

Pulse survey on continuity of essential health services during the COVID-19 pandemic



Interim report
27 August 2020



Pulse survey on continuity of essential health services during the COVID-19 pandemic

Interim report

27 August 2020

Pulse survey on continuity of essential health services during the COVID-19 pandemic. Interim report

© World Health Organization 2020. Some rights reserved. This work is available under the [CC BY-NC-SA 3.0 IGO](#) license.

WHO reference number: [WHO/2019-nCoV/EHS_continuity/survey/2020.1](#)

Design and layout by [Café.art.br](#)

Contents

Contents.....	iii
Executive summary.....	iv
Introduction.....	1
Methods.....	1
Results.....	2
National policies and plans.....	3
Maintenance of essential health services.....	4
Reasons for service disruptions.....	11
Approaches to overcome service disruptions.....	12
Country priorities and technical assistance needs.....	13
Conclusions.....	14
References.....	16
Annex: Questionnaire.....	17

Executive summary

WHO conducted a key informant survey among ministry of health officials in five WHO regions between May and July 2020 to assess the impact of the COVID-19 pandemic on up to 25 essential health services in countries. Questionnaires were sent to 159 countries and 105 responses were received (66% response rate).

80% of the 105 responding countries had established packages of essential health services prior to the pandemic and 66% of these countries had already identified a core set of services to be maintained during the COVID-19 pandemic.

In general, disruptions of essential health services were reported by nearly all countries, and more so in lower-income than higher-income countries. The great majority of service disruptions were partial, which was defined as a change of 5–50% in service provision or use. Severe/complete disruptions were defined as a change of more than 50% in service provision or use.

All services were affected, including essential services for communicable diseases, noncommunicable diseases, mental health, reproductive, maternal, newborn, child and adolescent health, and nutrition services. Emergency services were the least disrupted, although 16 countries reported disruptions across all emergency services. The most severely affected service delivery platforms were mobile services, often suspended by government, and campaigns, for example as used for malaria prevention or immunization.

The causes of the disruptions were a mix of demand and supply factors. On the demand side, 76% of countries reported reductions in outpatient care attendance. Other factors, such as lockdowns hindering access and financial difficulties during lockdown were also mentioned. On the supply side, the most commonly reported factor was cancellation of elective services (66%). Other factors mentioned included staff redeployment to provide COVID-19 relief, unavailability of services owing to closures of health facilities or health services, and supply-chain difficulties.

Countries have responded to the adverse effects on essential health services in multiple ways, most commonly through triage of health services, telemedicine deployment to replace in-person consultations (more common in high-income countries), and changes in dispensing approaches for medicines. Eighty countries indicated priorities and technical assistance needs, including guidance and support in adapting strategies to maintain essential health services, assuring essential supplies, strengthening the health workforce, implementing adequate infection prevention and control capacities, risk communication, monitoring and telemedicine.

BOX 1. Key messages

- This key informant pulse survey aimed to collect country information to gain a rapid understanding of the impact of COVID-19 on a tracer set of up to 25 essential health services across the life course. The results provide initial insight into perceived disruptions across services, the reasons for disruptions and country approaches to overcoming them.
- Across the five WHO regions, 66% of responding countries had already defined essential health services to be maintained during the COVID-19 pandemic through a national policy or document.
- Nevertheless, disruptions in essential services are geographically widespread across the globe. Almost every country (90%) experienced a disruption to some extent, with greater disruptions being reported in low- and middle-income than in high-income countries. On average, countries reported disruptions to half of the tracer health services on which they reported.
- Essential health services were affected across the board. The most frequently disrupted services included routine immunization services – outreach services (70%) and facility-based services (61%) – noncommunicable disease diagnosis and treatment (69%), family planning and contraception (68%), treatment for mental health disorders (61%), antenatal care (56%) and cancer diagnosis and treatment (55%).
- While some services, such as dental care and rehabilitation, may have been deliberately suspended by government protocol (half or more countries reported that government policies had limited or suspended outpatient services, inpatient services and community-based care), the disruption of many of the other services will have a potentially harmful impact on population health in the short, medium and long term. For example, potentially life-saving emergency services were disrupted in almost a quarter of countries. Further work is needed to quantify and understand better the potential impact of such disruptions.
- Disruptions were caused by a blend of demand and supply side factors. Reductions in outpatient care attendance owing to lower demand were reported by 76% of countries, with other factors such as lockdown (48%) and financial difficulties (33%) also mentioned. The most commonly reported factor on the supply side was cancellation of elective services (66%). Other factors reported by countries included staff redeployment to provide COVID-19 relief (49%), insufficient personal protective equipment available for health care providers (44%), unavailability of services owing to closures of services or health facilities (33-41%), and interruptions in the supply of medical equipment and health products (30%).
- Many countries have already started to implement WHO-recommended strategies to mitigate disruptions to services, such as triaging to identify priorities, shifting to online patient consultations, changes to prescribing practices and supply-chain strategies, and refocusing public health information communications. Only 14% of countries reported removal of user fees, which may negatively affect access to services during this period. Documentation and learning about which strategies work best in different settings and throughout different stages of the pandemic are urgently needed.

- This pulse survey provides insights from key informants from countries on the extent of disruptions to their health services and an indication of their experiences in adapting strategies to mitigate the impact on service provision.
- Notwithstanding the limitations of such a survey (subject to reporting bias, representing the opinion of key informants), the results indicate that even robust health systems can be rapidly overwhelmed and compromised by a COVID-19 outbreak, reinforcing the need for strategic adaptations to ensure maintenance of essential health services.
- Decisions about the nature and timing of adaptations to service delivery must be informed by the use of accurate and timely data, and there is a need for countries to improve real-time monitoring of changes in service delivery and utilization, as the outbreak is likely to wax and wane over the coming months.
- This survey also highlights the need to improve understanding of the potential impact of disruptions on morbidity and mortality, and to weigh carefully the benefits and risks of pursuing different mitigation strategies.
- Documentation and learning about what works in different settings in terms of mitigation strategies during the different phases of the pandemic are urgently required.

Introduction

The impact of the COVID-19 pandemic on essential health services is a source of great concern. Major health gains achieved over the past two decades can be wiped out in a short period of time, as has been shown previously in humanitarian emergency situations caused by armed conflict or disease outbreaks such as Ebola (1, 2). The collapse of essential health services – including health promotion, preventive services, diagnosis, treatment and rehabilitative and palliative services – is likely to have serious adverse health effects, especially on the most vulnerable populations, such as children, older persons, people living with chronic conditions or disabilities, and minority groups.

Demand and supply factors may both play a role. People may stay away from health services out of fear of catching COVID-19. The operation of health services may be affected by shifting resources to fight the COVID-19 pandemic or by closures of health services or facilities. Supplies of medicines and commodities can be disrupted. In addition, societal measures such as a strict lockdown to combat the pandemic may affect people's socioeconomic situation as well as their ability to reach the health services they need.

Tracking access to essential health services during the pandemic is critical in order to achieve the optimal balance between fighting the COVID-19 pandemic and maintaining these services. As part of their response, countries need to have defined the set of essential services to be maintained during the pandemic, to assess how these services are being affected and to track any changes that may be occurring as the outbreak progresses along its various stages. National, regional and international data on the impact of the pandemic are also needed to advocate for resources for the most affected countries and populations, and to help target efforts to maintain health services for the populations in greatest need.

This key informant survey was aimed at gaining initial insight into the impact of the COVID-19 pandemic on up to 25 tracer essential health services across the life course in each country. The results of the survey should improve our understanding of the perceived extent of disruptions across all services, the reasons for disruptions, and country mitigation strategies to maintain services. This information can help to inform policy dialogues and support decision-makers at national and international level by providing a rapid snapshot of where the greatest challenges and priority needs lie in order to enhance planning of mitigation strategies and policies for maintaining essential services, and targeting of resources and investment throughout the course of the pandemic.

Methods

In May 2020, through collaboration between WHO headquarters and the regional offices, WHO distributed a secure web-based questionnaire to WHO country offices in five WHO regions (the WHO African Region, the WHO South-East Asia Region, the WHO European Region, the WHO Eastern Mediterranean Region and the WHO Western Pacific Region), together with instructions for completing the questionnaire through facilitated discussions with key informants within the national ministry of health. Owing to the high transmission status of COVID-19 and limited capacities at the time of the survey, the WHO Regional Office for the Americas will conduct the survey in the Region at a later date, and findings for that Region are therefore not included in this report. The questionnaire was made available in English, French, Russian and Spanish.

Each country completed one survey and responses were received between May and July 2020 reflecting the situation during the time prior to submission. At the request of countries, the original deadline for submission was extended from the end of May to the end of June, although a handful of responses were also received in July. Most responses were submitted through the online portal; a few responses were received by email, which were then entered into the online platform by the technical team at WHO headquarters.

The questionnaire comprised eight questions related to national policies and plans, the maintenance of essential health services, and country priorities and technical assistance needs in the COVID-19 context. A mixture of closed, multiple choice, check all that apply and open-ended questions was used. The full questionnaire is reproduced in the Annex.

In the first section, countries reported on the availability of nationally defined essential health services packages – prior to the COVID-19 pandemic and in the context of services to be maintained during the COVID-19 pandemic– as well as the availability of additional government funding for the maintenance of essential health services during the pandemic. Countries were also asked to upload national plans and documents outlining the national package of essential health services and/or list of essential health services to be maintained during the pandemic, if available. The second section requested information related to the level of functioning of different delivery platforms during the pandemic, levels of disruption in up to 25 essential health services across the life course, the main causes of service disruptions, and the approaches being used to overcome those disruptions. The final section asked countries to identify the main priority needs and technical assistance requirements for maintaining essential health services during the COVID-19 pandemic.

Data from the national questionnaire were downloaded directly from the web-based platform to a Microsoft Excel database for analysis. The analysis presented in this report is based on unweighted country data.

The limitations of the study should be taken into account in the interpretation of findings. The responses were provided by key informants through self-assessment, which may be prone to bias and lacks validation. The type and mix of respondents and method of survey completion varied from country to country. Respondents included health policy advisors, directors of planning and health services, and health systems and incident management team focal points. In some cases, the questionnaire was completed by a single respondent and in some through a cross-cutting consultation, with the extent of coordination between ministry of health focal points again varying across countries. Countries were at different stages of the COVID-19 pandemic when they submitted their responses, so that variations in cross-country comparisons were to be expected. Moreover, the novelty of concepts and terminology related to service continuity, service disruptions, causes and mitigation strategies may have been interpreted differently by respondents, with potential implications for the results.

Results

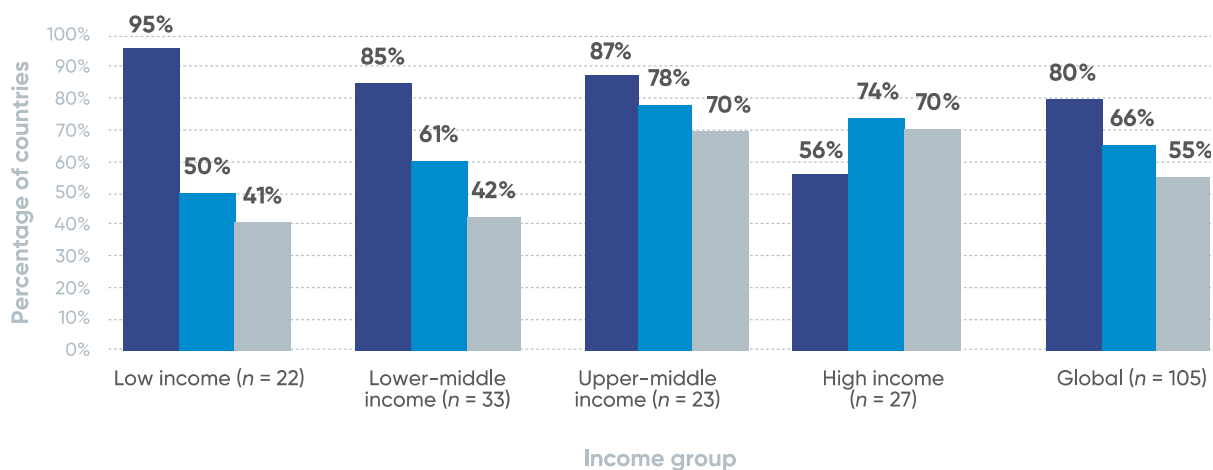
In total, 105 countries responded from the five WHO regions. The responses reflect the situation in country prior to submission: 55% of the reports were received in June, 40% in May, and 5% in July 2020.

National policies and plans

80% of countries had defined an essential health services package prior to the outbreak, and 66% of all countries had identified a core set of services to be maintained during the COVID-19 pandemic (Fig. 1) (3). Having a previously defined package made a country more likely to have identified a core set of essential health services to be maintained during the COVID-19 pandemic: 69% of countries with a previously defined package and 55% of those without.

Only 55% of the 105 countries had allocated additional government funding to assure essential health services. This response was more common in upper-middle- and higher-income countries (70% in both groups) than in low- and lower-middle income countries (41% and 42% respectively) (Fig. 1).

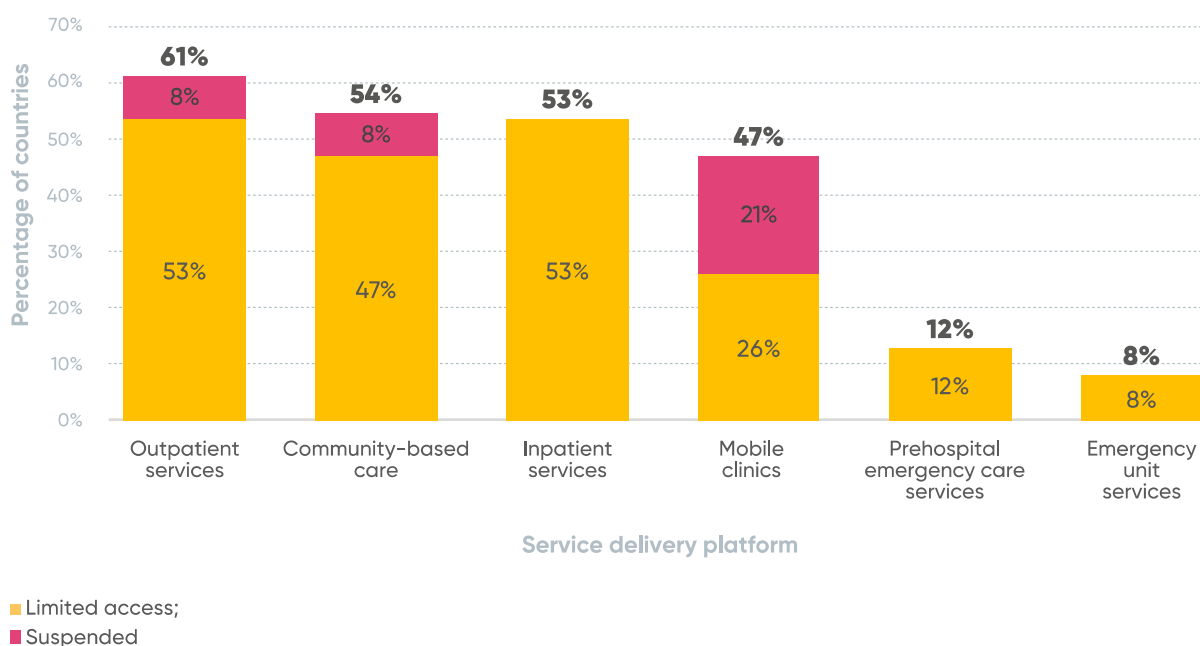
Fig. 1. Countries with national essential health service packages and government funding (by income group)



- National essential health services package defined prior to COVID-19 (%);
- Essential health services to be maintained during COVID-19 defined in national plan (%);
- Additional government funding allocated for maintaining essential health services during COVID-19 (%)

More than half the of countries implemented government policies to scale back service provision intentionally at some point during the reported period. The most common suspension affected mobile clinics: 21% of countries reported complete suspension of mobile services (Fig. 2). Full suspension of outpatient services and community-based care was reported in 8% of countries.

Fig. 2. Government policies in relation to service delivery platforms (n = 105)



Limiting access to selected services or in selected areas of the country was more common than full suspension of services. More than half of the countries had policies that partially or fully affected outpatient services (61%), community-based care (54%), inpatient services (53%) and mobile clinics (47%). Prehospital emergency care services and emergency unit services were affected in a minority of countries (12% and 8% respectively).

Maintenance of essential health services

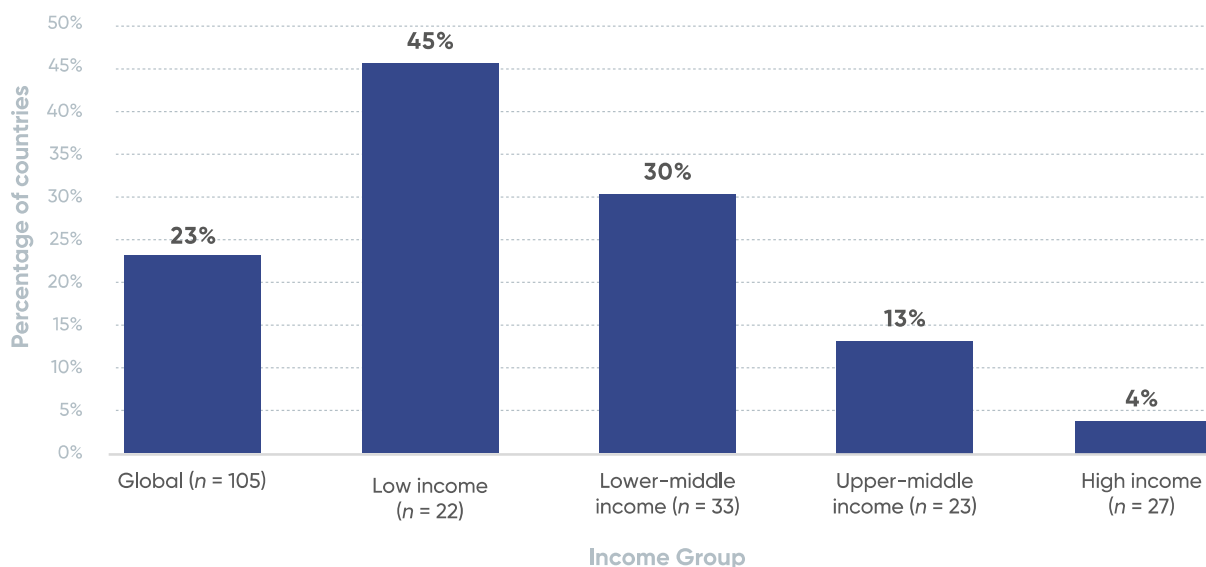
Questions were asked about the disruption of up to 25 essential health services using a three-point ordinal scale: no, partial or severe–complete disruption. Partial disruption was defined as a decline in service use by 5–50% of patients/clients, while any decline above 50% was to be considered as severe–complete disruption.

The type and number of services affected by the COVID-19 pandemic varied between countries and regions. Based on the key informants in 105 countries, on average countries reported at least partial disruptions in 49% of the 25 tracer services. Nine out of 10 countries reported at least one disruption of essential service (89%). Overall, the mean number of services disrupted per country was 11 (of 25).

Among the 105 countries, 28 reported disruptions in 75–100% of services, 27 in 50–74% of services, 20 in 25–49% of services and 19 in less than 25% of services, and 11 countries reported no service disruptions.

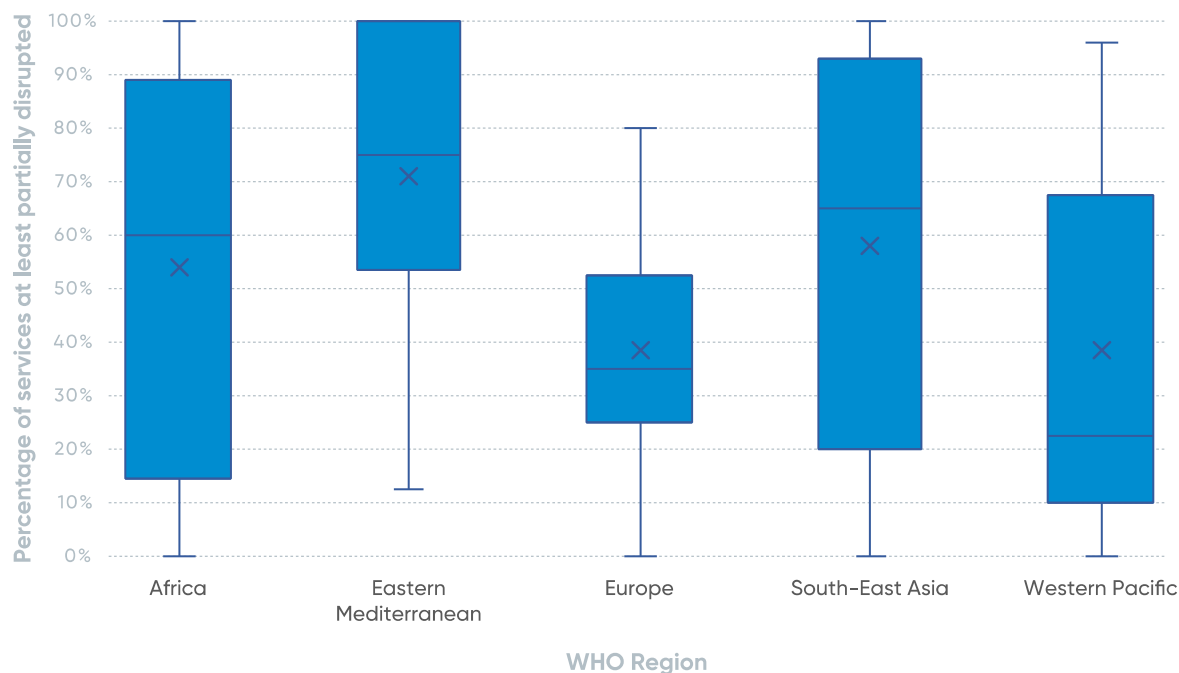
The distribution of service disruptions in WHO subregions or country income groups was uneven (Fig. 3). Disruptions were much more frequently reported by low-income countries, although the spread was wide. The higher the income group, the lower the median proportion of disrupted services.

Fig. 3. Percentage of countries reporting at least partial disruption in at least 75% of services (n = 105)



The Eastern Mediterranean Region was the most affected, followed by the African and the South-East Asia Regions. Essential health services in the countries in the European and the Western Pacific Regions were least affected (Fig. 4).

Fig. 4. Percentage of services at least partially disrupted (by WHO region) (n = 105)

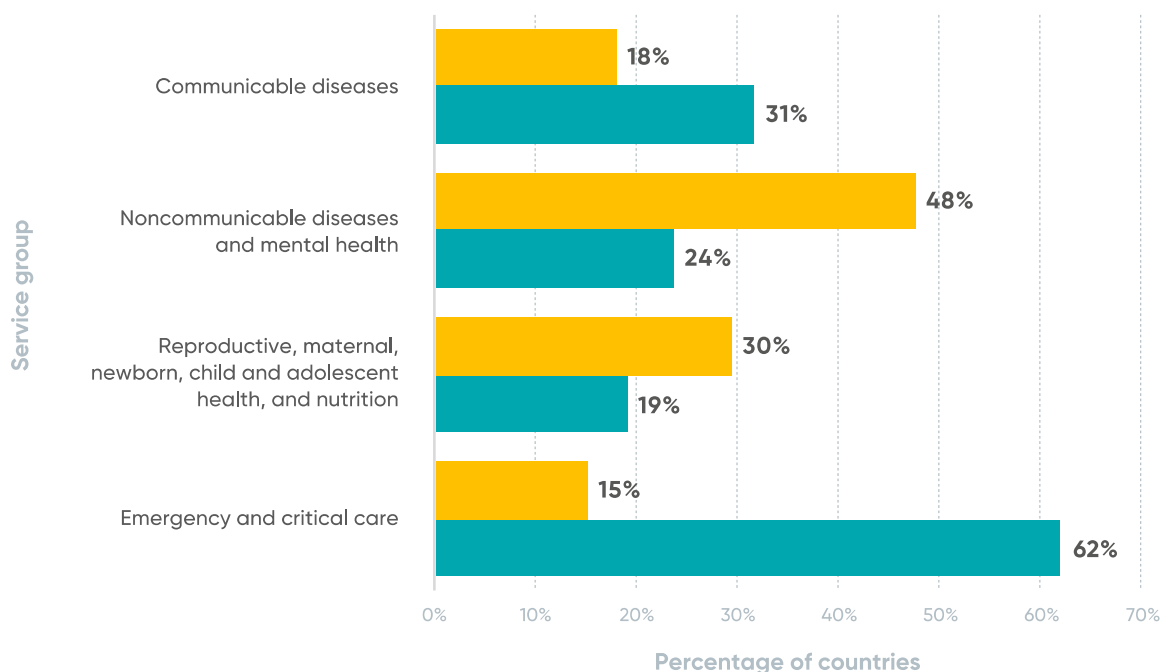


X indicates the average percentage of services at least partially disrupted reported per region; the line across the bar in the middle quartiles indicates the median percentage of services at least partially disrupted reported per region

Disruptions across service areas

More countries (48%) reported at least partial disruptions in all NCD services compared to the other service groups. Conversely, more countries (62%) reported no disruptions in any of the emergency and critical care services compared to the other service groups (Fig. 5).

Fig. 5. Percentage of countries reporting disruptions across entire service groups (n = 105)



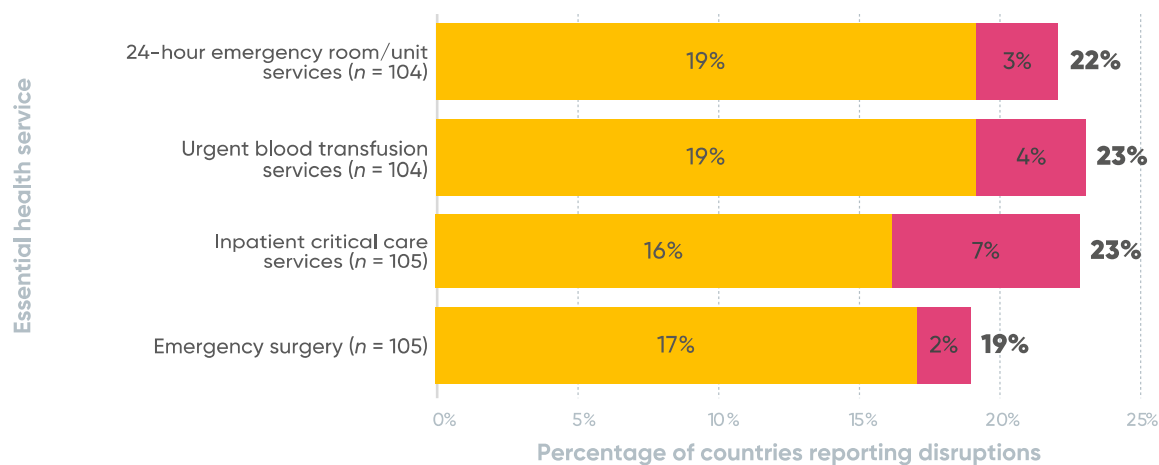
- All services at least partially disrupted (%)
- No services disrupted (%)

Emergency and critical care

Poorer availability of potentially life-saving emergency surgical interventions, blood transfusions or drug treatment is one of the most immediate and dramatic indirect consequences of the COVID-19 pandemic for essential health services. Facility closures, staff shortages or supply issues may all play a role. Each of the four emergency and critical services were affected in 20–25% of the countries (Fig. 6).

Severe/complete disruptions were not common but still occurred in 7% of countries for inpatient critical services, followed by urgent blood transfusions (4% of countries). Partial or severe/complete disruption of all four emergency services was reported by 15% of countries (Fig. 5). At the other end of the spectrum, 62% reported no disruptions at all in these services.

Fig. 6. Percentage of countries reporting disruptions in emergency and critical care services



■ Partial disruption (%);
 ■ Severe disruption (%)

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

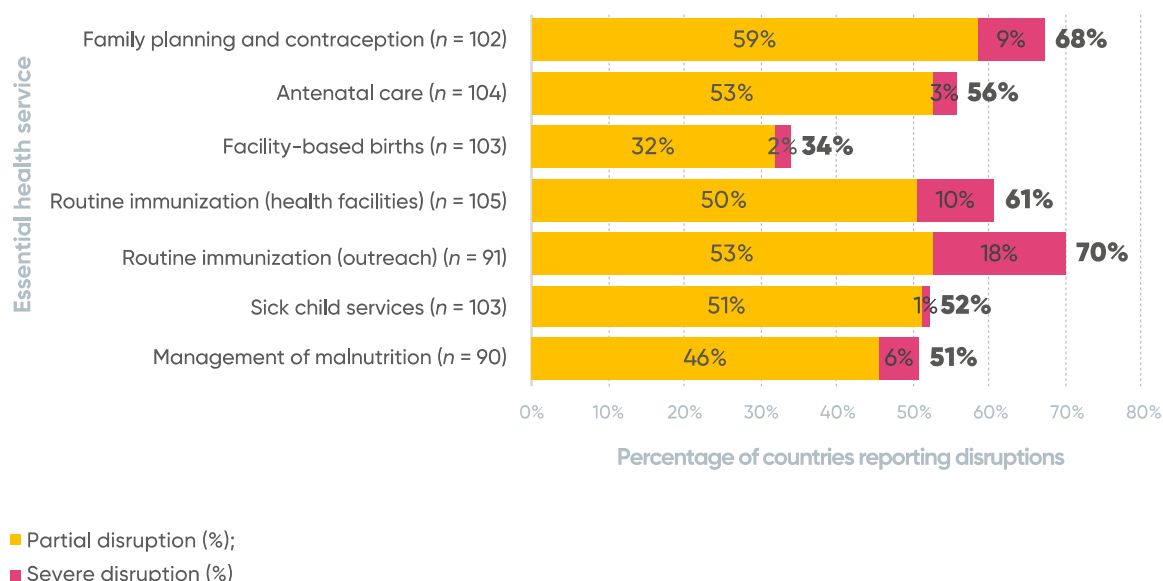
Reproductive, maternal, newborn, child and adolescent health (RMNCAH) services are critical for women, children and adolescents, and disruptions may lead to unintended pregnancies, sexually transmitted diseases, and increased health risks for mothers and their newborn babies, and for children and adolescents. For instance, the breakdown of such services has been estimated to lead to major excess deaths of children under 5 years of age and increases in maternal and neonatal mortality (4, 5).

The survey results show that most countries reported some disruption in RMNCAH and nutrition services. Family planning services were disrupted in 68% of countries, with 9% reporting severe/complete disruption (Fig. 7). Antenatal and especially delivery care services were rarely severely disrupted, but 53% of countries reported partial disruptions in antenatal care services and 32% in facility-based birth services.

Severe/complete disruption of outreach routine immunization services was reported by more than one in six countries (18% of 91 reporting countries) for mobile immunization services and by one in nine countries (10% of 105 countries) for static routine immunization. Partial routine immunization disruptions were reported by about half of countries for both health facilities and mobile services. These findings are similar to those found in recently conducted immunization pulse polls (6, 7).

Essential services for sick children and for moderate and severe malnutrition were partially disrupted in about half of the countries which will likely negatively affect child survival and development. All RMNCAH and nutrition services were at least partly disrupted in 30% of countries (Fig. 5).

Fig. 7. Percentage of countries reporting disruptions in reproductive, maternal, newborn, child and adolescent health, and nutrition services



Communicable diseases

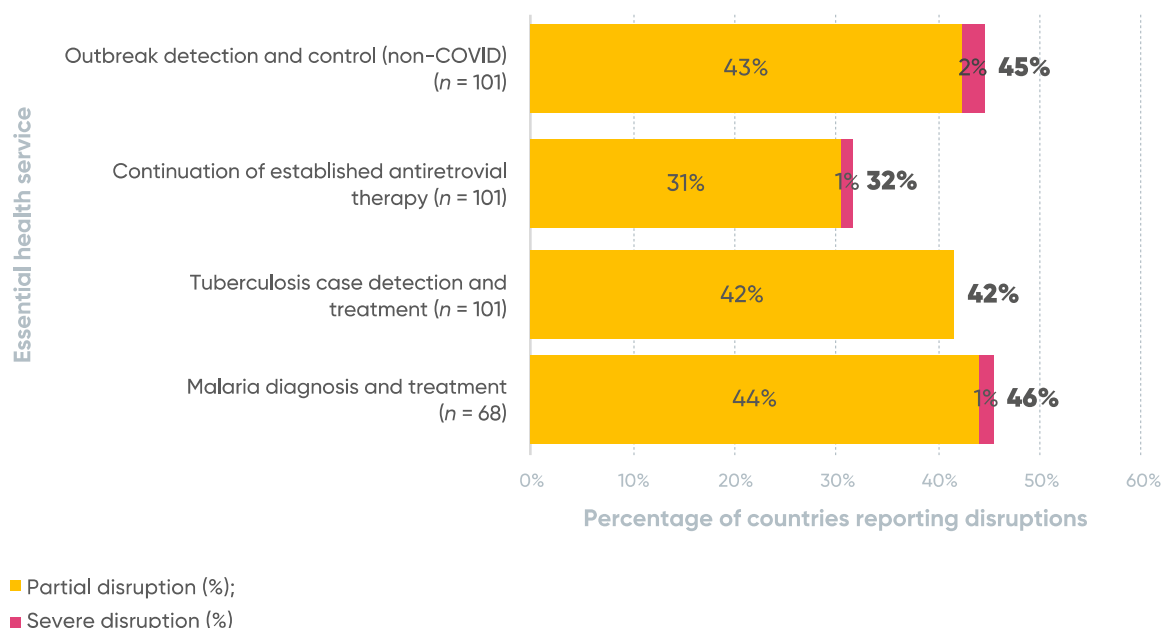
While the focus is on the COVID-19 outbreak, the threats posed by other pathogens remain in most countries. Outbreak detection and control of these pathogens and diseases was reportedly suffering from the COVID-19 focus in 45% of countries (Fig. 8).

Other infectious disease programmes are also affected. In 32% of countries continuation of established antiretroviral therapy services for human immunodeficiency virus (HIV) was partially disrupted. For tuberculosis case detection and treatment, the situation was worse, with 42% of countries reporting partial disruption.

Malaria diagnosis and treatment were also affected, with 46% of the 68 countries reporting on it experiencing disruptions. To note that complementary efforts to track disruptions in malaria prevention owing to COVID-19 have found that malaria prevention campaigns, including for seasonal malaria chemoprevention, indoor residual spraying, and distribution of long-lasting insecticidal nets have largely continued to be implemented on track during this time (8).

In 18% of countries all communicable disease services were disrupted while 31% of countries reported no disruption in any of these services (Fig. 5).

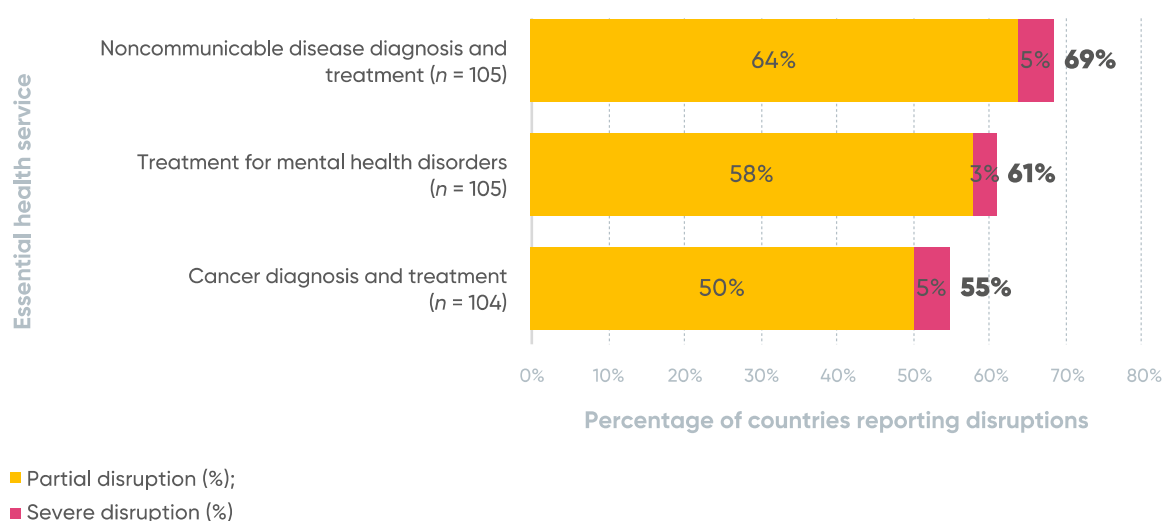
Fig. 8. Percentage of countries reporting disruptions in communicable disease services



Noncommunicable diseases and mental health

Noncommunicable disease (NCD) services, essential for a wide range of chronic conditions such as cardiovascular diseases, chronic respiratory conditions, diabetes and cancer, were affected in more than half of the reporting countries (Fig. 9). NCD diagnosis and treatment was disrupted 69% of countries, with 5% reporting severe/complete disruptions. Cancer diagnosis and treatment was adversely affected in 55% of countries. Treatment for mental health disorders was also disrupted in more than half of countries (61%), with 3% of those countries reporting severe/complete disruptions. All three of these services were reported as disrupted in 48% countries, while 24% of countries reported no disruption in these services (Fig. 5).

Fig. 9. Percentage of countries reporting disruptions in noncommunicable disease (including cancer) and mental health services



BOX 2. Rapid assessment of disruptions to noncommunicable disease services because of COVID-19

Since 2001, WHO has been carrying out regular assessments of country capacity to address and respond to the burden of noncommunicable diseases (NCDs) through key informant surveys, referred to as the NCD Country Capacity Survey. In the first half of May 2020, and to complement the essential health services survey, WHO also conducted a more in-depth pulse survey on the impact of COVID-19 on specific NCD resources and services, with responses from 163 countries across the six WHO regions (an 84% response rate). In this case, the key informants were NCD focal points within national ministries of health. The main findings relating to NCD services support the results of the essential health services survey and provide in-depth information on issues faced by national NCD programmes.

Nearly all countries (94%) reported that all or some ministry of health staff with responsibility for NCDs and their risk factors were supporting the COVID-19 efforts either full time or along with routine NCD activities, and 20% of countries reported that government funds had been reallocated from NCDs to non-NCD services, with seven countries (4%) reporting a loss of more than 50% of funds.

Most countries (77%) reported some disruption to ministry of health NCD activities planned for the current year, such as public screening programmes for NCDs, which WHO advised countries to suspend during the pandemic, disruption to the implementation of NCD surveys (39%) and suspension of mass communication campaigns (37%). Access to inpatient NCD services was generally less affected: 62% of countries reported that inpatient NCD services were open while 35% reported that inpatient NCD services were open for emergencies only. No countries reported that inpatient services were suspended. About half of countries reported severe/complete or partial disruptions to hypertension management services (53%) or diabetes and diabetic complication management services (49%). Asthma services (48%), palliative care services (48%) and urgent dental care (45%) were also widely reported as disrupted. Although disruptions to cancer treatment services (42%) and services for cardiovascular emergencies (31%) were less widely reported, the global figures mask marked differences across income groups. While half (50%) of low-income countries reported disruptions to services for cardiovascular emergencies, only 17% of high-income countries reported any disruptions. Likewise, 58% of low-income countries reported disruptions to cancer treatment services compared to 26% of high-income countries.

Full results are detailed in the survey report on the [WHO website](#).

BOX 3. Rapid assessment of service delivery for mental, neurological and substance use disorders during the COVID-19 pandemic

WHO has been publishing information on mental health resources around the world since 2001 as part of its [Mental Health Atlas](#) project. As part of Mental Health Atlas 2020 and in complement to this pulse survey, a short and focused survey was conducted by WHO to assess the impact of the COVID-19 pandemic on mental, neurological and substance use (MNS) disorders. There are direct and indirect consequences of COVID-19 on mental health conditions leading to increased demand for services. Major stressors such as the COVID-19 pandemic represent risk factors for the development, exacerbation and relapse of a range of MNS disorders. The disruption of care for MNS disorders can be life-threatening, particularly in the treatment for epilepsy, unaddressed suicide risk, and substance use harm reduction services.

The web-based survey has been conducted between mid-June and mid-August with designated mental health focal points in Ministries of Health in the six WHO regions. The survey covered: plans, funding and coordination platforms for mental health and psychosocial support; degree of disruption of different MNS services, its causes and overcoming approaches in use; and surveillance mechanisms and research on MNS data. The data has been received from more than 130 countries and WHO will publish the results of this survey in September 2020.

Other essential services

Dental health services and rehabilitation services were among the most commonly disrupted essential health services, with 60% of countries reporting partial and 17% severe/complete disruption of dental health services and 75% reporting partial or severe/complete disruption of rehabilitation services. In addition, palliative care services were disrupted in more than half of countries (53%, including 6% severe/complete disruption). In many countries, some of the observed interruptions in these types of services may have been due to intentional reductions.

Reasons for service disruptions

“A mix of demand and supply side factors are responsible for disruption of services. The situation differs from state to state, with partial and no disruption depending on program/service and region.” This comment from a key informant was confirmed by the responses of 97 countries that provided data on the main causes of disruption. The demand and supply factors are of similar importance. Moreover they are often related and can help classify the reasons given for disruption (Fig. 10).

On the demand side, the most mentioned causes were:

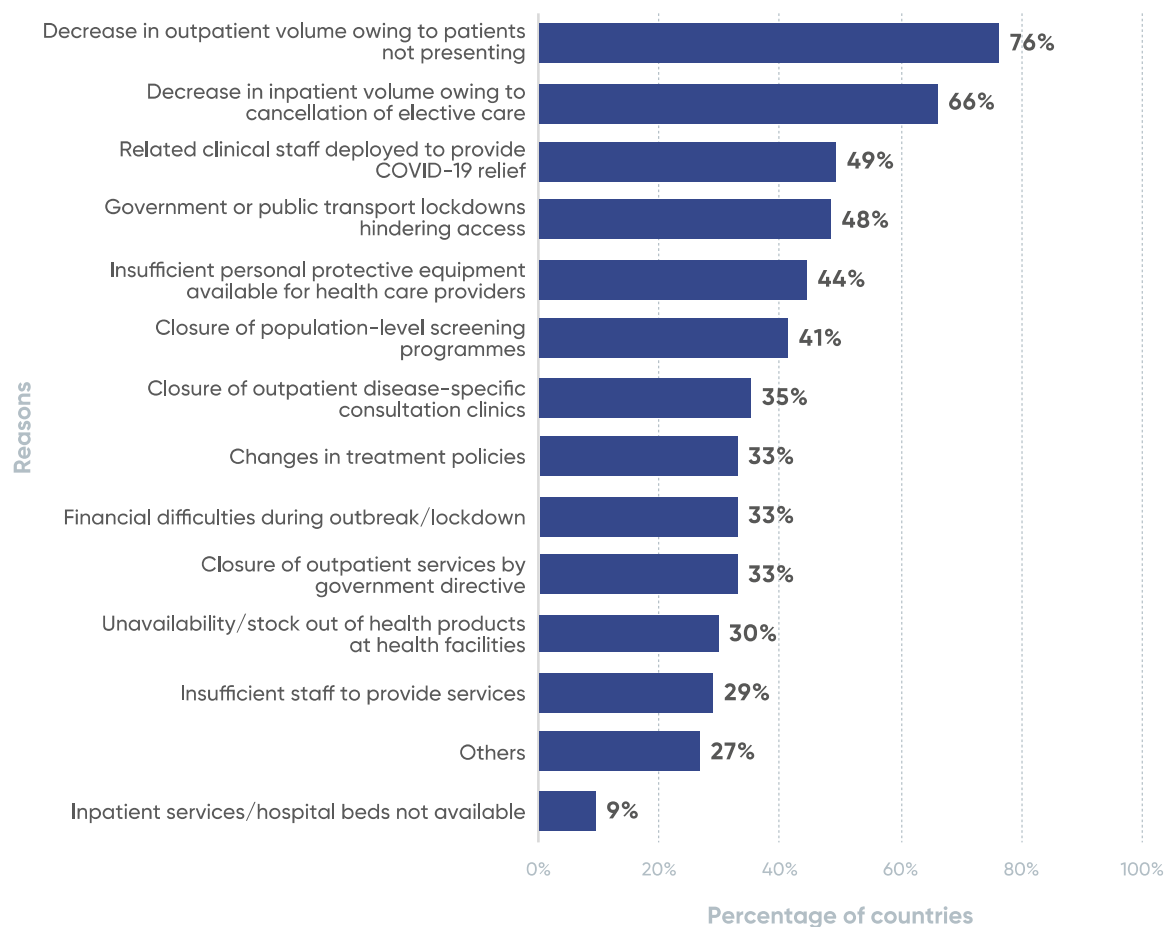
- patients not presenting to outpatient care (76%)
- perceptions that government or public transport lockdowns were hindering access (48%)
- perceptions that financial difficulties during the outbreak were affecting attendance (33%).

A number of countries also noted fear and mistrust as "other" understood reasons for changes in utilization.

On the supply side, the following causes were listed:

- cancellation of elective care (66%)
- health workforce difficulties: clinical staff redeployment to provide COVID-19 relief (49%) or insufficient staff to provide services (29%)
- unavailability of services: closure of screening programmes (41%), closure of disease-specific outpatient consultation clinics (35%), closure of outpatient services per government directive (33%), inpatient beds not available (9%)
- lack of supplies: reduced stock of health products (30%) and insufficient personal protective equipment for health care providers (44%)
- changes in treatment policies (33%)

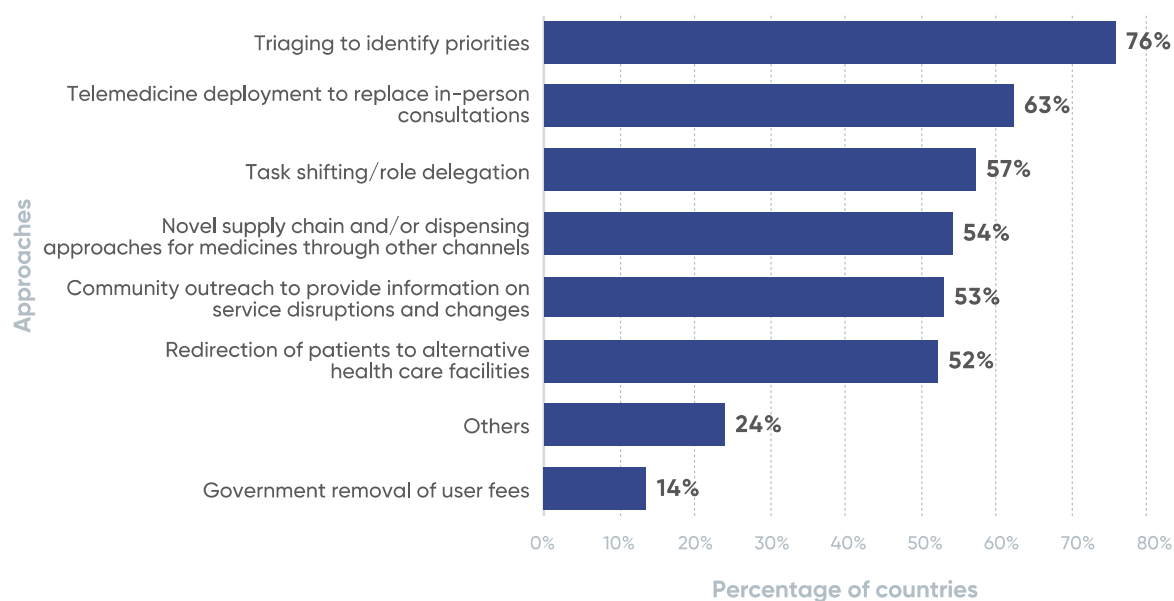
Fig. 10. Reasons for service disruptions (n = 97)



Approaches to overcome service disruptions

Almost all responding countries had implemented at least one approach to overcome disruptions owing to the COVID-19 pandemic (Fig. 11). Triaging to identify priorities was the most common response (76%). Other frequently reported approaches included telemedicine deployment to replace in-person consultations (63%), task shifting/role delegation (57%), novel adjustments to the supply chain and/or dispensing of medicines (54%), community outreach to provide information on service disruptions or changes (53%), and redirection of patients to alternative health care facilities (52%). Only 14% of countries have removed user fees, which has potential implications for access to essential health services during the COVID-19 outbreak. Other approaches included designation of specific COVID-19 treatment facilities, mobile medical teams, digital health, transportation/financial support for patients, additional training/guidelines, intensified communications, advocacy and strengthening of partnerships, intensified training/guidelines and strengthening of laboratory capacities.

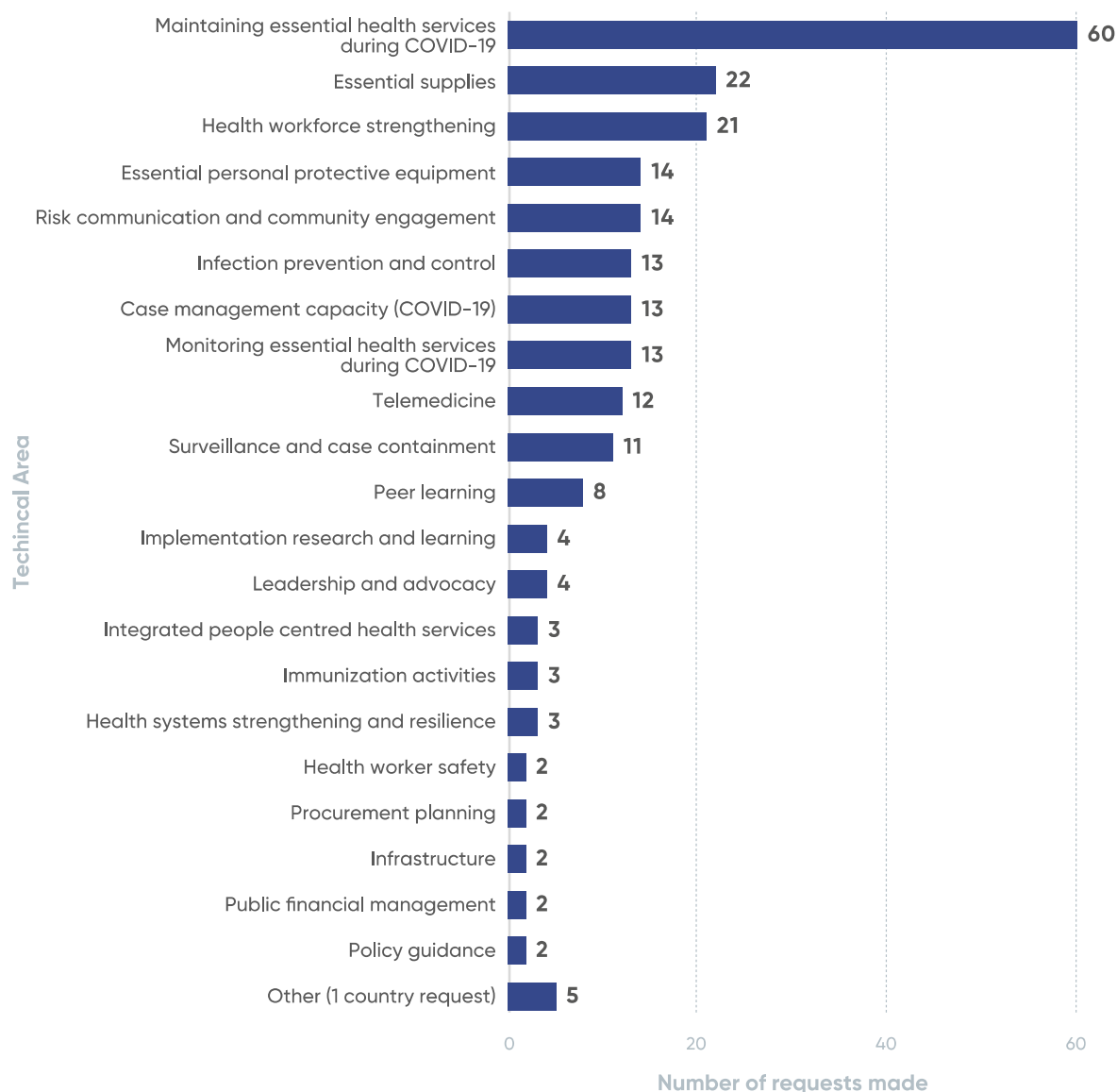
Fig. 11. Approaches for overcoming disruptions (n = 96)



Country priorities and technical assistance needs

In response to the open-ended question on priority needs and technical assistance requirements from WHO, 80 countries indicated that they had such needs, including guidance and support in adapting strategies to maintain essential health services, assuring essential supplies, strengthening the health workforce, strengthening adequate infection prevention and control capacities, providing risk communication, monitoring and implementing telemedicine.

Fig. 12. Country priorities and technical assistance needs (233 requests from 80 countries)



Conclusions

This pulse survey provides useful initial insights from key informants in over 100 countries on the extent of disruptions to their health services and an indication of their experiences in adapting strategies to mitigate the impact of COVID-19 on service provision. It indicates that the pandemic is testing all national health systems, with an impact on essential health service delivery and utilization in almost every country in the five WHO regions surveyed. The extent of the impact at the population level is generally partial (5–50%), but large enough to affect availability of and access to high-quality services for the most vulnerable populations in every society. This reinforces the need for strategic adaptations to ensure maintenance of essential health services. The impact may be felt beyond the immediate pandemic as, in trying to catch up on services, countries may find that resources are overwhelmed.

Although estimating the effects of the disruptions to services on the basis of this survey is limited, it is reasonable to anticipate that even a modest disruption in essential health services could lead to an increase in morbidity and mortality from causes other than COVID-19 in the short to medium and long term. Greater understanding of the potential impact of disruptions on morbidity and mortality is needed in order to weigh the benefits and risks of pursuing different mitigation strategies. Documentation and learning about what works in different settings during the various phases of the pandemic is urgently required. There is also a need to improve real-time monitoring of changes in service delivery and utilization at subnational and health facility levels, as the outbreak is likely to wax and wane throughout the course of the pandemic.

References

1. Delamou A, Delvaux T, El Ayadi AM, Beavogui H, Okumura J, Van Damme W, et al. Public health impact of the 2014–2015 Ebola outbreak in West Africa: seizing opportunities for the future. *BMJ Glob Health*. 2017;2:e000202.
2. Kieny M-P, Evans DB, Schmets G, Kadandale S. Health-system resilience: reflections on the Ebola crisis in western Africa. *Bull World Health Organ*. 2014;92:850. doi: 10.2471/BLT.14.149278.
3. Monitoring and evaluation framework. Geneva: World Health Organization; 2020 (<https://www.who.int/publications/i/item/monitoring-and-evaluation-framework>, accessed 26 August, 2020).
4. Robertson T, Carter ED, Chou VB, Stegmuller AR, Jackson BD, Tam Y et al. Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. doi: 10.1016/S2214-109X(20)30229-1 ([https://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(20\)30229-1/fulltext](https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(20)30229-1/fulltext), accessed 26 August 2020).
5. Jones SA, Gopalakrishnan S, Ameh CA, White S, van den Broek NR. 'Women and babies are dying but not of Ebola': the effect of the Ebola virus epidemic on the availability, uptake and outcomes of maternal and newborn health services in Sierra Leone. *BMJ Glob Health*. 2016 Oct 7;1:e000065. doi: 10.1136/bmjgh-2016-000065.
6. Danovaro C, Gurung S, Lee Lee Ho, Lindstrand A. Understanding the disruption to programmes through rapid polling. WHO Global Immunization News (GIN) newsletter March–April 2020 (https://www.who.int/immunization/GIN_March-April_2020.pdf?ua=1, accessed 26 August 2020).
7. Special feature: immunization and COVID-19: Second pulse poll to help understand disruptions to vaccination and how to respond. WHO Global Immunization News (GIN) newsletter June 2020 (https://www.who.int/immunization/GIN_June_2020.pdf?ua=1, accessed 26 August 2020).
8. WHO-GMP Workstream on supplies and commodities: tracking disruptions in malaria prevention, 2020. (https://www.who.int/malaria/areas/epidemics_emergencies/covid-19/who-gmp-response-covid-19.pdf?ua=1, accessed 27 August 2020).

Annex: Questionnaire

Pulse survey on continuity of essential health services during the COVID-19 pandemic



Dear colleague,

Within the context of COVID-19 pandemic response, we are reaching out to you to ask a small set of a questions to quickly assess if your country has defined the set of essential services to be maintained during the pandemic, how they are being impacted (maintained, modified, suspended), and track any changes that may be occurring as the outbreak progresses along its various stages. The survey can support decision-makers in systematically taking stock of essential services and flagging common issues to be addressed as workforce task-shifting, resource allocation, and supply chains are diverted or burdened. It can help countries identify important actions throughout the course of the pandemic while also being used to assess COVID-19 health system response globally. We greatly appreciate your time and effort to respond to these questions.

Survey responses will be treated confidentially, and only aggregated results will be used for reporting. We may reach out to you to seek any clarifications if needed. Should we decide later to use examples or case studies that identify specific countries, we will contact you to request advance permission.

Please click on the link below to access the survey. Note that you may access the questionnaire as many times as needed, saving your responses as you go.

Thank you in advance.

Information on those who completed the questions

Who is/are the focal point(s) who provided the responses?

Name: _____
Position: _____
Organization: _____
Country: _____
Email Address: _____

Please add any other focal points who provided responses including their contact details.

POLICIES AND PLANS			
1	Has your country defined a national essential health services package (prior to the COVID-19 pandemic)?	1. Yes 2. No 3. Don't know (Kindly upload your country's national plan/document in which the national essential health services package has been defined)	
2	Has your country identified a core set of essential health services to be maintained during the COVID-19 pandemic?	1. Yes 2. No/ Not Yet 3. Don't Know (Kindly upload your country's COVID-19 response plan/document in which the essential health services to be maintained during the pandemic are identified)	
3	Is there additional government funding allocated to assuring essential health services?	1. Yes 2. No 3. Don't Know	
MAINTENANCE OF ESSENTIAL HEALTH SERVICES			
4	During the COVID-19 pandemic, what are the government policies for the following?:	Outpatient services	<input type="checkbox"/> Functioning as normal <input type="checkbox"/> Limited access <input type="checkbox"/> Suspended <input type="checkbox"/> DK
		Inpatient services	<input type="checkbox"/> Functioning as normal <input type="checkbox"/> Limited access <input type="checkbox"/> Suspended <input type="checkbox"/> DK
		Emergency unit services	<input type="checkbox"/> Functioning as normal <input type="checkbox"/> Limited access <input type="checkbox"/> Suspended <input type="checkbox"/> DK
		Prehospital emergency care services (e.g. ambulance transport)	<input type="checkbox"/> Functioning as normal <input type="checkbox"/> Limited access <input type="checkbox"/> Suspended <input type="checkbox"/> DK
		Community based care	<input type="checkbox"/> Functioning as normal <input type="checkbox"/> Limited access <input type="checkbox"/> Suspended <input type="checkbox"/> DK
		Mobile clinics	<input type="checkbox"/> Functioning as normal <input type="checkbox"/> Limited access <input type="checkbox"/> Suspended <input type="checkbox"/> DK
5A	Which of the following services have been disrupted due to COVID-19?	Family planning and contraception	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
		Antenatal care	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
		Facility based births	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK

	Routine immunization services in health facilities	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
	Routine outreach immunization services	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
	Sick child services	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
	Management of moderate and severe malnutrition	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
	Outbreak detection and control (for non-COVID diseases)	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
	Continuation of established ARV treatment	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
	TB case detection and treatment	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
	Malaria diagnosis and treatment	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
	Implementation of planned campaigns for distribution of insecticide treated nets	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
	Implementation of planned campaigns for indoor residual spraying (IRS)	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
	Implementation of seasonal malaria chemoprevention campaigns (SMC)	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
	NCD diagnosis and treatment (e.g. hypertension, diabetes, asthma, chronic obstructive pulmonary disease, coronary artery disease)	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
	Treatment for mental health disorders	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
	Cancer diagnosis and treatment	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
	Dental services	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK

		Rehabilitation services	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
		Palliative services	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
		24-hour emergency room/unit services (e.g. myocardial infarction/arrhythmia/stroke, diabetic ketoacidosis, asthma/chronic obstructive pulmonary disease, sepsis and serious injury)	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
		Urgent blood transfusion services	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
		Inpatient critical care services (e.g. respiratory support, haemodynamic support)	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
		Emergency surgery (including obstetric, injury, infection)	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
		Others: (Please specify what other related services have been disrupted due to COVID-19)	<input type="checkbox"/> Completely disrupted <input type="checkbox"/> Partially disrupted <input type="checkbox"/> Not disrupted <input type="checkbox"/> DK
5b	What are the main causes of this disruption(s) and/or change(s) in service utilization? (Check all that apply)	<ol style="list-style-type: none"> 1. Closure of outpatient services as per government directive 2. Closure of outpatient disease specific consultation clinics 3. Closure of population level screening programs 4. Decrease in outpatient volume due to patients not presenting 5. Decrease in inpatient volume due to cancellation of elective care 6. Inpatient services/hospital beds not available 7. Insufficient staff to provide services 8. Related clinical staff deployed to provide COVID-19 relief 9. Insufficient personal protective equipment (PPE) available for health care providers to provide services 10. Unavailability/stock out of essential medicines, medical diagnostics or other health products at health facilities 11. Changes in treatment policies for care-seeking behaviour for fever symptoms (e.g. stay at home policies) 12. Government or public transport lockdowns hindering access to the health facilities for patients 13. Financial difficulties during outbreak/lockdown 14. Others (please specify what are the other causes of this disruption and/or changes in service utilization): _____ 15. Do not know 	

6	<p>What approaches are being used to overcome the disruptions to essential health services in public sector health facilities? (Check all that apply)</p>	<ol style="list-style-type: none"> 1. Telemedicine deployment to replace in-person consultations 2. Task shifting / role delegation 3. Novel supply-chain and/or dispensing approaches for medicines through other channels 4. Triageing to identify priorities 5. Redirection of patients to alternative health care facilities 6. Community outreach to inform on service disruptions and changes 7. Government removal of user fees 8. Others (please describe what other approaches are being used): _____ 9. Do not know
7	<p>What are your country's plans to re-initiate any suspended services?</p>	
PRIORITIES AND TECHNICAL ASSISTANCE NEEDS		
8	<p>What are your priority needs and technical assistance requirements from WHO for maintaining essential health services during the COVID-19 pandemic?</p>	<p>Please use the text box to give your suggestions</p>

Thank you for taking time to provide your input for this survey. If you have any queries regarding this survey, please contact EHSmonitoring@who.int

Definitions:

1. Reassigned/deployed
 - Temporarily assigned to another unit or team
2. Level of disruption of services
 - Completely (or severely) disrupted (more than 50% of patients not treated as usual)
 - Partially disrupted (5% to 50% of patients not treated as usual)
 - Not disrupted (less than 5% of patients not treated as usual)

Please add any comments on the questions above.



World Health Organization
Avenue Appia 20
1211 Geneva 27
Switzerland

WHO in Emergencies
www.who.int/emergencies/en