COVID-19 Pandemic in Malaysia:

The Journey

A Report by
the Pharmaceutical Services Programme,
Ministry of Health Malaysia
COVID-19 Pandemic in Malaysia: The Journey

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The whole country is striving to combat COVID-19 and we have started to see the impact. Every Malaysian played a significant role in preventing the transmission of the disease and flattening the infection curve.

The preparedness plans initiated by the Ministry of Health Malaysia since the beginning of the outbreak had helped the country to contain the spread of the virus. I wish to dedicate my special thanks to all our fellow MOH pharmacy colleagues who work hard to ensure the adequate supply of medicines for COVID-19 treatment as well as to those who have gone the extra mile to ensure the continuous treatment for all our patients.

The COVID-19 fighting journey, although challenging, had proven that as long as we work together as a team, we can overcome any difficulties. As the battle against COVID-19 is still ongoing, I hope that all pharmacy personnel can continue to stay strong and strive to provide the best pharmaceutical care services for the nation.

DATIN DR FARIDAH ARYANI BINTI MD. YUSOF, RPh 1197
SENIOR DIRECTOR OF PHARMACEUTICAL SERVICES
MINISTRY OF HEALTH MALAYSIA
The Pharmacy Policy and Strategic Planning Division was honoured to be given the mandate to document the Pharmaceutical Services Programme’s journey in battling the COVID-19 pandemic.

Our preparedness plans were lined out since the beginning of the outbreak in December 2019 to ensure adequate supply of medicines for the whole country. Apart from that, we were working closely within the MOH, and with other government agencies and non-governmental organizations to ensure the efficient distribution of personal protective equipment for the MOH front liners. This report documented some of the significant and special events during our battle against COVID-19, and how the pharmacy staffs dynamically adapted to the changes to ensure that pharmaceutical services were not interrupted during the Movement Control Order period.

I hope that this report will serve as a record that we have overcome many obstacles during the COVID-19 pandemic, and to remind us to continuously improve our preparedness for more challenges in the future.

NORHALIZA BINTI A HALIM, RPh 1750
DIRECTOR
PHARMACY POLICY AND STRATEGIC PLANNING DIVISION
MINISTRY OF HEALTH MALAYSIA
## List of abbreviations

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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>API</td>
<td>active pharmaceutical ingredients</td>
</tr>
<tr>
<td>CPRC</td>
<td>Crisis Preparedness and Response Centre, MOH</td>
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<tr>
<td>CPC</td>
<td>COVID-19 Preparedness Committee, PSP</td>
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<tr>
<td>DBB</td>
<td>take away doses (<em>dos bawa balik</em>)</td>
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<tr>
<td>DIY</td>
<td>do it yourself</td>
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<tr>
<td>DOT</td>
<td>Daily Observational Therapy</td>
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<td>EMCO</td>
<td>Enhanced Movement Control Order</td>
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<td>HCPS</td>
<td>Home Care Pharmacy Services</td>
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<td>HSAH</td>
<td>Hospital Sultan Abdul Halim, Sungai Petani, Kedah</td>
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<tr>
<td>HSB</td>
<td>Hospital Sultanah Bahiyah, Alor Setar, Kedah</td>
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<td>HTAA</td>
<td>Hospital Tengku Ampuan Afzan, Kuantan, Pahang</td>
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<tr>
<td>HTAN</td>
<td>Hospital Tuanku Ampuan Najihah, Kuala Pilah, Negeri Sembilan</td>
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<tr>
<td>HTF</td>
<td>Hospital Tuanku Fauziah, Perlis</td>
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<tr>
<td>IP</td>
<td>investigational product</td>
</tr>
<tr>
<td>JKN</td>
<td>State Health Department (<em>Jabatan Kesihatan Negeri</em>)</td>
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<tr>
<td>JKWPKL&amp;P</td>
<td>Kuala Lumpur and Putrajaya State Health Department</td>
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<td>MAEPS</td>
<td>Malaysia Agro Exposition Park Serdang</td>
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<tr>
<td>MCO</td>
<td>Movement Control Order</td>
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<tr>
<td>MITI</td>
<td>Ministry of International Trade and Industry</td>
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<tr>
<td>MOH</td>
<td>Ministry of Health Malaysia</td>
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<tr>
<td>MTAC</td>
<td>Medication Therapy Adherence Clinic</td>
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<tr>
<td>NGO</td>
<td>non-governmental organization</td>
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<tr>
<td>NPRA</td>
<td>National Pharmaceutical Regulatory Agency</td>
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<tr>
<td>PhIS</td>
<td>Pharmacy Information System</td>
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<tr>
<td>PKRC</td>
<td>COVID-19 Low-Risk Patient Quarantine and Treatment Centre (<em>Pusat Kuarantin dan Rawatan Risiko Rendah COVID-19</em>)</td>
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<tr>
<td>PPE</td>
<td>Personal Protective Equipment</td>
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<td>PSP</td>
<td>Pharmaceutical Services Programme</td>
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<tr>
<td>PUI</td>
<td>person under investigation</td>
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<tr>
<td>SARI</td>
<td>severe acute respiratory infections</td>
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<tr>
<td>SOP</td>
<td>standard operating procedures</td>
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<tr>
<td>SPUB</td>
<td>Integrated Drug Dispensing System (<em>Sistem Pendispensan Ubat Bersepadu</em>)</td>
</tr>
<tr>
<td>UMP</td>
<td>Medicines by Post (<em>Ubat Melalui Pos</em>)</td>
</tr>
<tr>
<td>URTI</td>
<td>upper respiratory tract infection</td>
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<tr>
<td>VAS</td>
<td>Value Added Services</td>
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Preamble
The Pharmaceutical Services Programme (PSP), Ministry of Health Malaysia (MOH) initiated its preparedness plans for COVID-19 since the announcement of the first positive case in China in December 2019. The plans were then strengthened and improvised from time to time according to the outbreak situation in the country. During the COVID-19 outbreak, especially during the enforcement of Movement Control Order (MCO), PSP had to work extra hard to ensure the availability and continuous supply of medicines for all patients including the COVID-19 patients. At the same time, pharmacy personnel, with the support of various divisions and organisations, play a vital role in ensuring the smooth distribution and handling of Personal Protective Equipment (PPE) and hand sanitizers for the front liners and other healthcare workers. In addition, continuous monitoring and close collaborations with other MOH divisions and the pharmaceutical industry are carried out to ensure that all initiatives are implemented smoothly.
Chapter 1

Pandemic Preparedness

Getting ready for the battle

The demand for antivirals, PPE and service delivery was bountiful during the COVID-19 pandemic. The COVID-19 Preparedness Committee (CPC) of PSP was formed in March 2020 to facilitate, monitor and ensure effective communication regarding the access and supply of medicines, PPE and hand sanitizers, human resource needs, and the medicines supply capacity of the domestic pharmaceutical industry. The committee was chaired by the Senior Director of Pharmaceutical Services and represented by the Pharmacy Policy and Strategic Planning Division, Pharmacy Practice and Development Division, Pharmacy Enforcement Division, National Pharmaceutical Regulatory Agency (NPRA) and Pharmacy Board Malaysia.
The CPC conducted weekly meetings to ensure a timely effort in concordance with the current condition of COVID-19 in Malaysia. Judicious planning and strategies were carefully carried out by the CPC in coordination with the MOH Crisis Preparedness and Response Centre (CPRC). Regular information sharing between PSP and CPRC MOH were carried out to better understand what were ahead. Under the leadership of CPC, MOH pharmacy personnel worked extra hard to ensure the adequate access to medicines especially for COVID-19 treatment, continuous supply of PPE through constant monitoring and collaboration with the Medical Development Division and Public Health Development Division, and sufficient human resources to maintain the services.

During the first wave, or the early containment phase of COVID-19 in Malaysia, PSP had initiated the close monitoring on a list of key medicines, hand sanitizers and PPE. When the second wave of the pandemic hit, from 27 February 2020 until the MCO, the action was further strengthened. Due to the significant increase in medicines usage during the COVID-19 pandemic, an additional budget of about RM35.4 million was allocated to the MOH for the procurement of medicines related to COVID-19 treatment.

Notably, a key challenge pertinent to COVID-19 pandemic was an unprecedented high demand for its treatment. Owing that there was no standard treatment regime available for COVID-19, close communication and discussions with the MOH Infectious Disease Team were carried out to identify the list of drugs used in combatting COVID-19. These medicines were then procured centrally at the MOH headquarters level through the Emergency Procurement Procedure to accelerate the availability of medicines. This special procedure
was also applied to procure hand sanitizers to quickly overcome the stock-out condition in MOH facilities.

The procurement of medicines during the pandemic was taxing and warranted lots of extra efforts mainly due to the travel restrictions that had affected the importation and logistics of medicines and medical supplies. The problems, however, were successfully overcome by the teamwork among all the MOH divisions and cooperation with other ministries. For example, inter-ministerial discussion and collaboration with the Ministry of International Trade and Industry (MITI) were done to obtain the approval for the pharmaceutical manufacturers and related companies to operate like normal at full force during the MCO. Meanwhile, government to government engagement with Japan, India, China and Taiwan was facilitated through the MOH Policy and International Relations Division to allow the exportation of pharmaceutical products as well as active pharmaceutical ingredients (API) to Malaysia.

As the usage of hydroxychloroquine increased, the product registration holder was unable to supply the medicine as required by the MOH. To ensure the adequate and continuous supply of hydroxychloroquine during this critical time, a local pharmaceutical manufacturer was engaged to produce it locally after strict qualification assessment by the NPRA. Another issue and challenge was the unavailability of commercialized hydroxychloroquine sulphate suspension for children and adult patients requiring it. To overcome this challenge, the PSP had updated the formulation for hydroxychloroquine sulphate 25mg/ml suspension in the Pharmacy Information System (PhIS) to enable the facilities to prepare the suspension extemporaneously.

Supply chain management is very crucial during COVID-19 pandemic, hence the monitoring on the stock status of medicine and related consumables, like PPE was done closely. In addition, the stock status at the suppliers’ level was also being monitored, in particular for the high usage items so that appropriate countermeasures can be taken immediately to prevent stock disruptions to the MOH facilities. As most of the medicines and antivirals for the treatment of COVID-19 were used as off-label treatment, a special monitoring mechanism was established to supervise the utilization and conduct active surveillance on the safety profile of 15 types of medications that were used in the management of COVID-19 in 76 MOH hospitals. Along with this, PhIS was also improvised to enable the reporting
and monitoring of daily stock balance status at MOH facilities beginning April 2020. These data were presented during the CPC PSP and MOH CPRC meetings every week.

The PSP also facilitated the WHO Solidarity Trial via fast-track approvals of investigational products (IPs) to be used in these clinical trials, including Remdesivir. All IPs were successfully evaluated within four working days without jeopardizing the quality and adherence to the international regulatory requirements. Assurance of quality and safety of all foreign and local products whether for procurement or donations were also verified through the registration status of drugs and cosmetics notification.
During the MCO period, Malaysians were encouraged to stay at home and reduce unnecessary hospital visits. Due to the movement restrictions during the MCO, some of the essential pharmaceutical care services in MOH facilities, such as ambulatory pharmacy, Medication Therapy Adherence Clinic (MTAC) and Home Care Pharmacy Services (HCPS), were disrupted. As a result, several measures were taken by the PSP to ensure the continuity of pharmaceutical care services. For instance, patients with appointments for medication refills or any other pharmaceutical services were given longer appointment dates. The medication supplies to patients were also increased to two-month supply or more whenever possible to reduce the patient loads and crowds at the pharmacies in both MOH hospitals and health clinics.

Another initiative to facilitate the supply of refill medications and avoid crowding in the MOH health facilities was the Pharmacy Value Added Services (VAS). During the MCO period, patients were encouraged to utilise the various VAS available in the MOH facilities such as the Pharmacy counter appointment-based system, Medicines by Post (Ubat Melalui Pos, UMP), Drive-through Pharmacy (Farmasi Pandu Lalu), Locker4U and Integrated Drug Dispensing System (Sistem Pindispensan Ubat Bersepadu, SPUB). Information about VAS provided by the MOH was actively promoted to the public and advertised via television, radio station, social media networks, newspapers and online articles. To improve the uptake of UMP, the MOH has decided to bear the delivery charges of UMP from 5 April 2020 to 30 Jun 2020. Following the subsidy of delivery charges and various promotional activities, the usage of UMP has increased tremendously, from 42,422 medication parcels in year 2019 to
194,119 parcels in April to June 2020. In addition, more convenient and easy methods for VAS registration, for example, through email, WhatsApp, telephone and online registrations were developed. The increased utilisation of VAS has successfully reduced the patient crowd and medication refill waiting time at MOH facilities.

Other pharmaceutical services, such as logistic pharmacy, inpatient pharmacy, sterile and non-sterile production, clinical pharmacokinetic services, counselling and ward pharmacy services, were carried out as usual. Extra precautionary measures, however, were employed especially when providing services that required direct contact with the patients. Various online or virtual methods were also implemented. For example, e-counseling materials such as videos and QR code that links to educational e-pamphlets were prepared. Phone counselling and video call counselling were utilised to ensure the continuity of essential clinical services while securing the safety of both patients and pharmacy personnel.

On the other hand, extra effort has also been made to ensure the constant supply of Methadone for patients on Methadone Treatment Programme. To help patients to minimize travelling during the MCO, more Daily Observational Therapy (DOT) patients who were stable were dispensed with take away doses (dos bawa balik, DBB) with the approval from the psychiatrists and Family Medicines Specialists.

Infographic about pharmacy VAS available in the MOH facilities
The number of parcels sent through UMP service from April to June 2020 compared to the previous years

<table>
<thead>
<tr>
<th>Period</th>
<th>Number of UMP parcels</th>
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<tr>
<td>APR-JUNE 2020</td>
<td>194,119</td>
</tr>
<tr>
<td>2019</td>
<td>42,422</td>
</tr>
<tr>
<td>2018</td>
<td>36,254</td>
</tr>
</tbody>
</table>

UMP at Hospital Kuala Lumpur

UMP at Hospital Tengku Ampuan Afzan (HTAA) Kuantan, Pahang

UMP at Hospital Putrajaya
UMP at Hospital Kepala Batas, Penang

UMP at Hospital Tengku Ampuan Rahimah Klang, Selangor

Pos Malaysia staff collecting the UMP medication parcels at Hospital Serdang, Selangor
A temporary drive-through pharmacy counter was set up at Hospital Selama, Perak during MCO.

Drive-through pharmacy services at Hospital Sultan Abdul Halim (HSAH), Kedah.

‘Drive-through’ pharmacy service at Hospital Kepala Batas, Penang.
Drive-through Pharmacy at Bakri Health Clinic, Muar

Temporary Drive-Through Pharmacy counter at Hospital Tuanku Ampuan Najihah (HTAN), Negeri Sembilan

“Park & Take” dispensing counter at Kangar Health Clinic, Perlis

Hospital Selayang’s Drive-through Pharmacy
Follow-up medications to be collected at the Drive-Through Pharmacy tent at Hospital Seberang Jaya, Penang

Follow-up medications to be collected at the appointment time at Teluk Bahang Health Clinic, Penang

Follow-up medications at Hospital Tunku Azizah (Women and Children Hospital) to be supplied through SPUB
FB Messenger was introduced as a new communication means for VAS services at HSAH, Kedah

The ‘Leave and Collect Counter’ (Kaunter Letak dan Ambil) at HTAA Kuantan, Pahang
With the COVID-19 cases accelerating globally, the safety of healthcare staff and patients remain the utmost priority. In all MOH facilities, various efforts were carried out to ensure the adherence to the guidelines of physical distancing and personal hygiene. In the pharmacies, new norms and standard operating procedures (SOP) were adhered to prevent the transmission of the virus.

For example, the medicines supply procedures to the hospitalised patients, especially for COVID-19 and severe acute respiratory infections (SARI) patients, were modified to prevent the spread of the disease. Only trained pharmacy personnel were allowed to process the prescriptions and supply medications to the COVID-19 and SARI wards. The prescriptions were sent to the pharmacy using online methods such as PhIS, email and WhatsApp. Medications were then supplied individually to the wards instead of using medication trolleys.

For services that require close contact with the patients, such as ward pharmacy services and medication counselling, pharmacy staff should comply with strict personal protection procedures. Furthermore, hand sanitizers were made available at all counters, infra-red thermometers were used to measure the temperature of staffs and patients before entering the pharmacy, and posters of cough etiquette were displayed at the pharmacy area.
Guideline issued by the Senior Director of Pharmaceutical Services to ensure that all essential pharmaceutical services were not interrupted during the COVID-19 outbreak while observing all necessary SOPs
Briefing session to pharmacy staff regarding the new SOP in HSAH, Kedah

Face masks were prepared and distributed to all pharmacy staffs on duty at HSAH, Kedah

Practicing physical distancing at the pharmacy counters of HSAH, Kedah
Screening counter was established at the entrance of HTAN pharmacy

Monitoring body temperature of pharmacy staffs and patients at HTAA, Kuantan
Maintaining physical distancing when conducting medication counselling at HTAA, Kuantan

Inpatient bedside counselling at HTAN, Negeri Sembilan is carried out by maintaining physical distancing

Dispensing with physical distancing at Rembau Health Clinic, Negeri Sembilan
Practicing physical distancing at the pharmacy of Hospital Putrajaya

Blocking of the seats to ensure physical distancing at the Specialist Clinic Pharmacy of Hospital Tunku Azizah

Maintaining physical distancing at the Specialist Clinic Pharmacy of Hospital Tuanku Fauziah (HTF), Perlis
Additional pharmacy dispensing counter and waiting area at Mak Mandin Health Clinic, Butterworth

Setting up the pharmacy at HTAA, Kuantan to ensure physical distancing
Moving the Emergency Pharmacy Unit and Galenical Unit to a new location to give way to the Fever Screening Unit and COVID-19 Ward at Hospital Duchess of Kent, Sandakan

Disinfection activity at Kemabong Health Clinic, Keningau, Sabah

Preparing the pharmacy area of HSAH, Kedah to ensure physical distancing
Mobile pharmacy counter was set up in the Enhanced Movement Control Order (EMCO) zone by Kepong District Health Office

Reviewing patient’s prescription at the Medication Reviewing Counter in a quarantine centre in Selangor
Additional pharmacy dispensing counter at the Bukit Jambul Health Clinic, Penang

Additional pharmacy counter at the office vehicles parking area of Hospital Bukit Mertajam, Penang
Pharmacy Counter at the Fever Clinic of Maharani Health Clinic, Muar
Mobilization of Pharmacists and other pharmacy personnel was carried out to ensure the continuity of service during the COVID-19 pandemic. Pharmacy staffs from the PSP headquarters, state health departments and MOH health facilities were mobilised to health facilities requiring support during the COVID-19 outbreak.

To speed up the process of receiving and managing the donation items, eight officers from the PSP headquarters were deployed to the Integration Store of Hospital Sungai Buloh from 30 March 2020 to 20 April 2020 to assist the hospital pharmacists and staffs to receive, check and manage the donation items.

When the Low-Risk Patient Quarantine and Treatment Centre (Pusat Kuarantin dan Rawatan Risiko Rendah COVID-19, PKRC) was set-up at the Malaysia Agro Exposition Park Serdang (MAEPS), the core team of Pharmacy Unit was formed and MOH pharmacists were deployed accordingly. Six pharmacy staffs from the PSP headquarters, Selangor State Health Department (JKN) and Hospital Serdang were appointed as the core team members of the Pharmacy Unit at PKRC. Beginning 20 April 2020 until July 2020, MOH pharmacy staffs from the PSP headquarters, NPRA, JKWPK Kuala Lumpur and Putrajaya (JKWPKL&P), and JKN Selangor were deployed to provide pharmacy services in PKRC.

Besides that, seven officers from the NPRA were sent to the National Public Health Laboratory by rotation to extend a helping hand in the laboratory. In addition, mobilisation of pharmacy staffs also happened at the state and district levels. For example, pharmacists
in JKWPKL&P were deployed to help in the COVID-19 close contact screening, and some pharmacist assistants were deployed to help to conduct temperature screening at the fever clinics in their respective facilities.

Officers deployed from the PSP were helping to receive donation items at Hospital Sungai Buloh

Briefing session for the pharmacy staffs deployed to the PKRC
Sending pharmaceutical items to PKRC, MAEPS Serdang

Preparing the medical stocks at PKRC
Pharmacists from JKWPKL&P were part of the mobile sampling team to obtain sample swabs from person under investigation (PUI) returning from high-risk countries.
Pharmacists from JKPWL&P were assisting the doctors to manage swab samples in EMCO zone.
Unprecedented high demand for PPE and hand sanitizers became phenomenal due to the COVID-19 pandemic. Within the MOH, a list of PPEs including hand sanitizers were identified as critical items during the pandemic time. Selected MOH facilities were identified as stockpile centres for PPE around Malaysia. To ensure the efficient distribution of PPE, an online monitoring system, namely the Pharmacy PPE Tracker, was developed by the PSP to monitor the stock supplies and daily usage of PPE. The close monitoring of PPE stocks in 263 MOH facilities was done on daily basis together with the Medical Development Division and Public Health Development Division through this system.

At the state and MOH facility level, the pharmacy personnel have to ensure that PPE procurement, distribution and monitoring were carried out smoothly during the COVID-19 outbreak. In addition, an overwhelming amount of donation items, such as PPE, face shields, face masks and hand sanitizers from the non-governmental organizations (NGO), companies and public were received by MOH. Therefore, the pharmacy personnel have to prepare adequate and suitable storage space for the goods, and evaluate the donation goods before distribution.

To cope with the increasing demand for hand sanitizers in the market, special manufacturing permits were issued to a few reputable local manufacturers after strict assessment by the NPRA. Furthermore, the Emergency Procurement Procedure was in place to centrally procure hand sanitizers for MOH facilities. Following the temporary disruption in the supply of commercial hand sanitizers to MOH, two alcohol-based hand sanitizer
formulation from WHO were adopted to be compounded in all MOH facilities. The PSP has updated the formulations of alcohol-containing hand sanitizer in the PhIS system so that all MOH facilities can compound their own hand sanitizer. While awaiting the commercial product to be available in the market again during the MCO period, pharmacy staffs in the MOH facilities had to do in-house compounding of hand sanitizers for the use of healthcare personnel. The proactive and prompt action had helped to temporarily resolve issues on the insufficient and supply disruption of commercial hand sanitizers in the market.

Besides procuring and receiving donated PPE stocks, pharmacy personnel, together with other MOH staffs, have taken various initiatives to ensure the adequate supply of PPE for the front liners. For example, many ‘do it yourself’ (DIY) activities or sessions were organised by the healthcare staffs to produce PPE in the healthcare facilities or health offices. Besides that, collaborations or engagements with other governmental agencies or NGOs were also carried out to increase the productions of PPE for MOH healthcare staffs.
Receiving, checking, recording and sorting the donation goods received at Hospital Sungai Buloh

Arranging PPE stocks in the Logistic Pharmacy of Hospital Temenggong Seri Maharaja Tun Ibrahim, Kulai, Johor
High amount of PPE stocks was received at HSAH, Kedah. The PPE stocks that could not be stored in the Logistic Pharmacy store had to be transferred to a temporary storage area at level 2 of the nursing hostel.
Management of PPE storage and distribution by the Logistic Pharmacy of HTF, Perlis with the help of hospital support service staffs

Handling PPE in JKN Negeri Sembilan

Receiving PPE at JKN Pahang to be distributed to the districts
Distribution of PPE to the districts in the state of Pahang
The unloading of PPE stocks at JKN Sabah for temporary storage

Unloading PPE stocks from the Royal Malaysian Air Force airplane to be distributed to all hospitals and health clinics in Sabah
The compounding of hand sanitizers in Hospital Putrajaya

The compounding of hand sanitizers in Bentong District Health Office, Pahang
Sewing PPE at JKN Kelantan
Procurement of non-woven fabrics by Hospital Sultanah Bahiyah (HSB), Kedah to produce PPE

Collaboration between HSB, Kedah and NGOs to produce PPE

Collaboration between HSB, Kedah with the Pokok Sena Prison to produce PPE
Collaboration between HSB, Kedah with Universiti Utara Malaysia (UUM) to produce PPE

Collaboration between Hospital Duchess of Kent, Sandakan with the Malaysian Prison Department, Sandakan to produce PPE

PPE DIY activity at Hospital Kuala Penyu, Sabah
PPE DIY activity at Muar District Health Office

PPE DIY activity at Hospital Tunku Azizah

PPE DIY activity at Hospital Bukit Mertajam, Penang
Staffs from JKWPKL&P organising PPE for frontliners carrying out sampling activity
Production of face shields at the PSP headquarters

JKN Kedah

JKN Pahang

JKN Penang
PPE distributions by the Logistic Pharmacy to all wards in Hospital Tunku Azizah

PPE donations to Hospital Tunku Azizah
PPE donations to Hospital Temenggong Seri Maharaja Tun Ibrahim, Kulai, Johor

PPE donations to JKN Selangor
The temporary PPE stock storage at Hospital Mesra Bukit Padang, Kota Kinabalu

JKN Sabah staffs and the donation items

PPE donation by NGO to Hospital Seberang Jaya, Penang
JKN Penang received face mask donation from the China Consulate and The Government of Quangang District, Fujian Province, China at KOMTAR on 2 April 2020

JKN Penang received face mask donation from the China Consulate on behalf of several companies in Xiamen, China at KOMTAR on 5 May 2020

PPE donation to Hospital Pulau Pinang
PPE donation to HTF, Perlis

PPE Donation to JKN Kelantan
PPE Donation to JKN Negeri Sembilan

Face shields with motivational notes from the donor
Chapter 6

Pharmacy Educational Activities

We learn, we share

During the COVID-19 pandemic, PSP carried out many pharmacy educational activities related to COVID-19 and Rational Use of Medicines through the production and dissemination of infographics, videos, articles, and interview sessions on TV and radio. The educational materials were disseminated using social media such as the PSP, Know Your Medicines Ambassador, and State Pharmaceutical Services Division Facebook pages, Know Your Medicines Portal (www.knowyourmedicine.gov.my), WhatsApp Group for Know your Medicines Ambassadors in every state, and MOH Sihat Milikku Telegram.

These educational activities were carried out from time to time to ensure that the society are empowered with the necessary knowledge and awareness regarding COVID-19. As there were many false claims about medicines, substances, herbal preparations and supplements that can cure COVID-19, it is very important to ensure that the public is aware that there are no vaccines or cure available for COVID-19 yet. Moreover, to ensure patients’ medication adherence during the MCO period and to facilitate the collection of follow up medications, promotional activities about VAS services were actively carried out using mass media and social media.

Furthermore, many Continuous Pharmacy Education (CPE) sessions were carried out at the MOH hospitals and health clinics to improve COVID-19 awareness among the healthcare staffs. At the same time, pharmacy staffs were also actively educating the public and patients about COVID-19 including its prevention and hand-washing techniques.
Infographic to educate the netizens on medication adherence during the Ramadan and MCO period.

Visit the Know Your Medicines portal to access more infographics (http://www.knowyourmedicine.gov.my).

Visit the Know Your Medicines Ambassador facebook page for more information (https://www.facebook.com/Duta-Kenali-Ubat-Anda-490989567761791/?ref=page_internal).
Video about VAS services available in the MOH facilities
(https://www.facebook.com/490989567761791/videos/568158107143575)

The Director of Pharmacy Practice and Development Division, Madam A’itia binti Hashim, at an interview on TV1’s programme BIZ MALAYSIA entitled “PKPB: Cukupkah Bekalan Ubat? (CMCO: Is the medicines supply sufficient?)”
<table>
<thead>
<tr>
<th>Programme</th>
<th>Media</th>
<th>Date</th>
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<tr>
<td>Kenali cecair pembasmi kuman (Knowing the types of disinfectants)</td>
<td>TV3 Interview</td>
<td>28 March 2020</td>
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<td></td>
<td>Asyik FM Radio Interview</td>
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Educational and promotional activities conducted by the PSP from March to June 2020
One of the patient education infographic series produced by the PSP
Poster for a radio interview session about the treatment of COVID-19

Health promotional articles were published in the newspapers and magazines to educate the public about the importance of medication compliance

A Pharmacy Enforcement Officer from JKN Selangor at an interview session via video call, explaining the initiatives to ensure physical distancing during pharmacy enforcement activities
Pharmacists at the Hospital Kepala Batas, Penang were attending a demonstration session to practice the correct hand washing techniques.

Demonstration of hand washing techniques by the pharmacists at Jalan Angsana Health Clinic, Penang.

Demonstration of hand washing techniques by a pharmacist assistant at Lebuh Muntri Health Clinic, Penang.
HTF, Perlis pharmacy staffs were briefed about Covid-19 and PPE by the HTF Covid-19 Education Team

COVID-19 CPE session at Hospital Tunku Azizah
Lessons learnt

The close monitoring of medicines stock and supply status during the COVID-19 outbreak was proven to be effective in allowing immediate actions to prevent stock-out situations in MOH facilities. In view of this, a structured early drug shortage warning system to detect and identify issues related to drug management should be developed.

Various monitoring mechanisms had helped the CPC PSP to acquire first-hand information to make important decisions related to crisis preparedness strategies promptly. This showed that the access to real-time data is crucial to facilitate efficient decision making by the MOH.

During the COVID-19 pandemic, the availability of APIs in the country was affected when China and India tightened their control on API export. Therefore, the production of APIs in the country or region should be encouraged to reduce the dependency on other countries.

Healthcare personnel must be adequately trained and well equipped with ability, competency and strength to work under pressure and crisis at all time. Also, guidelines and SOPs are useful means of ensuring the standardisation of new practices or norms in service delivery.
Direct human contacts could be hampered during a disease outbreak. Latest technology should always be considered in delivering pharmaceutical care services to avoid the interruption of the service at all time.

The collaboration with POS Malaysia has increased the area of coverage for UMP service and working together with the local suppliers to increase the production of high demand items during the lockdown were good examples of public-private partnership. In the future, more innovative opportunity for public-private partnership should be explored.

Some hand sanitizers and PPE that were received through donations did not conform to the specifications. The Guidelines for Receiving Donations of Pharmaceutical Product in MOH (Tatacara Penerimaan Sumbangan Produk Farmaseutikal di Kementerian Kesihatan Malaysia) is now available in the official portal of PSP (www.pharmacy.gov.my). The guidelines could be used should there be donations from any individual, industry or society.
More IT-based pharmaceutical services, for example, counselling services using online platforms and social media, could be explored. E-education material and electronic applications to increase service coverage should be developed.

Pharmacy personnel should also receive broader types of trainings including disaster management and motivational seminar to ensure that every staff is mentally and physically prepared for potential public health emergencies.

Any monitoring plans developed should be practical and able to provide real-time situation if possible.

There is a need to build the capacity of local manufacturers to produce API and engage in regional collaborations in the production of API.

Pharmacists are encouraged to be innovative in finding new information-sharing methods and to explore e-learning tools to disseminate healthcare-related information.
Programmes involving many participants, such as public talks, workshops and exhibitions, shall be conducted according to the new norms and SOP to prevent the spread of infectious diseases.

Programmes involving house visits, such as home medication review and Program Duta Prihatin Masyarakat (PDPM*), will be conducted with strict adherence to physical distancing SOP.

Community programmes such as the Pharmacy Integrated Community Care (PICC**) will be resumed during the Recovery MCO phase. The SOP or new norms shall be adhered to ensure that these activities can be conducted safely.

* PDPM is a house visit programme involving the community representative or the Know Your Medicines Ambassador together with the pharmacist. The houses selected are usually patients with potential medication adherence problems or those with bedridden patients.

** PICC is a programme which uses a community approach, involving healthcare professionals from various disciplines such as pharmacists, doctors, medical assistants, nurses, physiotherapist, nutritionist, etc., to carry out health education for diabetic patients.
Conclusion
The journey of handling COVID-19 pandemic crisis warrants great leadership, structured planning, excellent teamwork and undoubtedly, a lot of hard work. Despite all the challenges we faced, the crisis preparedness at the PSP level was successfully carried out and the emerging issues were well managed. Pharmacy personnel, from the top management at the headquarters and state health offices, to all pharmacy staffs at the front line and behind the scene, had shown great commitment and pride in carrying out our responsibility in handling the COVID-19 pandemic as part of the MOH family. With all the initiatives and strategies imposed, adequate access to medicines and pharmaceutical supplies needed for COVID-19 treatment and prevention was ensured. In addition, the implemented strategies had also ensured the continuity of treatment for all our patients during the pandemic. To the date of the publication of this report, the fight against COVID-19 is far from over. The PSP, together with all other members of the MOH, shall continue to work hard and be resilient to face the upcoming challenges.
We thank the Senior Director of Pharmaceutical Services for her permission to publish this report, and all the people instrumental in producing this report.

We are grateful to all the people who contributed their photographs, artwork, and images to this report. Not to forget, our colleagues from the PSP, MOH State Health Departments and MOH healthcare facilities who recorded these memorable moments in words, and those who helped to source and compile the photographs for this report.

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