Summary of the crisis

Health crisis arising from the military takeover is affecting the entire country. This is on top of the ongoing Covid19 pandemic response as well as protracted emergencies in areas of the country with pre-existing humanitarian needs.

Start date: 1 February 2021

Overall situation

- Prior to the military takeover, protracted conflict affected areas were limited to three states in Myanmar: Rakhine, northern Shan, Kachin states. Since then, the entire country has fallen into a vulnerable state.
- The military take-over on 1 February 2021 removed the democratically elected government and head of state, with all legislative, judicial and executive powers usurped by the military, for an initially declared duration of one year, with a military and country-wide state of emergency imposed. Recently removed age limits for the commander-in-chief and deputy commander-in-chief raised fears they may wish to rule for life.
- The military takeover prompted inception of a large ‘civil disobedience movement’ (CDM), considered as a peaceful form of political protest, with a large part of the civil service across many sectors and of the general population participating in massive protest – and other forms of resistance - organised all over the country, which were peaceful for several weeks.
- Security forces have used live ammunition, together with water cannons, stun grenades and rubber bullets and other weapons, in multiple locations, in order to disperse protests.
- At least 824 individuals were killed at the hands of the military authorities since 1 Feb 2021. military takeover (OHCHR 28 May 2021). Out of more than 4,300 people currently in detention, 80 are children, 52 journalists, with a further 22 in hiding (OHCHR 28 May 2021).
- At the political level, the “Committee Representing Pyidaungsu Hluttaw” (Myanmar’s parliament), or CRPH, was formed, at an emergency parliamentary session held 5 Feb 2021, by elected members of parliament with 3 objectives: (1) to place back the people’s power in the hands of the people, (2) to support and strengthen civil disobedience, (3) to oppose the military regime. This further evolved into formation of a national unity government (NUG) after Myanmar new year 17 April 2021. The military council appointed Dr Thet Khaing Win as de facto Minister for the Ministry of Health & Sports (MoHS), GNLM, 2 Feb 2021. Meanwhile, CRPH appointed Dr Zaw Wai Soe as acting Union Minister, Ministry of Education, Ministry of Health & Sports, & Ministry of Labour, Immigration & Population (CRPH, 2 Mar 2021), and later as Minister for both Education and Health in the national unity government (NUG), Irrawaddy, 16 Apr 2021. Later, the military council declared the CRPH, NUG, People’s Defence Forces (PDFs) and their subordinates as ‘terrorist’, GNLM, 12 May 2021.

Impact on health care

- Development funds in billions of dollars are kept on hold, by Japan, USA, EU, EU countries, Republic of Korea, UK, World Bank, Asian Development Bank and others. This will impact adversely on health systems.
- Curfew orders, and later martial law orders, were issued which limit movement at night, posing extreme challenge for emergency referral services. Curfew was first announced from 8pm to 4am in selected townships, including Yangon Region. This was later adjusted to 10pm to 4am in some townships in Yangon disseminated through local administration offices (GNLM, 9 Feb 2021, 10 Feb 2021, 15 Mar 2021).
- Many government workers, including a majority of public health care workers, are involved in the CDM. The immediate impact is limited workforce in the public sector to implement essential services. While MoHS has been urging the health workers to return to their duties (GNLM, 9 Feb 2021, 1 Mar 2021), it remains unclear how many did so at this writing – and for
those who did return whether they are actually working. In addition, many are threatened with arrest, deterring return even if they chose to do so.

- As a result, the health care system in Myanmar has been significantly impacted from highest levels in the MoHS all the way to frontline community volunteers within the public sector, including public health and medical services. Those services that remain functional, including immediate emergency care, are the ones supported by networks of partners such as volunteers associated with civil society organizations, ethnic health organizations, non-government organizations, and private sector. In some cases, private health care providers provide some of their services as free of charge if the patient has government issued health registration records. Some non-government organization clinics providing specific services, for example HIV treatment, reported seeing government registered patients for continuity of medication. At the same time, public information is available with regards to healthcare provision from the military health service. As at 12 May 2021, 197,169 outpatients and 60,955 inpatients were reported to have been assisted (GNLM) which represents approximately a tenth of the expected volume of services being provided normally by the public network in a month.

- Health officials at all levels have reportedly been arrested, intimidated, threatened with arrest, forced to resign or forced to return to work, others have resigned of their own accord, or gone into hiding or are incommunicado. The toll of resigning health officials is mounting, including those in critical strategic and technical roles. In addition, security forces occupied1 several public sector hospitals in different parts of the country, including in Yangon and Mandalay Regions.

- Direct essential health service provision across all programmes, including Covid19, and capacity-building of the public sector are adversely affected. This situation results in reduced availability, in some cases obstruction, of life-saving health interventions to patients. This leads to an increase of preventable morbidities and mortalities.

- Currently national reporting systems including District Health Information Software 2 or DHIS2 is not functioning, as such it is difficult to capture granular information on key indicators of health programmes as well as the overall functionality of the health system.

- Surveillance systems to monitor diseases of public health importance are disrupted, severely affecting capacity for early detection & prevention of communicable disease outbreaks.

- Procurement and supply management is likewise affected as there are severe limitations on both international and local logistics systems. Clearance processing, including tax exemption certificate issuances and customs clearance, for importation of goods have been disrupted since 1 February 2021. If this continues, there is a risk of shortages of essential medicines supplies in the country, possibly affecting all health programmes.

- Increasing personnel safety concerns forced humanitarian health partners to temporarily suspend some mobile clinic outreach services in fragile, conflict, vulnerable areas. This affects availability of essential services and communicable disease surveillance capacity among displaced, vulnerable populations with pre-existing humanitarian health needs.

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**Humanitarian profile, Myanmar Humanitarian Response Plan 2021 (prior to 1 Feb 2021)**

<table>
<thead>
<tr>
<th>Population in need of humanitarian assistance</th>
<th>Number of internally displaced people</th>
<th>Returnees/resettled/locally integrated</th>
<th>Non-displaced stateless people in Rakhine state</th>
<th>Other vulnerable crisis affected people</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000,000</td>
<td>336,000</td>
<td>11,000</td>
<td>470,000</td>
<td>219,000</td>
</tr>
</tbody>
</table>

1 Prior to 1 Feb 2021 there was no presence of security forces in civilian public health or hospital facilities. After 1 Feb 2021, occupation varied in duration, location and purpose. It may refer to one, or a combination of, the following possibilities: (1) to provide protection to health facilities through presence of armed, non-medical military personnel; (2) to render services provided by medical military personnel; (3) to search premises and arrest suspected individuals, regardless if they are health care workers or patients and regardless if this was during the act of providing or receiving life-saving health care; (4) to use public hospitals, depending on their strategic location, as forward operating bases.
Health status and threats

Population mortality

- Maternal mortality ratio 2017: 250 per 100,000 live births (Myanmar Health Statistics 2020, p59)
- Under 5 Mortality Rate (U5MR), 2018: 47 per 1,000 live births (Myanmar Health Statistics 2020, p59); U5MR, 2019: 45 per 1,000 live births (Levels and Trends in Child Mortality: 2020 Report. United Nations Inter-agency Group for Child Mortality Estimation or IGME 2020)
- Infant Mortality Rate (IMR), 2018: 37 per 1,000 live births (Myanmar Health Statistics 2020, p59); IMR, 2019: 36 per 1,000 live births (IGME 2020)
- Neonatal Mortality Rate (NMR), 2018: 23 per 1,000 live births (Myanmar Health Statistics 2020, p59); NMR, 2019: 22 per 1,000 live births (IGME 2020)
- In 2018, top ten causes of mortality were attributed to pregnancy and delivery-related causes, sepsicaemia, head and intracranial injuries, heart failure, stroke, primary hypertension, pneumonia, respiratory Tuberculosis (TB) (Myanmar Health Statistics 2020, p58)
- Nearly three-fourths of all deaths in 2016-2017 as per the national causes of death survey were attributable to non-communicable diseases (NCDs); whereas only one-fifth were attributable to maternal, nutritional, neonatal causes (Myanmar Health Statistics 2020, p58)
- Among deaths due to communicable diseases, leading cause is pneumonia followed by TB, HIV-AIDS and malaria (Myanmar Health Statistics 2020, p58)
- Among deaths due to NCDs, leading cause is stroke followed by chronic respiratory diseases, ischemic heart diseases, cirrhosis, diabetes (Myanmar Health Statistics 2020, p58)
- Among deaths due to injuries, leading cause is road traffic accident followed by fall. (Myanmar Health Statistics 2020, p58)

Vaccination coverage

The Myanmar Expanded Programme on Immunization (EPI) programme has been successfully implementing immunization activities and providing 13 antigens free of cost through a wide network of vaccine delivery points across the country. New antigens were introduced even during the pandemic year 2020 (rotavirus vaccination, from February 2020, and Human Papilloma virus, from October 2020). Earlier, from December 2017 onwards, Japanese encephalitis had been added to the national EPI calendar. Over the past years, Myanmar made considerable progress in attaining and sustaining high immunization coverage through various strategies. WHO-UNICEF Immunization coverage estimates 2019 for BCG, DTP3/Penta3, and OPV3 are ≥90% and immunization coverage for almost all antigens is 85%-90% in the 2020, despite the COVID-19 pandemic (Source: DHIS2 2020 data collected 31 Jan 2021, the day before the military takeover). However, since 1 February 2021, after the military takeover, EPI activities across the country have been disrupted in all states and regions (less so in Rakhine state). Current immunization coverage data for 2021 is not available from DHIS2. Based on available information, only 133 out of 330 townships have confirmed that routine immunization services were offered primarily in urban areas such as Urban Health Centre, Maternal and Child Health Centre, and hospital immunization services from February to April 2021; all other townships either have no information or have not offered EPI services at all. Any disruption of immunization services, even for short periods, will result in accumulation of susceptible individuals, higher dropout, and higher likelihood of vaccine-preventable disease (VPD) outbreaks. Without the support and cooperation from the skilled personnel of MoHS currently observing civil disobedience, it will be extremely difficult to implement the effective recovery plan for routine immunization to ensure eligible children who missed immunization during service interruption period.
## Key Health Risks (February to July 2021)

<table>
<thead>
<tr>
<th>Public health risk</th>
<th>level of risk***</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covid19 resurgence</td>
<td></td>
<td>Covid19 related activities on surveillance and contact tracing, laboratory testing, case management, and vaccinations are currently disrupted.</td>
</tr>
<tr>
<td>Vector Borne Diseases</td>
<td></td>
<td>Vector borne diseases (VBDs) test-treat services from the public health facilities have been interrupted. Most of the malaria test-treat services are currently being offered through integrated community malaria volunteers. The current stock of commodities can support services until May-June 2021. Stock out with onset of monsoon is a risk for VBDs outbreaks.</td>
</tr>
<tr>
<td>Epidemic and pandemic-prone infectious diseases</td>
<td></td>
<td>National surveillance and laboratory system are currently non-functional resulting in untimely detection and response activities. In addition, the monsoon season is coming. Without efficient and effective preparedness, risk for seasonal disease outbreaks like influenza increases.</td>
</tr>
<tr>
<td>Malnutrition and child health</td>
<td></td>
<td>Many nutrition-related activities by public sector and partners are on hold. The availability and affordability of nutritious food is becoming limited which will complicate the food choices and feeding practices. The observed public health service disruption in Myanmar will further affect the health promotion and nutrition services at the community level, leading to aggravation of malnutrition and increase in child mortality.</td>
</tr>
<tr>
<td>Reproductive, maternal, newborn, child, and adolescent health</td>
<td></td>
<td>Access to antenatal care, delivery care, postnatal care, family planning, and child health care are significantly impacted as a result of non-functionality of the public health sector. Although some disruptions can be compensated by service provision from charity clinics and private health facilities, these are short-term, non-sustainable measures. On top of that, current security issues can contribute to further deterioration.</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td></td>
<td>Due to service interruption and possible drug shortages especially for drug resistant (DR)-TB patients, this would have high impact to morbidity and mortality of TB patients. This can also increase risk of TB transmission in the community.</td>
</tr>
<tr>
<td>HIV</td>
<td></td>
<td>Adequate ARV supply to the service delivery sites for upcoming months is a concern although some ART regimen can be switched to major regimen as a contingency plan. HIV diagnosis and opportunistic infections (OI) management services are largely impacted. Disruption of HIV prevention and harm reduction services may result in increased HIV transmission.</td>
</tr>
<tr>
<td>Viral Hepatitis</td>
<td></td>
<td>Diagnostics, clinical care, treatment services at public health facilities are disrupted and prevention activities such as hepatitis B vaccination and health education activities are also greatly affected.</td>
</tr>
</tbody>
</table>

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In addition to usual levels of trauma from different causes, the use of force during demonstrations may add to the trauma case load.

Current country context with security concerns and general instability increases the risk of developing mental health issues especially among direct victims and populations with pre-existing vulnerabilities.

Current support on building climate resilient health systems is on hold. This has impacted the ongoing work on development of climate resilient healthcare facilities, sanitation safety and water safety plans, establishment of air pollution surveillance system, awareness on climate sensitive diseases.

***[Select cell and fill with the colour]

- **Red:** Very high risk. Could result in high levels of excess mortality/morbidity in the upcoming month.
- **Orange:** High risk. Could result in considerable levels of excess mortality/morbidity in the upcoming month.
- **Yellow:** Moderate risk. Could make a minor contribution to excess mortality/morbidity in the upcoming month.
- **Green:** Low risk. Will probably not result in excess mortality/morbidity in the upcoming month.

**Covid19**

- Daily testing output decreased from 19,667 as at 26 Jan 2021, to 836 as at 1 March 2021, to 998 as at 28 March 2021; 2,446 as at 27 April 2021; 2,056 as at 4 May 2021, and 1,230 samples as at 28 May 2021. These numbers represent the total of tests on all platforms combined.
- Under present circumstances, Covax is unlikely to issue the share of vaccines that had been allocated to Myanmar, and there is also a risk that also bilateral vaccine procurement deals may not proceed further. While the military government reported 1.88 m vaccines utilized (GNLM, 22 Apr 2021), neither WHO nor partners are able to verify this report.
- Procurement support for Covid19 response, eg laboratory reagents and consumables, equipment for clinical care are now suspended. This results in shortage of supplies and has of course a negative impact on COVID-19 response activities.
- Access to Covid19 testing facilities is very difficult for people, particularly from low socio-economic status, nationwide. Although there is limited availability of testing and clinical care in private sector facilities, the cost of such services is too high for most people.
- Resurgence of Covid19 in Myanmar is very likely due to inconsistent application of contact tracing, quarantine practices; poor surveillance and absence of data entries challenging to monitor regularly and effectively implement public health and social measures or PHSM; lack of diagnostics and testing commodities, consumables and skilled health staff; relative lack of infection prevention and control (IPC) measures; and little remaining treatment and care capacity. In addition, inconsistent implementation of Covid19 public health and social measures in areas prone to large gatherings, eg open markets, long queues at banks and ATMs, can superimpose this resurgence. In general, most people usually wear masks in such gatherings, but not necessarily to social distancing, hand hygiene or respiratory etiquette. Covid19 resurgence can affect neighbouring countries of Myanmar, which are also a destination of a significant number of documented and undocumented Myanmar migrants.
Endemic infectious diseases

**Malaria**

**Situation:** Malaria is endemic in Myanmar. The elimination of all human species of malaria is targeted by 2030. At the same time the short-term target is *P. falciparum* elimination by 2025. In 2020, 54,202 malaria cases have been reported with predominant species as *P. vivax* (74%) (National Malaria Control Programme). Distribution of malaria is heterogenous. Malaria is a seasonal disease with peak season during June-August coinciding with the monsoon season. Almost 70% malaria cases are now concentrated along the international borders and top 20 townships accounts over 80% malaria cases--also along the international borders. The primary malaria vectors are still susceptible to pyrethroids and antimalarials with over 95% effectiveness. The malaria immunity in people residing in low transmission areas is declining, and people migration from low to high transmission areas are at risk with high potential for outbreak and resurgences. The planned activities in 2020 are in support of achieving *P. falciparum* malaria elimination by 2025 and creating a foundation for *P. vivax*, or all forms of malaria, elimination by 2030. Key activities are provision of early and effective test-treat services, provision of prevention (bed nets) in all risk areas, conduct intensified approaches in high transmission areas, implement case notification, case and foci investigation, classification, response, and develop sensitive and specific surveillance system.

**Impact:** The current situation has led to a breach in service delivery (malaria test-treat) through public health care facilities and disrupted the supply of malaria commodities. Most of the test-treat activities are ongoing from the integrated community malaria volunteers at the village level. If not addressed, this will have an impact on the *P. falciparum* elimination by 2025. All malaria gains achieved over decades are at stake. WHO through its programme review and adjustments is working with partners and professional bodies, to maintain essential malaria services on the ground.

**Dengue**

**Situation:** Dengue has been reported in Myanmar since 1970 and number of cases started rising from 2001 with ups and down over the years. The highest number of dengue cases was reported in the 2015 with total of 42 913 cases. Number of cases went down to a very low level in 2016 (total case 10 770) followed by rise in number of cases in 2017 (total case 31 288). In 2020 total reported cases was only 15 131 which is lower than the previous two years – 2018 and 2019 (2018 total case 23 273 and in 2019 total case 24 178). Dengue is usually cyclical in nature and with cases alternating every year, but programme interventions play a critical role in preventing the occurrence of dengue. Total dengue deaths reported in 2020 were 68 and the programme is continuously maintaining case fatality rate below 1% from 2008 which shows improved early diagnosis and effective case management of dengue haemorrhagic fever in healthcare facilities.

**Impact:** Dengue transmission tends to have seasonal patterns, with high transmission during monsoon (June to September). Early diagnosis and effective case management of dengue haemorrhagic fever may be greatly impacted due to impaired functionality of public health care facilities in Myanmar. Number of cases may be increased along with increased number of deaths. Several interventions were planned to be implemented in 2021 like dengue awareness campaign through mass, electronic, and print media; larval free school initiatives, larval control (through source reduction and use of abate); fogging; capacity building of the clinician and laboratory staff; and digitalization of dengue reporting system. These interventions may be greatly impacted, and hence fuel increasing numbers of cases as well as deaths in the country.

**Leprosy**

**Situation:** Leprosy has been a public health problem in Myanmar for many centuries. The Integrated Leprosy control activities into the Basic Health Services (primary health care programme) was initiated in 1978. Myanmar adopted the WHO’s strategy of further reducing the leprosy burden and sustaining leprosy control/elimination activities and focused its effort on improving the quality of
care by promoting disability prevention activities. Multidrug therapy (MDT) regime was started in 1988 and expanded phase-by-phase covering all the townships in 1995. Elimination of leprosy was declared in the year 2003. However, new cases ranging from 2000 to 3000 are detected annually. Programme is now aiming for Leprosy elimination by 2030: Zero leprosy: zero infection and disease, zero disability, zero stigma and discrimination.

Impact: During this critical time most of the health facilities are unable to provide diagnosis, treatment, and referral services for leprosy. All the planned activities starting from capacity building, coordination, contract tracing, post exposure prophylaxis, prevention of disability activities, sentinel surveillance on drug resistance are on hold. Supply of Leprosy MDT drug from health facilities to the patients may be interrupted.

Lymphatic Filariasis
Situation: Lymphatic Filariasis was endemic in 45 districts in 2001. National programme started Mass drug administration (MDA) in the year 2001. As of 2020, a total of 30 implementation units (IUs) stopped MDA. MDA was conducted in 15 IUs in 2020.

Impact: Pre-Transmission Assessment Survey (Pre-TAS) in 15 IUs was planned to conduct in February 2021 where MDA was conducted in 2019 but now on hold. Filariasis Test Strips (FTS) for pre-TAS is going to expire/already expired (February and March 2021). Fresh FTS need to be procured. It was planned to procure Ivermectin for triple drug mass administration therapy. The procurement of FTS and Ivermectin is on hold. Based on the result of pre-TAS, IDA was planned to conduct in the pre-TAS failed areas in 2021 which would likely be postponed.

Epidemic-prone diseases

Vaccine preventable diseases and surveillance. Myanmar has been maintaining good quality and sensitive surveillance for vaccine preventable diseases (VPDs), however, following the military takeover in February 2021, surveillance activities has been completely disrupted. Annual Non-Polio Acute Flaccid Paralysis (AFP) rate for 2020 in children < 15 years was 1.29, however no AFP cases are reported since 01 February 2021. Annual Measles incidence per million was 98.85 in 2019 and 8.22 in 2020 with confirmed measles cases of 5243 in 2019 and 444 in 2020. Reported Diphtheria cases were 121 and 273 in 2019 and 2020 respectively. No VPD surveillance data is available from February 2021 onwards. Without the co-operation from MoHS skilled personnel, it will be impossible to maintain the effective surveillance system in the country.

Epidemic and pandemic-prone infectious diseases

Situation: In accordance with International Health Regulations (2005), WHO has been supporting MoHS to develop, strengthen, and maintain the national capacities necessary for the surveillance, verification of, and response to acute public health events with the potential to threaten the health of populations worldwide. For instance, Field Epidemiology Training Programme (FETP), Rapid Response Team (RRT) training up to township level, laboratory detection capacity trainings for epidemic and pandemic-prone infections. MoHS has been conducting surveillance for 17 prioritized diseases under national surveillance system across the country. Through this national surveillance system, the outbreak/event will be notified by the township public health team followed by conducting laboratory confirmation and control measures. WHO has also provided necessary support in implementation of surveillance and outbreak control for such prioritized epidemic and pandemic-prone infectious diseases. Further, WHO has supported MoHS in carrying out laboratory-based surveillance for some specific infections like zoonotic diseases, influenza, and antimicrobial resistance (AMR) pathogens. Myanmar has implemented Influenza Like Illness/Severe Acute Respiratory Infection (ILI/SARI) sentinel surveillance across the country and contributed to Global Influenza Surveillance and Response System, and also strengthened pandemic influenza preparedness activities. In 2017, 2018 and 2019, MoHS
implemented, with WHO support, early detection and significant control activities for seasonal influenza outbreaks, with enhanced preparedness also continuing in the pandemic year 2020. In addition, MoHS conducted monsoon preparedness activities for certain seasonal diseases with WHO facilitation, including co-ordination meetings, flu vaccination for high-risk health care workers, stockpiling of essential laboratory reagents, prevention and clinical commodities. Regarding AMR, considering its great threat to modern medicine, Myanmar implemented sentinel surveillance system for prioritized antimicrobial resistance pathogens and also participated already regularly in the Global AMR Surveillance System.

In summary, MoHS Myanmar in co-ordination with WHO and other development partners implemented International Health Regulations (IHR 2005) effectively and efficiently through detection of acute public health events in timely matter; assessing and reporting the event in accordance with Annex 2 of the IHR; and timely response to public health risks and emergencies.

**Impact:** Due to the current situation, the national laboratory-based surveillance system is currently non-functional, posing risks for emerging and re-emerging infectious diseases outbreaks. If notifiable events cannot be detected, investigated, responded and shared with relevant parties, the risk for communicable disease outbreaks will be high, resulting in significant public health, social, economic and political impacts on health systems and affected populations, and may also impact neighbouring countries and the wider international community.

**EWARS.** WHO is supporting MoHS to implement the early warning, alerts and response system (EWARS) in Rakhine and Kachin States for internally displaced persons (IDPs) and other vulnerable people living in conflict-affected areas. Health Cluster partners and MoHS are contributing to EWARS through their mobile clinics. Reporting, verification, investigation and response procedures follow the national EWARS standard operating procedure and aligned with national disease control plans. The reports are collected through an online system. Collected information is monitored and analysed regularly and informs decision-making to ensure prompt response.

**Impact:** The current situation caused a considerable decline of submitted reports in Kachin State, from 355 reports covering 57 locations with 7,998 consultations (1st Nov 2020 to 31st Jan 2021) to 62 reports covering 24 locations with 1,282 consultations (1st February to 28th April 2021). This severely limits the ability for rapid detection of events of potential outbreaks especially in FCV fragile, conflict-affected and vulnerable areas.

**Malnutrition and child health**

The **Myanmar Micronutrient and Food consumption survey** conducted in 2017-18, with the support of WHO, Unicef, World Bank, had quantified the prevalence of Severe Acute Malnutrition (SAM) as 0.8% (0.6-1.1). However, this rate was as high as 1.7 (0.9-3.3) and 1.6 (0.8-3.1) in Ayeyarwady Region and Kayin State. The Global Acute Malnutrition was 6.7% (6.0-7.4). The stunting was 26.7%. With regards to the feeding practices of infant and children at national level; exclusive breastfeeding was 51.2% and the minimum acceptable diet among infant aged 6 – 8 months of age was 13%. The Under-five mortality rate was estimated to be 44.7 deaths per 1,000 live births in 2019.

To accelerate the progress toward the UN Decade of Action on Nutrition 2025 and Sustainable Development Goals (SDGs) targets, Myanmar MoHS together with multisectoral collaboration had prepared a Multisectoral National Plan of Action on Nutrition (MS-NPAN) in 2019 and started rolling out at sub-national levels.

Due to the protracted Covid19 restriction since mid-2020 and with the current political situation in Myanmar, many nutrition-related activities by public sector and partners are on hold. The availability and affordability of nutritious food becoming limited which will complicate the food choices and feeding practices. The observed public health service disruption in Myanmar will
further affect the health promotion and nutrition services at the community level, leading to aggravation of malnutrition and increase in the child mortality.

**Reproductive, maternal, newborn, child and adolescent health**

**Situation:** Myanmar has been making significant progress in reducing maternal, newborn, and child mortality. Maternal mortality ratio (MMR) has dropped by 26% in 2017 since 2000, from 340 to 250 maternal deaths per 100,000 live births, with 1.8% annual rate of reduction (MMEIG). Similarly, newborn and under five mortalities have decreased by 53% (from 47 per 1,000 live births to 22 per 1,000 live births) and 61% (from 115 per 1,000 live births to 45 per 1,000 live births) respectively, between 1990 and 2019. Provisional results from the Inter-census Survey indicated a 47% reduction of under-five mortality rate from 72 per 1,000 live births to 38 per live births in 2019. Nevertheless, there is still a considerable way to reach the targets of Sustainable Development Goals by 2030.

Even within the country, the risk of maternal and child deaths are disproportionately high among the most vulnerable segments of society. MMR in Chin State (357 per 100,000 live births) was found considerably higher than other states and regions while under five mortality rate (USMR) in Magwe was 108 per 1,000 live births which is more than twice of national average. In addition, MMR is particularly higher among girls aged 15-19 years which was 229 per 100,000 live births. It was contributed by the high adolescent fertility rate in the country (33 births per 1,000 girls). Post-partum hemorrhage still remains the first leading cause of maternal deaths, while the abortion-related deaths become the second leading cause. Prematurity, birth asphyxia, and neonatal sepsis are leading causes of newborn deaths.

During the past decade, MoHS Myanmar put in concerted efforts to tackle common causes of maternal, newborn, and child mortality, and sexual and reproductive health issues, under the five-year strategic plans for Reproductive Health, Newborn & Child Health, and Young People's Health. Myanmar committed to the global initiative of Family Planning 2020 to reach a contraceptive prevalence rate (CPR) of 60% by end 2020. Costed Implementation Plan (CIP) to meet Myanmar's FP 2020 commitments was developed in 2014 and revised in 2018. Maternal death surveillance and response (MDSR) and child death surveillance and response (CDSR) systems were rolled out in all States and Regions in 2017. Strategies towards Ending Preventable Maternal Mortality (EPMM) in Myanmar 2017-2021 were approved in 2018. The National Strategic Plan for sexual, reproductive, maternal, newborn, child & adolescent health (SRMNCAH 2021-2025) and action plans were intended to be launched during the first quarter 2021, upstaged by the events from 1 Feb 2021.

The Myanmar Demographic and Health (DHS) Survey 2015-2016 showed only 51% of currently married women were using a method of modern contraception (mCPR) while 16% of married women had unmet contraceptive needs, as they were not using any contraceptive method despite their desire to avoid pregnancy. In particular, nearly 1 in 5 married adolescents age 15-19 years have an unmet need for modern contraception. High rates of fertility and unmet need for family planning pose greater risks on adolescents to face consequences of unintended pregnancy and unsafe abortion.

In addition, only 59% of pregnant women received at least four visits of antenatal care. Total of 60% births were attended by skilled providers, where only 37% of all deliveries occurred at health facilities. Sociocultural barriers exist leading to deliveries by traditional birth attendants (TBA) in the hard-to-reach rural areas. High rates of home deliveries are also due to ill-equipped facilities, poor referrals, poor infrastructure, costs of transport, high costs of medical supplies borne by women, and cultural preferences to deliver in the presence of family members as well as to be delivered by health workers perceived to be more culturally acceptable such as TBA. Although 85% of all hospitals provide basic emergency obstetric and newborn care (BEmONC), only 7% of rural and

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sub-rural health centres can offer such services. In addition, only 12.4% of women in the poorest quintile accessed facility-based deliveries, compared to 77.5% among the wealthiest quintiles.

Myanmar DHS indicates that only 71% of mothers and 36% of newborn receive the recommended postnatal check-up within first two days after birth. Only half of the infants under age six months are exclusively breastfed. In terms of health seeking practices, only 54% of children with diarrhoea were taken to a health facility for treatment and 86% of them received oral rehydration therapy or increased fluid.

On top of that, the ongoing COVID-19 pandemic has significant impacts on the country. While the impact of the pandemic and its control measures are clearly visible on economic activities, social restrictions and the care of people infected with COVID-19, the indirect effects on the demand for, and provision of, essential health services, are inevitable and likely to be significant, especially for the vulnerable populations of women, newborn, children and adolescents. To document this, the extent of RMNCAH service disruption during the pandemic was assessed through a series of mapping exercises (or assessments) during two periods. First, March to April 2020 as an initial round, and May to August 2020 as a second round. As per the results, the RMNCAH services were found disrupted to certain extent. Antenatal care (ANC) and post-natal care (PNC) services were affected. There was a slight reduction of total number of mothers who received ANC four times through May to August 2020. The total number of mothers who received PNC was also reported to have decreased through May to August 2020. As for the newborn, the total number receiving newborn care and the total number receiving early initiation of breastfeeding were lower for a few months, from May to August 2020 but were observed to catch up later, during Sept-Nov 2020. Similarly, the number of institutional deliveries reduced in May 2020, then caught up by Aug 2020.

**Impact:** Due to current situation, normal health care functioning has almost completely broken down especially in public sector, leading to disruption of access to RMNCAH services. Although comprehensive service coverage data are unavailable at this early stage, it can be expected that there may be additional mortality and morbidities of mothers, women, children and adolescent resulting from RMNCAH service disruption. In many places across the country, charity clinics and private hospitals (with discounts or sometimes free of charge in selected services) are supporting essential RMNCAH services. However, these are short-term, non-sustainable measures. Health personnel (those observing civil disobedience, those retired, and private practitioners) have been assisting patients through charity services where possible under challenging circumstances. Curfew orders have been issued which limit movement at night and this poses extreme challenge for emergency obstetric and child referral services. Access to antenatal care, delivery care, postnatal care, family planning and treatments for children (e.g. pneumonia, diarrhoea) can also be constrained due to the interruption in supplies and equipment, and potential stock out in several facilities. Limitation in counselling services and adolescent friendly health services can put additional risks of unwanted pregnancies, adolescent pregnancies, and unsafe abortions. Furthermore, psychosocial impacts on pregnant mothers, young children, and young people could contribute to significant morbidities including increased postpartum depression, developmental delays in children and suicidal rates in youths.

**Tuberculosis, HIV and viral hepatitis**

**Tuberculosis**

**Situation:** Tuberculosis is one of the major public health problems in Myanmar, still among the 30 high TB burden countries. In 2019, 137,325 TB cases were notified including 3,205 notified drug-resistant TB (DR-TB) cases. TB treatment coverage was 77% in 2019, and treatment success rate for new and relapse TB cases registered in 2018 was 88%. The estimated TB incidence was 322 (212-454) per 100,000 population in 2019 and prevalence of all forms of TB for all ages was 436 (361–511)
per 100 000 population according to the national TB prevalence survey implemented 2017-2018. TB Diagnosis and treatment was provided by public sector as well as private sector as public-private and public-public partnerships, and active case finding, and treatment completion was also supported by community-based TB care services co-ordinated by non-governmental organization (NGOs) and international non-governmental organization (INGOs) through volunteer networks. Availability of GeneXpert testing and chest X-ray facilities has been promoted along with strengthening of diagnostic algorithms. Piloting oral DR-TB regimens was initiated in certain townships of Yangon and Mandalay regions in 2020, and it is planned to extend throughout the country in June 2021. WHO provides technical assistance for applying new regimens as well as strengthening TB services of the National TB Programme and partners.

**Impact:** TB case finding activities have been seriously affected. Although some cases are being diagnosed as TB by CXR, there is limited access to drug susceptibility tests (DST) services to assist and guide the clinicians to start a correct treatment. Adherence to treatment and adequate management of side effects would have been hampered by current situation. So far, the continuum of medicine supply has been maintained by different channels.

**HIV AIDS**

**Situation:** HIV epidemic in Myanmar is concentrated among key populations (people who inject drugs, men who have sex with men, transgender women and sex workers) and the prevalence is 0.58%. Estimated new infections are about 9,000 per annum. The estimated People Living with HIV (PLHIV) is around 240,000 and nearly 200,000 patients are on antiretroviral therapy (ART) as of December 2020. Total of 80% ART patients were seeking care at public health facilities and the rest at the implementing partners. As people who inject drugs have the highest prevalence, harm reduction services are a priority intervention, and 26,000 are on Methadone Maintenance Therapy (MMT) in December 2020. Myanmar is also moving towards dual elimination of mother-to-child transmission of HIV and syphilis in 2025. Yearly, more than 800,000 pregnant women were screened for HIV and provided treatment for 4,000 – 5,000 HIV positive mothers. Even during the COVID-19 pandemic, essential services were maintained by implementing contingency plan including multi-month dispensing of antiretrovirals (ARV) and take-home dose of methadone and explored alternative approaches for HIV prevention interventions.

**Impact:** Due to the crisis, HIV prevention interventions, including HIV testing services, cannot be routinely implemented. ARV and MMT dispensing were prioritized in collaboration with implementing partners and community networks, but the security situation can be an issue. Viral load monitoring of ART patients could be done only for very few patients. There are recently distributed ARV and MMT stock at the dispensing sites. However, if the situation continues, there may be challenges in replenishing these essential supplies. Challenges in treatment adherence and OI management may have impact on AIDS-related death. Due to the escalating security situation, restoring HIV prevention services will be difficult. Decreasing HIV screening of pregnant mothers will impact mother-to-child transmission. Collecting data and information is another challenge to know the exact situation since the current priority is to maintain essential services. Electronic-based reporting system is not functioning at present.

**Viral Hepatitis**

**Situation:** Myanmar is one of the 28 countries regarded as WHO’s priority countries for Viral Hepatitis (VH) response. According to the national sero-prevalence survey among the general population conducted in 2015, the prevalence of hepatitis B was 6.51% and hepatitis C was 2.65%. The Myanmar National Strategic Plan (NSP) 2016-2020 was developed in line with the WHO’s strategic directions as a roadmap towards elimination of viral hepatitis as a public threat by 2030. Childhood vaccination of hepatitis B is provided through the EPI; completion of the third dose for all children under one year was reported to be an average of 90% coverage annually from 2016 - 2019.
Hepatitis C treatment program was initiated in 2017 and mainly provides services at 13 public hospitals across 8 states and regions. Since 2017, total of 17,148 patients started hepatitis C treatment by public sector and implementing partners and 14,806 have completed the full course of treatment as of September 2020.

**Impact.** With the ongoing disruption of the public health system, diagnostic, treatment, investigations services and routine reporting at the public and partners facilities for hepatitis C are halted and there is no new patient enrolment at present. Since EPI vaccination activities are also non-functioning and routine reporting are not available, childhood hepatitis B vaccination is greatly impacted. The review of the National Strategic Plan (NSP) I was conducted in 2020, expected to be finalized in the first quarter 2021, followed by development of the next NSP. However, all the planned activities such as NSP II development, second national sero-prevalence survey, collaboration for service integration with National AIDS Programme for hepatitis C treatment to people who inject drugs (PWIDs) and project extensions are on hold as a result of this crisis.

**Non-communicable diseases (NCDs)**

**Situation:** According to WHO NCD country profile, four major NCDs are estimated to account for 68% of all deaths with proportional mortality of 25% for cardiovascular diseases, 13% for Cancers, 8% for Chronic Respiratory diseases and 4% for Diabetes. Nearly one fourth (24%) of deaths occur between 30-70 years of age and deaths due to NCDs are expected to increase by 21% over the next decade if effective prevention and control measures are not undertaken.

Regarding the key risk factors posing development of NCDs, the challenging findings need to be tackled for prevention and control of NCDs by STEPwise approach to chronic disease risk factor surveillance or STEPS survey in 2014. The tobacco use prevalence (54.4%) in the country is two times higher than the average global prevalence rates. Current smoking prevalence rate was 26% and smokeless tobacco use was 43%. Current drinking 20% where more than 40% in 25-44 years age group. Prevalence of hypertension was 26% and diabetes was 10.5%. Nearly one fourth (24%) of deaths occur between 30-70 years of age and deaths due to NCDs are expected to increase by 21% over the next decade if effective prevention and control measures are not undertaken. Health literacy promotion with respect to general health education on NCDs and promotion of healthy lifestyle regarding diet, physical activities, tobacco and alcohol consumption are also provided. Up to April 2020, PEN services were providing at 9,518 out of 11,004 health facilities including urban health centres, MCH clinics, RHC and sub-centres throughout the country by basic health staffs as Wednesday NCD clinics. During 2019, 1.67 million population was screened for NCDs risk factors and among them, 205,495 diabetes and 429,400 hypertension cases were treated.

During 2019-2020, anti-diabetic medication (metformin, sulfonyl urea), anti-hypertensive drugs (ACE inhibitors, ARBs, calcium channel blockers, beta blockers), cardiovascular drugs (Aspirin, statins), bronchodilator, benzathine penicillin injection, HPV vaccination are available for prevention and control of NCDs in primary care facilities. More than 50% of health facilities can offer CVD risk stratification.

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There are 11 NCD related programmes, including of those regarding 4 major NCDs, tobacco free initiative project, Myanmar Epilepsy initiative project, injury prevention, community based-rehabilitation project, snakebite control and deafness prevention projects, under implementation with technical and financial support mainly from WHO.
Impact: Due to the protracted Covid19-related restrictions since mid-2020, on top of that current crisis, many NCD prevention and care activities by the public sector are disrupted. At community-based settings, Hypertension and Diabetes clinics (Wednesday NCD Clinic) cannot be opened for new case finding and elderly health care for nearly one year. At the same time for registered NCD patients, essential drug supply continues to be provided through basic health staff (BHS). However, after February 2021, there are serious risks affecting continuity of essential drug supply.

Services at public hospitals were already limited to varying degrees due to Covid19. These include outpatient services, in-patient services, emergency unit services, pre-hospital emergency care services, NCD diagnosis, treatment at hospital OPD clinics, treatment for mental health disorders, cancer diagnosis and treatment, dental services, rehabilitation services, 24-hour emergency room services for emergencies, eg myocardial Infarct, arrhythmia, stroke, diabetic ketoacidosis or DKA, asthma, chronic obstructive pulmonary disease or COPD, sepsis, serious injury. Such services from public hospitals became partially to fully disrupted since Feb 2021.

World Health Survey plus STEPS survey is important for updating the evidence-base information for NCD and risk factors monitoring for Myanmar. It’s in country implementation has been planned since 2019 and was put on hold in 2020 due to Covid19. Implementation looks unlikely this year. WHO Myanmar submitted proposal for life-saving NCD activities to NORAD, via WHO SEARO & WHO HQ, for an initial implementation period of six months (28 May 2021, see health priority activities 11 below), to ascertain delivery models & partnerships to deliver life saving NCD prevention and care.

Trauma care

Situation: According to Myanmar Health Statistics 2020, injury has been one of the top ten causes of morbidity and mortality for more than one decade. There is an increasing trend in the total number of reported injury cases and deaths. Total number of reported cases increased from 370,000 in 2016 to 460,000 in 2019. More than 80% of total incidents were attributable to vehicle accidents (45 to 51%), accident on farm (16 to 25%) and fighting (12 to 14%) across these four years period. Also, number of deaths increased from 11,300 to 15,300 which corresponded to the death rate of 3.1 to 3.4% among cases. More than 75% of injury deaths were vehicle accident (41 to 43%), drowning (23-24%) and suicides (13-15%).

Impact: According to the office of the UN High Commissioner for Human Rights OHCHR, at least 824 individuals have been killed at the hands of the military authorities since 1 Feb 2021, and more than 4,300 people are currently in detention, 80 of whom children (OHCHR, 28 May 2021).

Gender-based violence (GBV)

Situation: According to the Myanmar Demographic and Health Survey (MDHS) conducted in 2015-16, 23% of households are headed by a woman. Total of 15% women reported that they have ever experienced physical violence since age 15. 9% in the 12 months before the survey; 3% of Myanmar women have ever experienced sexual violence (since age 15); 2% have experienced sexual violence recently (in the year before the survey); 21% of ever-married women have ever experienced physical, emotional, or sexual violence committed by their husband. Most women do not seek help when they experience domestic violence.

Impact: In a statement issued 12 March 2021, “UN Women aligns with the statements made by the UN Secretary-General in strongly condemning the violent crackdown and the use of lethal force against peaceful protestors over the past month in Myanmar and expresses its deep concern over the targeted and disproportionate violence against women being recorded in this situation. This repressive response has already taken the lives of six women and resulted in the arrest of close to
600 women, including young women, LGBTIQ+ and civil society activists. In addition, those in detention are also reportedly experiencing sexual harassment and violence…"

**Mental health**

**Situation:** According to public health statistics report of HMIS, 2016, prevalence of common mental health disorders per 100,000 population in Myanmar were, psychoses 9, anxiety disorders 7, depressive disorders 6, epilepsy 5, mental retardation 7 and alcohol dependence 120 per 100,000 population. A survey carried out among general population of Hlaing Tharyar township, Yangon Region, in 2017, showed that prevalence of psychosis was 0.86%, depression 0.89% and epilepsy 0.81%. To help address the enormous mental health treatment gap, a pioneering, decentralized, successful epilepsy initiative had been well under way in Myanmar for five years. It was positively evaluated in 2019 and is at risk to be affected adversely by the current crisis.

Mental health programme is providing the trainings to reduce the diagnosis and treatment of mental health problems with the help of WHO. WHO biennial work plan provides budget for the training of GAP intervention programmes by using mhGAP intervention guideline and manual for management of alcohol use disorder, in three states/regions every two years. The community mental health care satellite continuous care programmes are running at Hlaing-thar-yar Township, Kyaut-tan Township and Kaut-hmu Township every two weeks with the supports from Yangon Mental Health Hospital and well-wishers.

A new Mental Health Law, which is in line with human right advocacies, was under review by parliament to complement or substitute the Lunacy Act 1912. It is envisaged to be a critical milestone in improving mental health care in Myanmar. Moreover, national mental health policy and strategic plan 2021-25 was in final stage of adoption by cabinet prior to 1st Feb 2021. To raise awareness of suicide prevention, workshop for ‘training of media professionals for suicide prevention’ has been held May 2018, to name one example.

Global School-based Students Health Survey (2016) data revealed that 9% of adolescent students aged 13-17 years attempted suicide one or more times during the last 12 months. Depression was 27%, and current tobacco users reported were 10%. Reported the prevalence of bullying was 50.1%. Reports of violence include being in a physical fight with a peer was 24.3% and being physically attacked by someone other than a peer was 32.7%.

**Impact:** While there is currently no single source of verified information compiled for mental health concerns, the current crisis can severely affect mental health wellbeing of individuals, including those directly experiencing violence. Loss of liberty and happiness, as well as of properties or livelihoods, likewise greatly increase the risk of developing depression. Risk for anxiety, post-traumatic distress syndrome, and severe mental traumas may also increase. The impact may affect all age groups, which may have short- and long-term consequences.

Due to the ongoing communications and internet disruptions, online mental health services while available are difficult to be accessed by the public. Inaccessible of timely information can raise worries and anxiety, especially in resource-constraint settings. Disruption to daily routines, sense of personal safety, destruction to possessions such as home, vehicles and shops, loss of income-generating activities and job insecurity, unavailability of mental health services from public hospitals, direct experience of threatened death or serious injuries, threat to physical integrity, or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by someone close, closures of community resources and facilities (including religious centres, childcare centres and welfare centres) may lead to psychological reactions, including grief and complicated bereavement, and possibly post-traumatic stress disorder or PTSD.

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29th May 2021
Determinants of health

Health Environment and Climate Change

Situation: Myanmar has been identified as the second most affected country by natural disasters in the past 20 years, based on the average weighted ranking by the Climate Risk Index 2020. Myanmar is party to the Paris Agreement on climate change signed in 2015. The draft 2020 National Determined Contribution commits specific greenhouse gas emissions reductions targets promoting renewable energy for power generation, and reduced deforestation and forest degradation (REDD+). Frequency and intensity of natural disasters and disease outbreaks notably increased during past two decades in Myanmar. WHO has been working on climate change with government departments of Ministry of Health and Sports since 2019. With the support from Green Environment Facility, WHO aims to strengthen national capacities and improve the resilience, adaptive and mitigation capacity of health systems to deal with the adverse health effects of climate change. More specifically, in 2020, WHO key technical assistance were to conduct climate change and health vulnerability, adaptation and mitigation assessment, develop and implement health component of national adaptation and mitigation plan, develop climate change profile, strengthen climate resilience health system, build climate resilience healthcare facilities, develop climate resilient water safety and sanitation safety plans, develop tools, guidance and training packages on climate change and health, develop advocacy tools, establishment of air pollution surveillance system, integrated climate sensitive Integrated disease surveillance and climate-informed disease early warning systems, and build capacities and raise public awareness. In 2021, support to these activities continues to the extent feasible.

Impact: The current situation has put on hold most support that engages government directly. This is not due to restricted engagement as a result of UN-wide guidelines adopted since the military takeover as many collaborative activities would have life-saving character and hence be permitted, it is due to the drastically reduced implementation capacity of the de facto health authorities. This will delay in building resilient health care systems to deal with climate-related adverse events. WHO with the support of partners are conducting programme review and adjustments to carry out activities those are possible to implement through different stakeholders.
Pre-crisis health system status

Myanmar’s UHC services coverage index has improved, from 49 in 2010 to 56 in 2020. Services coverage, presented on a scale of 0 to 100, encompasses tracer indicators that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases, service capacity and access. Therefore, the improvement in the service coverage index mirrored the MoHS’ success in the implementation of the first strategy of the National Health Plan (NHP) 2017-2021, i.e. expansion of access to services. Meanwhile, available data indicated that Myanmar is yet to accelerate achievements in implementing the second strategy of the current NHP, i.e. financial protection.

The latest National Health Accounts confirmed 76.4% of current health spending in Myanmar is paid out-of-pocket by families. Although it was found to be lower than previous periods, it stands as one of the highest among the region. In 2017, an estimated 324,00 people were pushed into poverty due to health care expenditure, while 14.4% of households spent more than 10% of their available spending on health, incurring in what is known as catastrophic health expenditure.

In crisis health system status: Previously established monitoring systems, such as DHIS 2 which enables an evidence-based analysis to determine the functionality of the current health system, is currently non-functional. As a result, alternative ad-hoc monitoring systems based on feasible implementation modality is under consideration, without which assessment of the current health system functionality may not be possible.

Human resources for health situation:

The sum of doctors, nurses, and midwives results in a density of 17.8 health workers per 10,000 population. The World Health Organization (WHO) according to the World Health Report 2006 suggested an average density of 22.8 health workers per 10,000 population to deliver a package of health services compatible with the health Millennium Development Goals (MDG). A decade later, the estimates had almost doubled, to 44.5 health workers per 10,000 population, to adapt services to the Sustainable Development Goals (SDG) standards. However, Myanmar has yet to reach those benchmarks in terms of health workforce density per 10,000 population. Comparison of health worker density across countries in the South-East Asia Region (SEAR) and with the thresholds just described, Myanmar is one of the countries with the lowest health worker availability, only above Bangladesh.

Beyond the overall availability of human resources in the system, their deployment is suboptimal since it is based on norms linked to facility nomenclature and size, rather than need or performance. The resulting allocation brings both insufficient personnel in some areas and exceeding capacity in others plus inadequate skill mix, as proven by the limited number of complete critical care teams to run ICU beds during the Covid19 crisis.

In crisis human resource status: Like other countries the Covid19 pandemic affected medical and allied health professional universities and training schools nationwide. This resulted in closure of all training institutions throughout the year 2020 with no graduation of all cadres of health workforce adding to the constraints of health workforce. Moreover, health workers were among the first to express dissent to the military takeover through civil disobedience. This translated into a significantly reduced health workforce in the public sector. At the same time, health personnel observing civil disobedience, or those retired, plus private practitioners, have been assisting patients through charity, faith-based or private services where possible under difficult and dangerous circumstances.
There is considerable uncertainty of health human resource situation in the future, both in terms of the number of personnel as well as in skill level. Rebuilding health workforce for the public system will require re-thinking both production and management.

**Access to health care**

In discussing access to health care, it is helpful to do this from the point of view of service provision. Using Tanahashi’s model, there are five important stages which successively lead to a desired health intervention and to define measurements of coverage appropriate to each stage.

First is availability coverage, where availability of resources (manpower, facilities, essential supplies) limits the maximum capacity of health services. Of these resources, availability of human resources is largely affected by CDM. Some Human Resources are available through networks of partners, incl volunteers associated with the civil society organizations, ethnic health organizations, non-government organizations, private sector, and medical military personnel.

Second is accessibility coverage, where resources that are available must be located within reasonable reach of the people. The current crisis has led to significant safety and security concerns that hampers accessibility of services by the population. This is further exacerbated by martial law imposed in selected townships and nationwide curfew making access to essential services a critical challenge for patients to receive life-saving interventions.

Third is acceptability coverage, where service is accessible it still needs to be acceptable to the population. Acceptability is influenced by several factors such as service cost. While out-of-pocket expenditure was already high at nearly 76 % in 2018, the current situation has further exacerbated the health financing crisis. The breakdown of public health services has severely affected and disrupted availability and access to financing of affordable health care services in Myanmar. Apart from cost, acceptability of services from the few public health care workers who are continuing to deliver care (non-CDM) as well as from the military is largely uncertain.

Fourth is contact coverage (actual contact between service provider and user) and fifth is effectiveness coverage (where service performance is appraised as satisfactory by specific criteria, including quality). Of these last two stages, there is currently no available information.

**Disruptions to supply chain**

International and domestic supply chains have been significantly affected by the military takeover. Land and air transportation are severely hampered and, in some instances, have come to a complete stand-still. Security threats to drivers, road closures, checkpoints, drivers and warehouse staff as well as administrative staff on strike or partaking in civil disobedience, airport closures, reduction of relief flights, all contribute to substantial problems in the efficiency of Myanmar supply chains. The lack of reliable data and systems to make proper projections and forecasts aggravates the situation. Hence, availability of essential medicines, technical commodities and supplies for prophylaxis, diagnostics and treatment are affected by the disruption of the supply chain from central, state-region to the lower level.

**Surveillance System of Attacks on Healthcare**

In 2012, World Health Assembly Resolution 65.20 was adopted, which requested WHO to provide leadership at the global level in collecting and reporting information on attacks on health care. Subsequently, WHO corporately implemented the Attacks on Health Care initiative to systematically collect evidence on attacks on health care, to advocate for the end of such attacks, and to promote best practices for safeguarding health care from attacks. In Myanmar, there have been 179 reported attacks on health care between 1st February and 29th May 2021.

29th May 2021

Of the **89 attacks impacting facilities**, **51 government health facilities** reported as having been under occupation by security forces, cumulatively. **Currently, at least 32 government health facilities have presence of security forces located in 31 townships across 12 states and regions, including referral hospitals**. Of the 32, 11 are highly impacted in terms of the decrease in volume of patients observed who voluntarily seek healthcare from said facilities. Moderately impacted are 11, low impact for 6, and no impact information on 4. The continuing use of force against health-care workers, including the reported occupation by security forces in hospitals, is taking a devastating toll on Myanmar’s health care system. The system does not intend to identify perpetrators or culpability but to contribute to a safe and protected healthcare environment enabling patients and providers to access and deliver health services without fear. The WHO statement issued **1st May 2021** gained full support from Myanmar’s UN country team, which published a further statement **5th May 2021**, link: https://myanmar.un.org/en/126289-un-reiterates-call-health-workers-and-facilities-be-protected
Humanitarian health response (as per Myanmar Humanitarian Response Plan 2021; excludes the new onset crisis)

Health response coordination
Health Cluster partner coordination is present at national and three field locations (Kachin State, northern Shan State, and Rakhine State). This includes 54 health partners.

Health actors’ priority activities
1. Primary health care services aligned with the essential package of health services, including sexual and reproductive, maternal, newborn, adolescent and child health care, and emergency health care for land mine victims.
2. Emergency referrals including specific services such as emergency trauma care, emergency obstetric care, emergency newborn care, life threatening emergency care, gender-based violence (GBV) clinical care and referrals to other GBV specialized services.
3. Immunization activity support.
4. Preventing, detecting, and rapidly responding to communicable diseases through Early Warning, Alert and Response System (EWARS).
5. Mental health and psychosocial support services.
6. Supporting the delivery of rehabilitation services and provision of assistive devices, technology and products for persons with injuries and different forms of impairments (incl. chronic diseases).
7. Preparedness capacity for emergencies and disasters, including disaster risk reduction within the Health Cluster.
8. Advocacy to promote equitable access to inclusive healthcare.
9. Contingency medical supplies and health logistics support to continue life-saving health services within the context of Covid19. This includes continuity of HIV and TB treatments as well as treatment for non-communicable diseases (e.g. diabetes, hypertension).
10. Improving availability of humanitarian health information for hard-to-reach areas.
11. Supporting life-saving NCD services – WHO Myanmar contingency plan for initial, six months’ implementation to NORAD-supported programme, with WHO SEARO and WHO HQ support, for the period 1 July-31 December 2021 (submitted to WHO SEARO & WHO HQ 28th May 2021).

Impact: The current situation continues to pose added challenges to humanitarians who are already operating in pre-existing fragile, conflict, vulnerable settings in the country. Disruption of Covid19 response and essential services from public health delivery system has increased the caseload for humanitarian actors. Routine referral mechanisms needed to be modified to adapt to the changing operational environment. Referrals to private health facilities consequently increases health expenditure. Delivery of medicines and medical supplies as well as staff movement to reach the vulnerable communities became more challenging due to heightened security and other concerns. Availability of cash for operations is increasingly a serious concern. Severe disruption of internet and communications affect coordination among health actors, including timely notification and investigation of potential communicable disease outbreaks.
List of acronyms:

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>AAPP</td>
<td>Assistance Association for Political Prisoners</td>
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<td>AFP</td>
<td>Acute Flaccid Paralysis</td>
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<td>AMR</td>
<td>antimicrobial resistance</td>
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<td>ART</td>
<td>antiretroviral therapy</td>
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<tr>
<td>ARV</td>
<td>antiretrovirals</td>
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<tr>
<td>BCG</td>
<td>Bacille Calmette-Guérin vaccine</td>
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<tr>
<td>BEmONC</td>
<td>basic emergency obstetric and newborn care</td>
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<tr>
<td>CDM</td>
<td>civil disobedience movement</td>
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<tr>
<td>CDSR</td>
<td>child death surveillance and response</td>
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<tr>
<td>COPD</td>
<td>Chronic obstructive pulmonary disease</td>
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<tr>
<td>DHIS2</td>
<td>District Health Information Software 2</td>
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<tr>
<td>DKA</td>
<td>Diabetic ketoacidosis</td>
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<tr>
<td>DR-TB</td>
<td>drug-resistant tuberculosis</td>
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<tr>
<td>DST</td>
<td>drug susceptibility tests</td>
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<tr>
<td>DTP</td>
<td>diphtheria, tetanus toxoids and pertussis vaccine</td>
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<tr>
<td>EPI</td>
<td>Expanded Program on Immunization</td>
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<tr>
<td>EPMM</td>
<td>Ending Preventable Maternal Mortality</td>
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<tr>
<td>FCV</td>
<td>fragile, conflict and vulnerable</td>
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<tr>
<td>FETP</td>
<td>Field Epidemiology Training Programme</td>
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<tr>
<td>HIV</td>
<td>human immunodeficiency virus</td>
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<td>HMIS</td>
<td>Health Management Information Systems</td>
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<tr>
<td>HPV</td>
<td>human papillomavirus</td>
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<td>IDPs</td>
<td>internally displaced persons</td>
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<tr>
<td>IGME</td>
<td>Inter-agency Group for Child Mortality Estimation</td>
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<td>ILI/SARI</td>
<td>Influenza Like Illness/Severe Acute Respiratory Infection</td>
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<td>IMR</td>
<td>Infant Mortality Rate</td>
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<td>INGOs</td>
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<td>IPC</td>
<td>infection prevention and control</td>
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<td>MDA</td>
<td>Mass drug administration</td>
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<td>MDG</td>
<td>Millennium Development Goals</td>
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<td>Myanmar Demographic and Health Survey</td>
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<td>MDSR</td>
<td>Maternal death surveillance and response</td>
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<td>STEPS</td>
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