact follow-up, case management and laboratory databases. Two operations are permanently carried out in these databases: data audit and cleansing. Data audit involves quantifying the rate of missing information or duplicates, the rate of anomalies or outliers. As for data cleansing, the catching up of missing data, the completion of missing data or the deletion of duplicates are carried out on a daily basis.

IMPROVING DATA QUALITY THROUGH DISTRICT CAPACITY BUILDING

In the response process, the quality of COVID-19 data has been a major concern in Cameroon. To this effect, a series of capacity building in districts through face-to-face or distance workshops was carried out with technical and financial support from WHO and partners. More than ten workshops were organized in all the regions of the country for district data managers assisted by their district heads. Approximately 400 district health personnel from all over the country were trained on

- 04 Databases Developed,
- 400 Trained district staff,
- 50 Situation Reports (SITREP) published
- 20 Dashboards shared
Improving data quality, analysis automation and the representation of graphic or cartographic information. Many regions have considerably structured their linear lists of data, such as confirmed cases or follow-up of contacts, which has resulted in the faster feedback of improved data. In this regard, some twenty Dashboards have been created and fifty SITREPs have been developed and shared to inform the national or international community on the epidemiological situation on a weekly basis.

**Epidemiological situation, visualization of confirmed cases reveals indicators**

**INDICATORS OF MORTALITY**

![Image of epidemiological curve from week 35/2020 to week 23/2021](image)

*Figure: Epidemiological curve from week 35/2020 to week 23/2021*

![Image of deaths according to severe cases of COVID-19](image)

*Figure: Deaths according to severe cases of COVID-19*
**INDICATORS OF MORBIDITY**

*Covid-19 Infos No. 003 - January - June 2021*

*WHO Cameroon Newsletter*

*Figure: Distribution according to age group, gender, comorbidity amongst people who died of COVID-19*
COMMUNITY EPIDEMIOLOGICAL SURVEILLANCE

A NEW PHASE

COMMUNITY CONTAMINATION RISES

The epidemiological situation of COVID-19 between the first week (W1) to week 14 (W14) was characterized by a COVID-19 outbreak representing the second wave that reached all health districts and leading to an increase in screening activities in laboratories carrying out PCR tests as well as mass screening activities in the various health regions. The technical platform for laboratories was strengthened by increasing from 03 PCR laboratories in the first weeks to 07 by the 14th week. This consequently led to the increase of samples screened thus helping to early detection of cases.

In schools, a slight increase in cases was noted: at W1, there were 108 confirmed cases among teachers (0.48% positivity rate) and 552 cases among students (1.5% positivity rate). At week 14, the number of confirmed cases raised to 282 confirmed cases raised among teachers (11% positivity rate) and 2454 confirmed cases among students (3.1% positivity rate).
In total, by week 21 (WE21) 62,013 teachers and administrative staff, pupils and students were screened in schools and universities. The regional distribution by category of actors provides more information on the screening work carried out across the country in schools and universities as shown in the following table:

<table>
<thead>
<tr>
<th>Regions</th>
<th>Teachers and administrative staff</th>
<th>Pupils and students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Screened</td>
<td>Positive</td>
</tr>
<tr>
<td>Adamawa</td>
<td>881</td>
<td>46</td>
</tr>
<tr>
<td>Centre</td>
<td>974</td>
<td>7</td>
</tr>
<tr>
<td>East</td>
<td>431</td>
<td>16</td>
</tr>
<tr>
<td>Far-North</td>
<td>220</td>
<td>8</td>
</tr>
<tr>
<td>Littoral</td>
<td>1890</td>
<td>15</td>
</tr>
<tr>
<td>North</td>
<td>178</td>
<td>19</td>
</tr>
<tr>
<td>North-West</td>
<td>217</td>
<td>10</td>
</tr>
<tr>
<td>West</td>
<td>847</td>
<td>28</td>
</tr>
<tr>
<td>South</td>
<td>2688</td>
<td>63</td>
</tr>
<tr>
<td>South-West</td>
<td>389</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8715</td>
<td>230</td>
</tr>
</tbody>
</table>

Table: Screening by region in school and academic institutions

To carry out this activity, WHO has provided the Ministry of Public Health with 410 community health workers (CHWs) trained in the use of the EBS-EWARS (Early Warning and Response System) platform. Similarly, supervision took place in 4 regions of the country, notably the North West, South West, South and Centre.

Furthermore, WHO contributed in to the elaboration of the national guide for Rapid Response Teams (RRTs) to serve as a basis for investigations and follow-up of contacts. In this line, 344 people were trained including 44 reservists from the Central level and the other 300 are deployed in the regions to reinforce the response teams.
BORDER HEALTH POSTS (BHPs)

The number of border health posts increases in the country

Border health posts (BHPs) are an important mechanism in the epidemiological surveillance of the Coronavirus pandemic. A total of 49 BHPs in Cameroon, including land, air, sea and river were not activated at the same period as some were prioritised due to their frequent use. Over 39 weeks, data was observed and analysed to determine how their implementation was evolving (figure).

The data analysed from week 36 (WE36) 2020 to week 21 (WE 21) 2021 show that the number of border health posts doubled from 15 to 33.

At BHPs, passengers were tested, but the statistics are not worrisome

Since the COVID 19 response was launched, tests have been carried out at border health posts. The analyses carried out for the selected 39-week period perfectly illustrates the trends of the pandemic at these entry points to Cameroon (figure).

There has been a significant decrease in the number of positive cases, while the number of tests (RDT) performed has not been much altered with approximately 6000 tests/WE. An analysis of data per category of BHPs provides a better understanding of events concerning this aspect of the response (figure).
An analysis conducted over 39 weeks between 2020 and 2021 (WE36-WE21) shows that 317,604 travellers passed through the BHPs and 215,738 were screened, i.e. 68%. 806 positive cases were confirmed and reported, representing a positivity rate of less than 0.5%.

Air BHPs were among the mostly used (201,052 = 63% of travellers) followed by land BHPs (85,307 = 27% of travellers) and then maritime BHPs (31,238=10% of travellers).

Out of the 806 positive cases reported, 409 were reported by air BHPs, 298 by land BHPs and 99 by maritime BHPs.

Focusing on each category provides more information on the pace of epidemiological surveillance at these points of entry to the country. Thus, the land BHPs, which are by far the most important in terms of numbers (figure), were the first to be examined.

This also applies to land BHPs, where some have a higher migratory flow than others: Kousséri, 12,951 cases screened out of 17,664 passengers disembarked, Bogdio 2,483 out of 7,113, Garoua-Boulai 6,545 out of 6,891, and Kyé-Osi 6,415 out of 6,750.

On the lower end, others BHPs such as the one of Boudjoumkoura and Abongschie respectively welcomed only 336 and 357 travellers (it should be noted that they are the least populated) even though they began their activities with a small time gap compared to the others (WE46 2020).

As for the number of positive cases declared, the BHPs of Ntam leads with 47 cases, followed by Garoua-Boulai (45), Kyé-Osi (44) and Ekok (38).

Meanwhile, the BHPs of Mboy II, Gari Gombo, and Abongschie did not report any COVID-19 positive cases.

Following data analysis of land BHPs, we conducted analyses were on maritime BHPs (figure).
In the maritime BHPs, the port of Douala received more travellers (7,180/12,505), Yagoua (4,056/5,418), the Autonomous Port of Kribi (PAK) (1,232/4,349) and Idenau (3,110/3,134).

However, in terms of number of cases, Idenau (39), PAD (19), Yagoua (16) and Campo (09). Socambo, Ekondo-titi and Gbiti are BHPs that are much less crowded and did not report positive cases.

The low rate of testing recorded at the Limbé BHPs (1232/4349 = 28% tested) is explained by the fact that seafarers still refuse to be tested in this port.

About 63% of travellers entering Cameroon pass through air BHPs, distributed as follows: AID (92,644/126,268), NSI (48,964/62,973) and AIG (357/11,811). These numbers refer to the number of cases screened over the total number of passengers recorded.

AID recorded 304 cases compared to 105 cases for NSI and zero cases for AIG.
Laboratory
IMPROVING PERFORMANCE

BRITISH AND SOUTH AFRICAN VARIANTS CIRCULATING IN CAMEROON

The Coronavirus is similar to a hydra, a multi-headed snake that can go through our control measures by mutating into other more or less virulent forms. Hence, the COVID-19 variants have been detected in four countries notably: the United Kingdom, the Republic of South Africa, Brazil, and India (Figure).

In Cameroon, there are two variants circulating: the British variant and the South African variant. Investigations and surveillance are still being carried out in order to track their geographical distribution in the country.

In this difficult context marked by the second and very severe wave of the pandemic, WHO supported the active case and contact tracing on a case-by-case basis.

PCR-RDT TESTING SHOWS FIGURES

From January to June 2021, eighteen laboratory units linked to PCR testing units in the health districts have carried out, with the support of technical and financial partners, in particular WHO, 314,044 PCR, i.e. 12 persons/1,000 inhabitants and 1,420,789 PCR, i.e. 52 persons per 1,000 inhabitants.
IMPLEMENTING GENOMIC SURVEILLANCE

WHO provided its assistance for the transfer of positive samples to reference laboratories of the WHO Africa-CDC network. Two shipments have already been made to laboratories in the network. A first shipment of 100 samples was sent to the Pasteur Institute in Dakar and a second shipment of 200 positive samples to the INRB in Kinshasa. In addition to providing support for the delivery of samples, WHO works with the government so as to update the technical platform and bring it to the level of complete sequencing. In this regard, WHO will acquire, with the support of the ADB, an Illumina NextSeq 550 complete sequencing platform. Following this acquisition, the personnel of the National Public Health Laboratory (NPHL) who is the beneficiary, will be trained for an effective use of this platform.

SUSTAINING TECHNICAL STAFF SUPPORT

The organisation financially supported the implementation of the decentralisation of COVID-19 diagnosis in the various laboratories with XAF 78,120,000. This funding was granted to cover the allowances of 26 agents (laboratory technicians, data managers, biologists and data entry agents) in 8 laboratories distributed in 6 regions. In the future, WHO intends to boost the sequencing capacities of these laboratories.

COVID-19 VACCINATION
VACCINES ARE THERE TO SAVE LIVES

<table>
<thead>
<tr>
<th>Vaccination sites</th>
<th>Astra - Zeneca doses</th>
<th>Sinopharm doses</th>
<th>AEFI followed up</th>
</tr>
</thead>
<tbody>
<tr>
<td>243</td>
<td>391 200</td>
<td>200 000</td>
<td>153</td>
</tr>
</tbody>
</table>
Cameroon has joined the COVAX initiative in its efforts to acquire COVID-19 vaccines. The COVAX initiative is one of the three pillars of the "COVID-19 ACT" launched by WHO and its partners to facilitate innovation and equitable access to diagnostic and treatment tools as well as vaccines. It is indeed a vital initiative that allows low-income countries like Cameroon to have the tools to fight the pandemic in an effective manner just like their rich counterparts; and, thus eradicate the Covid-19 pandemic. WHO has supported Cameroon in the introduction of the covid-19 vaccine in the country through the COVAX initiative from the preparation for the introduction, acquisition, storage, deployment and administration of the vaccine to the target population, and monitoring and evaluation. WHO through Covax has particularly brought assistance to Cameroon as the country during the preparation for the introduction of the vaccine to its population, supporting the development and implementation of the National Vaccine Deployment Plan in every step of the way. The plan identified the need for the country to acquire the vaccines progressively and also proceed in a step by step vaccination of its target population starting with priority targets to achieve the 3 following objectives (in order of priority): reduce the impact of the epidemic in terms of mortality and morbidity by protecting the most vulnerable, protect healthcare workers and build collective immunity. The Covax initiative has enabled Cameroon to acquire 391,200 doses of the Astra-zeneca vaccine arrived in Cameroon on 17th April 2021.

This allocation, along with 200,000 doses of the Sinopharm vaccine that arrived in Cameroon on 12th April thanks to bilateral cooperation between Cameroon and China, enabled the country to begin vaccinating priority targets. Not only the authorities demonstrated their willingness to cooperate with WHO as the organisation has greatly been supporting the country, but they also led by example as they were the first to be vaccinated in front of the cameras. The purpose of this initiative was to convince the sceptical and reluctant population to be vaccinated.

**CAMEROON FIRST COUNTRY TO RECEIVE THE VACCINES IN THE CEMAC ZONE**

Vaccines were speedily dispatched in Cameroon and reached 85% of the 243 approved vaccination sites within the first few weeks for the effective vaccination of priority targets throughout the country, thus widening accessibility for all those wishing to be vaccinated. More than 55,000 people have voluntarily took their first dose and more than 8,200 people have already taken their second dose. This significant number of vaccinated people should dispel the anxiety and hesitation felt by most Cameroonians and even a large part of the international community when the vaccine was announced at the end of last year. As it can be observed, the alleged adverse events spread by the anti-vaccine movement have not yet been witnessed. Apart from the normal effects that occur after an injection of any medical product (vaccine or medication), no exceptional event directly or indirectly related to the vaccine was reported. A total of 153 cases of adverse events were naturally followed up, as it is the case for other vaccines and even some drugs. WHO is currently supporting the government in activities aimed at sensitising all Cameroonians through real time information on vaccinated populations. The data happens to be quite reassuring as
opposed to the false rumours propagated in social media that make Cameroonian reluctance to get vaccinated, thus slowing down the road to the rut. Yet, in addition to the barrier measures that are still essential and recommended to everyone, vaccination has become the core pillar of the fight against the COVID-19 pandemic. WHO has supported the acquisition of safe and effective vaccines, which are currently available in all public health facilities in Cameroon for free. WHO also urges people to do the right thing by getting vaccinated for their own sake in particular and that of the whole community, to trust and resort to vaccination services in case of any side effects following vaccination.
VACCINATION CENTERS CLOSE TO THE POPULATION

I WISH TO BE VACCINATED WHERE DO I GO?

243 vaccination centers have been set up all over the country to enable priority targets and communities to benefit from COVID-19 vaccine services. These vaccination centers are regionally distributed as follows:

Adamawa 13, Centre 45, East 18, Far North 33, Littoral 32, North 18, North West 23, West 26, South 13, South West 22. Most of these centers are in district hospitals, medical health centers, integrated health centers and finally reference hospitals.
CASE MANAGEMENT

CLINICAL CASE MANAGEMENT

FOLDS BUT DOES NOT BREAK!

Management of data revealed the magnitude of the outbreak

The collected data on clinical case management have been analysed from the epidemiological week 48 (WE 48) in 2020 to the week 22 (WE22) in 2021. They revealed the national trends in terms of hospital admissions, people on oxygen and deaths (figure).

From the figure above, it can be seen that hospitalisation, oxygen and deaths increased significantly between week 7 (WE7) and week 19 (WE19). Yet, the health system has been greatly overwhelmed. Fortunately, the actions undertaken by the government and its partners have led to a decrease in COVID-19 hospital cases as the resources were increased.

Reinforcement of management resources

The resources made available for case management have been significantly strengthened since the start of the pandemic in March 2020 and even more with the surge of the 2nd wave. To date, selected health personnels in all regions benefited from capacity building in the management of mild and severe cases of COVID. This implies 10 regions, 190 health districts and more than 1,000 health care providers trained in medical management. The surge of the second wave has highlighted the increased need for oxygen. The Ministry of Public Health conducted an assessment of the needs in the 10 regions of the country followed by the drafting of a strategic plan. WHO support in the drafting of the concept note to the Global Fund which made possible to address these oxygen needs. Given the outbreak of the second wave of deaths, WHO has intensified its support to the Ministry of Health through the organisation of a major national training on the management of severe cases. These...
three-session training took place from 16th March to 2nd April in two towns: Douala and Yaoundé. All the regions and health facilities that were eligible for the management of COVID-19 severe cases in all regions were trained through theoretical presentations and practical work sessions. WHO provided support to the various participants in the training on severe case management and in the implementation of the recommendations made in their respective health facilities, followed by the development of short, medium and long term improvement plans. An evaluation carried out across the country shows the level of improvement of some regional hospitals.

**Continued management efforts**

The surge of the COVID-19 pandemic has led to the identification of gaps in the health system that require urgent support, particularly the access to oxygen. Although during the year 2020 WHO acquired approximately 183 oxygen concentrators for the Ministry of Health, these resources are still insufficient to cover the country’s oxygen needs. Thus, an evaluation of oxygen therapy needs has been undertaken in the country’s major regional health facilities with the long-term objective of reducing this deficit.

Overall, thanks to the support of the European Union, 76 service providers from the 30 health districts of the Centre region have been trained from 18th-22th January 2021. In the East Region, 31 care providers of 14 health districts were trained from 26th-30th January 2021.
PSYCHOLOGICAL CARE
HELP FOR BEST PRACTICES

TOWARDS EFFECTIVE PRACTICES FOR TOMORROW

The psychological shock deepens

The atmosphere of mistrust and uncertainty triggered by the COVID-19 pandemic has increased during the past six months. Consequently, the psychological shock has been amplified and was reflected through the increase in acute stress, obsessive-compulsive disorders and depression cases among people who have lost loved ones due to COVID-19 or burnout among frontline health workers. Therefore, the incident management system (IMS) with the support of WHO has provided the first potential solutions. As a matter of fact, data collected across the country indicate that approximately 350 health personnel have been trained in psychological first aid and pre/post-test counselling within the framework of patient management.
Practical guidelines are now available

To enhance psychological care as part of the COVID-19 response, the main action undertaken by WHO aimed at supporting the elaboration of documents to promote best practices among actors. To this end, a number of meetings were held between national experts and partners.

Thus, six different tools for psychological care were produced, notably:

- National Strategy for Mental Health in the context of COVID-19
- National Guidelines for Psychological Care of Children and Adolescents
- Algorithms for mental health care
- Standard mental health training modules
- Mental health communication materials (posters, image box, roll-up)

Handover ceremony of mental health documents to the Ministry of Health on 15 July 2021: 500 copies of the care guidelines, 500 copies of the mental health strategy documents, 300 copies of the psychological care guidelines for children and adolescents, 13 copies of the algorithm, 3,500 posters and picture boxes and leaflets, 13 copies of the algorithm, 3,500 posters and image boxes and leaflets
Psychological assistance to the population and families victims of the Kumba Massacre

As part of the psychosocial assistance to be provided to the population and families affected by the Kumba Massacre, the organization supported the following activities:

- Mental Health Training for 146 adults that is 92 parents and 54 teachers
- Detection of 49 critical cases during awareness sessions referred to the WHO’s clinical psychologist for psychological care,
- Creation of a playful and recreational space dedicated to restoring the psychological and social well-being of affected children,
- Financial aid brought to 56 victims and survivors who received XAF 35 000/ vulnerable child,
- Demonstration on the psychological and physical distress symptoms to 1,387 people sharing of awareness messages to thousands of people in Kumba and its surroundings through mass media.

CONTINUITY FOR ESSENTIAL HEALTH SERVICES

The surge of the Coronavirus outbreak has put a tremendous pressure on the health systems of many countries, and unfortunately Cameroon has not been spared. Therefore, this health situation led to a number of challenges such as the reduced demand for access to health services. Moreover, the response against the Coronavirus has shaded other services and care provided to the population such as vaccination and outpatients consultations. Lastly, it has also favored the growth of mortality risk due to other diseases. Over the last six months, the need of ensuring the continuity of health services in order to stimulate demand for health services and maintain the quality of essential care has been operationalised in Cameroon: 20 indicators for reproductive health and other indicators are summarised in five health services in the table below.

CONTINUOUS PROVISION OF HEALTH SERVICES AND CARE

Five health services are targeted for the continuity of services

<table>
<thead>
<tr>
<th>Nº</th>
<th>Services</th>
<th>Indicators</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Vaccination</td>
<td>Penta 3 Immunisation Coverage</td>
<td>monthly</td>
</tr>
<tr>
<td>02</td>
<td>Reproductive Health</td>
<td>Total number of FP consultations (any method) with new or frequent users.</td>
<td>monthly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total number of pregnant women who received ANC</td>
<td>monthly</td>
</tr>
<tr>
<td>03</td>
<td>Hospital and community-based management of malaria</td>
<td>Total number of outpatient consultations for the diagnosis and treatment of malaria</td>
<td>monthly</td>
</tr>
<tr>
<td>04</td>
<td>Outpatient consultations</td>
<td>High Blood Pressure management</td>
<td>monthly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total number of outpatient consultations for the diagnosis and treatment of chronic cardiovascular diseases</td>
<td>monthly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIV management</td>
<td>monthly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total number of outpatient consultations for the diagnosis and treatment of HIV</td>
<td>monthly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diabetes management</td>
<td>monthly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total number of outpatient consultations for the diagnosis and treatment of diabetes</td>
<td>monthly</td>
</tr>
<tr>
<td>05</td>
<td>Hospitalization</td>
<td>Bed occupancy rate</td>
<td>monthly</td>
</tr>
</tbody>
</table>

Table 1. Group of eight indicators selected to monitor the continuity of services
Reproductive health, still on focus

The attention paid to reproductive health remained constant as always, even in the context of Covid-19, over the past six months. A few key facts reflect this reality and the will to continue the provision of care and services in this important area of the health system in Cameroon.

- The first of these key facts was the writing, validation, production and dissemination of the National Guidelines for the continuity of maternal and reproductive, newborn, infant, child, adolescent, elderly health and nutrition services in the context of COVID-19 in Cameroon, in March 2021.

- The second was the writing and dissemination of the first edition of the magazine on the epidemiological situation of maternal and perinatal deaths in April 2021. This initiative will thus ensure an effective and timely response to reported maternal and perinatal deaths.

- The third was the organisation of a workshop session on 27 May 2021 at the Djeuga Palace Hotel in Yaoundé, to discuss about networking and how the care network approach could help to enhance the provision of care and services. In this regard, the Yaoundé perinatal network and the emerging network of gyneco-obstetric emergencies of Yaoundé were presented.

- The fourth was the publication in May 2021, of analyses carried out by students of the prestigious London School of Economics on the effects of macro-economic policies on SRMNIA services during the COVID-19 pandemic through RHIS data shared by 4 countries including: Brazil, Cameroon, Ethiopia and Pakistan. These data come from Cameroon’s active, successful and highly appreciated participation in Phase 1 of the BMGF Project on Mitigating the Indirect Effects of COVID-19 on the Continuity of SRMNIA+Nut Services. Following, these successful results, Cameroon was qualified (shortlisted) for Phase II of the same project.
The health of the elderly is not left out

A framework for supporting best practices for the comprehensive elderly care has been implemented in Cameroon with the adoption of the roadmap and the training of instructors in integrated elderly care. As a matter of fact, a workshop on this theme was held over five days from 27th April to 1st May 2021 in Mbankomo, a suburb of Yaoundé.

Vaccination campaigns against poliomyelitis are still being conducted to maintain the status of a country that has eradicated this disease

Vaccination against poliomyelitis coupled with deworming, vitamin A supplementation of children aged 0-59 months and registration of unregistered births took place from 21 to 24 May 2021 in all the Regions and 190 Health Districts of the country, during the "Semaine d’Actions de Santé et de Nutrition Maternelle et Infantile (SASNIM) (Mother and Child Health and Nutrition Action Week)". The target was estimated at 6,788,145 children aged 0-59 months. At the end of this SASNIM, 5,262,468 children were vaccinated against polio, i.e. 98% coverage, with 1,976 "zero dose" children aged 12 to 59 months.

Other epidemics still under surveillance

Polio, measles, yellow fever and neonatal tetanus are the main vaccine-preventable diseases that continued to be under epidemiological surveillance by the Ministry of Public Health, through the Expanded Programme on Immunisation (EPI), with the technical and financial support partners (WHO).
National Guidelines for Infection Prevention and Control in Health Facilities

In an effort to standardise IPC knowledge and practice in Cameroon, the government with the support of WHO and USAID-MTaPS produced a "National guidelines for Infection Prevention and Control in Healthcare Facilities": health professionals, support staff and administrative managers. This document is intended to improve quality care in health facilities, combining the protection of health professionals, patients and also visitors.

COVID-19 management manual in schools

The reopening of schools in September 2020 constituted a risk of dissemination of the virus. As of 30/12/2020, out of 22,514 teachers tested, 108 were positive and out of 361,000 students tested, 550 were positive throughout the country. Considering how this pandemic was evolving and the fact that the coronavirus was assuredly circulating in the school environment, it was only logical that a COVID-19 management manual for schools was produced. From January to June 2021, the health personnel (HP) infection followed the pattern of the Coronavirus pandemic in Cameroon. Indeed, there has been an outbreak of infections peaking between weeks 11 and 17 of 2021.
manual in schools be drafted to raise awareness and ensure early detection of cases. This was the purpose of the validation workshop for the COVID-19 management manual for schools in Cameroon that held from 16 to 19 February 2021 at the Florence Hotel in Ebolowa.

Beyond the manuals, the case by case operations carried out in the field have led to the training of 7,249 health and response workers, and 450 students and teachers in schools across the country. Moreover, 24,979 households and public buildings were decontaminated from January to June 2021.
Accounting for the whole country, 431 health facilities were evaluated. The averages of scorcard calculated at the regional level using the data obtained from seven regions show that the IPC situation is relatively stable in the country (figure).

In fact, three regions were not covered by data collection notably the Adamawa, North, and South West regions.

Scorcards were based on several indicators and their applications on health facilities resulted in the following performances:
Figure: Standard material for waste management and hand washing

Photo: Handling of educational fact sheet
RISK COMMUNICATION AND COMMUNITY ENGAGEMENT (RCCE)

STOCKS OF VISIBILITY MATERIAL ALWAYS AVAILABLE

WHO conceived and produced visibility materials for the donation granted by the humanitarian organisation Mercy Ships to the Cameroon Ministry of Health. Media were present during the handover ceremony.

COMMUNICATION MILESTONES OF SOCIAL MEDIA SET

The organisation has pioneered the setting up of a social network communication strategy to ensure that clear and accurate information is shared. In addition to the Documentation and Information Centre (DIC), WHO Cameroon is planning to develop the communication of social media (Twitter, Facebook) as UNICEF Cameroon and UNFPA Cameroon are already doing.

PROVIDING SUPPORT TO THE CHAN AND AFCON IMS

As far as communication and awareness raising is concerned, WHO provided support to the CHAN and AFCON/IMS for the planning of CHAN and AFCON activities in the presence of actors such as the MINSEP, MINJEC, DGSN, MINDEF.
RAPID ANTHROPOLOGICAL SURVEY (RAS) ON THE ACCEPTABILITY OF COVID-19 VACCINES IN CAMEROON TWO MONTHS BEFORE THE ACTUAL INTRODUCTION OF THE VACCINE

A rapid anthropological survey (RAS) on the acceptability of COVID-19 vaccines was conducted in Cameroon two months before the actual introduction of the vaccine thanks to the technical and financial support of WHO. In fact, against the background of persistent vaccine controversies across the country as elsewhere, a rapid anthropological survey was conducted on a sample of 1685 respondents in Yaoundé during the African Nations Championship (CHAN). The survey provided trends in community adherence to the COVID-19 vaccine. It has thus revealed that refusal outweighed acceptance for socio-historical and political reasons against the backdrop of racial confrontation.

ACCOMPANYING THE INTRODUCTION OF THE COVID-19 VACCINE TO INCREASE ADHERENCE AND ACCELERATE DEMAND

Several awareness-raising campaigns were carried out by the communication teams. In this sense, the WHO representative attended several radio and television programmes to shed light on the scope of vaccination against COVID-19 as well as on adverse events following immunisation (AEFI). One of the most notable passages was on the famous CRTV programme "Actualités Hebdo" on last 13th June.
During this television broadcast, the WHO Resident Representative, Dr Phanuel Habimana advocated for mass vaccination of the population of Cameroon. He especially layed emphasis on the effectiveness and safety of the various COVID-19 vaccines that arrived in Cameroon.

Actually, a vaccine is a biological preparation that contains a small amount or fragment of a killed or attenuated microbe called an antigen. The COVID-19 vaccine, like other known vaccines, triggers the immune defence system of each person vaccinated to produce antibodies and immune cells. It is thus on this basis that as of 1st June 2021, nearly 11 billion doses were already administered by 176 countries around the world. The United States of America and China share almost half of this consumption. All the negative perceptions of COVID-19 vaccines were dispelled during this programme. Also, the benefits and risks of all the vaccines that arrived in Cameroon were presented, as well as the system for monitoring their safety. A strong appeal was made by the WHO Representative in Cameroon “Let us all vaccinate to end the COVID-19 pandemic”.

“Le Cameroun enregistre entre 4000 et 5000 décès maternels par an...”

Dr Phanuel Habimana
Représentant de l’Organisation Mondiale de la Santé au Cameroun
LOGISTICS

Prioritizing materials and equipment, and renovating health infrastructures

Biomedical equipment support remains the priority

During the period from January to June 2021, WHO supported the government with a large stock of office and biomedical equipment with funding from three donors: the World Bank (WB), the European Union (EU) and the African Development Bank (AfDB). These are:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop computer</td>
<td>40</td>
</tr>
<tr>
<td>Smartphones</td>
<td>150</td>
</tr>
<tr>
<td>Medicalised ambulances</td>
<td>03</td>
</tr>
<tr>
<td>Field vehicles</td>
<td>02</td>
</tr>
<tr>
<td>PCR machine</td>
<td>01</td>
</tr>
<tr>
<td>COVID-19 Sequencing Platform</td>
<td>01</td>
</tr>
<tr>
<td>Thermal cameras and detection kits</td>
<td>20</td>
</tr>
<tr>
<td>Resuscitation kits</td>
<td>20</td>
</tr>
<tr>
<td>Treatment gloves and 410,000 examination gloves</td>
<td>50,000</td>
</tr>
<tr>
<td>Surgical masks</td>
<td>150,000</td>
</tr>
<tr>
<td>Respiratory masks</td>
<td>35,000</td>
</tr>
<tr>
<td>Throat and Nasal swab and Virus Transport Medium Kit</td>
<td>14,500</td>
</tr>
<tr>
<td>Real-time fluorescent RT-PCR Kit</td>
<td>14,500</td>
</tr>
<tr>
<td>Nucleic Acid Extraction Kit</td>
<td>14,592</td>
</tr>
<tr>
<td>Visors</td>
<td>6,000</td>
</tr>
<tr>
<td>Safety goggles</td>
<td>4,000</td>
</tr>
<tr>
<td>Ventilators for patients</td>
<td>08</td>
</tr>
<tr>
<td>Trauma kits</td>
<td>04</td>
</tr>
<tr>
<td>Concentrators and accessories</td>
<td>110</td>
</tr>
<tr>
<td>Laryngoscopes</td>
<td>5</td>
</tr>
<tr>
<td>High flow nasal</td>
<td>08</td>
</tr>
<tr>
<td>Defibrillators</td>
<td>03</td>
</tr>
<tr>
<td>Pulse oximeters</td>
<td>80</td>
</tr>
<tr>
<td>Monitors of patients</td>
<td>02</td>
</tr>
</tbody>
</table>

Materials provided under the framework of project funding

<table>
<thead>
<tr>
<th>Region</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated health centres (IHC)</td>
<td></td>
</tr>
<tr>
<td>Centre</td>
<td>5</td>
</tr>
<tr>
<td>East</td>
<td>11</td>
</tr>
<tr>
<td>Ouest</td>
<td>8</td>
</tr>
<tr>
<td>Hospitals</td>
<td></td>
</tr>
<tr>
<td>North-west</td>
<td>1</td>
</tr>
<tr>
<td>South-west</td>
<td>2</td>
</tr>
</tbody>
</table>

Number of health facilities per region

Pharmacovigilance of medicines and vaccines

WHO supported the Department of Pharmacy, Drugs and Laboratories of the Ministry of Public Health [DPML/MoH] through the vigilance service by developing the pharmacovigilance action plan for the year 2021. Therefore, the organization invited the DPML to convene a session of the specialised pharmacovigilance commission to combine the pharmacovigilance activities of the various programmes of the Ministry of Public Health, namely EPI, HIV, malaria and TB. From a practical point of view, WHO provided technical support for the AEFI classification developed on 11 June by some twenty experts from the national AEFI committee meeting in Mbankomo. Besides, the said classification continued on 25 June with three major objectives, firstly to complete the classification, secondly, prepare the expanded campaign on immunisation combined with AEFI management; and thirdly propose an action plan for the national AEFI committee.

The rehabilitation of health infrastructure kicks in

The plan to rehabilitate health infrastructures concerns the Centre, East, North West, South West, West regions (Table).
03 medicalised ambulances
02 field vehicles
01 PCR machine
110 respirators
27 intensive care units in rehabilitation
Vaccines protect us and protect the others