

# Jump Start Evaluative Review for Yemen



23 January 2021

*Gilbert Burnbam – Consultant, Johns Hopkins Bloomberg School of Public Health*  
*Rachel Neill – Consultant, Johns Hopkins Bloomberg School of Public Health*  
*Meighan Mary – Consultant, Johns Hopkins Bloomberg School of Public Health*

## Abbreviations

CRC	Convention on the Rights of the Child
C4D	Communication for Development
DFA	de facto authorities (North Yemen government)
HeRAMS	Health Resources and Services Availability Mapping System
H&N	Health and Nutrition section
IMCI	Integrated Management of Childhood Illness
IPC	Infection Prevention and Control
IRG	Internationally Recognized Government (South Yemen government)
KAP	Knowledge Attitude and Practice
MENA	Middle East, North Africa
MoPHP	Ministry of Public Health and Population
NGO	Non-governmental organization
OECD DAC	Organization for Economic Co-operation and Development, Development Assistance Committee
PHC	Primary Health Care
PPE	Personal Protective Equipment
RCCE	Risk Communication and Community Engagement
RO	UNICEF Regional Office
SBA	Skilled Birth Attendant
SCMCHA	The Supreme Council for the Management and Coordination of Humanitarian Affairs
SDG	Sustainable Development Goal
SMART	Standardized Monitoring and Assessment of Relief and Transitions (surveys)
ToC	Theory of Change
WASH	Water, Sanitation and Hygiene
WFP	World Food Program
WHO	World Health Organization

## Table of Contents

Abbreviations	2
Table of contents	2
Summary	3
Methods	4
Objective and Evaluative Review Questions	4
Background	5
Impact of Covid-19	6
Response plans	7
Specific findings	8
Monitoring information	13
Evaluation	14
Conclusions and recommendations	17
Annex	19

## Jump Start Evaluative Review for Yemen

### Summary

*Jump Start Package.* The Jump Start initiative came as a response to a 2020 *Lancet* paper estimating up to 51,459 additional child deaths as an indirect effect of COVID-19 on essential service delivery and potential decline in utilization of child health programs. The MENA Regional Office of UNICEF created a multi-faceted, multi-sectoral response around a Theory of Change. Country offices in the region then adapted these to particular needs within their specific country. The Yemen office decided to focus on maintaining continuity of essential health services, provision of Personal Protective Equipment (PPE), strengthening Infection Prevention and Control (IPC), water and sanitation services (WASH) and Risk Communication and Community Engagement (RCCE). These activities were incorporated into existing programming, with no separate Jump Start administrative entity created, but with few additional resources.

This evaluative review was carried out to assess the progress of the Jump Start package in Yemen, to document lessons learned and make recommendations. No Covid-19 surveillance or contact tracing has been carried out in Yemen so it is difficult to assess impact of control initiatives.

*Findings.* The UNICEF country office exhibited resourcefulness and marshalled resources to stem the impact of Covid-19 on the health of mothers and children through the provision of essential services. While these interventions were effective, difficulty from government resistance to Covid-19 reduced efficiency. A number of effective and alternative approaches to lessening the impact were created and implemented.

*Essential Health Services.* With the arrival of Covid-19 in Yemen in April 2020, the attendance at outpatient clinics dropped dramatically, and community outreach services were slowed or discontinued. The rapid deployment of PPE for health workers, and quick actions to improve infection control measures assured both health workers and those using services. In the North of Yemen, authorities forbade the use of the term “Covid-19” so alternative health education and outreach activities had to be devised. A sign of success in building trust was the 93 percent polio immunization coverage achieved in the December 2020 national campaign.

*Water, Sanitation and Hygiene (WASH).* The section played a major role in strengthening the weak IPC in PHC facilities and provided sanitizers for health workers and patients. The section also focused on strengthening water supply and sanitation facilities in municipalities and in communities.

*Risk Communication and Community Engagement.* The section managed national communication programs concerning Covid-19. When use of the term was banned in the North, messaging shifted to infection and respiratory disease prevention. Multiple channels were employed, and materials previously successfully used in cholera and diphtheria campaigns were adapted. Rapid assessment surveys produced some of the only data on perceptions, knowledge and behavior concerning Covid-19 in Yemen.

## **I. Methods**

Because of limitations in time and data availability, a qualitative approach was developed for the evaluative review. A common methodology and initial templates for data collection and analysis were developed and then adapted to the context of Yemen. Data sources included primary interview data and review of secondary documentation pertaining to program implementation and progress.

### **Document Review**

A comprehensive review of programmatic documentation including situation reports, project updates, briefs, data dashboards, and other relevant information served as the foundation of the evaluative review. Documents were provided by the regional office UNICEF in Yemen. A list of documents is referenced in the Annex 1.

### **Key Informant Interviews**

In-depth qualitative interviews were conducted with key stakeholders and programmatic focal points to contextualize the implementation process and understand how realities on-the-ground influenced the success and exacerbated the challenges of the Jump Start Package. The evaluation team worked closely with the Evaluation Specialists in each country to identify participants for key informant interviews. A semi-structured interview guide was developed based on the initial information gleaned from document review and the research questions. Interviews were approximately one hour in length and conducted via Zoom. Verbal consent was obtained from all interview participants. Twelve stakeholders were interviewed, four from the Regional Office and eight from Yemen.

### **Analysis**

The Jump Start initiative was reviewed as a single entity with a goal of maintaining continuity of service, but with concern for its various parts and the roles they performed in the Yemen context. In many aspects of the analysis it has been difficult to pinpoint the specific contribution of the continuity of service contributions of Jump Start as there are many confounding factors in the complex humanitarian emergency.

---

## **II. Objective and Evaluative Review Questions**

To inform ongoing implementation of the Jump Start Package, the team undertook an evaluative review of UNICEF's activities in Yemen. The focus of the evaluative review was on challenges, how they have been overcome, the reach of success (realized or potential), and actionable learnings for ongoing program improvement. Emphasis was placed on process indicators (e.g. how implementation has progressed, quality, institutional arrangements, programmatic decision making). Early outputs and outcomes from Jump Start were identified and assessed as available. Findings and recommendations are intended to generate timely actions to strengthen the ongoing Jump Start Package throughout the MENA region.

The evaluative review prioritized the following questions according to the 2019 OECD DAC Quality Standards for Development Evaluation. All questions were considered in the evaluation, but data gaps limited analysis.

### **Relevance:**

- To what extent are the four components of the Jump Start package (essential health and nutrition services, Infection Prevention and Control (IPC), Risk Communication and Community Engagement (RCCE) and personal protective equipment (PPE) and supplies) relevant in

terms of its strategy, approach and design, how were they selected, and to what extent is the theory of change for the Jump Start approach valid?

- To what extent does the Jump Start Package incorporate human rights, gender & inclusion, CRC, and conflict sensitive programming principals (including working across factions, if applicable)?

### Effectiveness:

- What are the early lessons that are emerging from implementation of the Jump Start Package including intended and unintended outcomes?
- What opportunities and bottlenecks are impacting the implementation of Jump Start Package activities, and what strategies have been implemented to mitigate any challenges? What are key lessons learned in each country?
- To what extent has UNICEF put in place effective mechanisms for monitoring the implementation of the Jump Start Package, including the appropriateness of selected output and outcome indicators and the ability to assess program indicators within the programmes' theory of change?

### Efficiency:

- What is UNICEF's implementation capacity (including implementing partnerships, human resources and financial capacity) and will UNICEF be able to meet the needs required to achieve the objectives of the Jump Start Package?
- How has the Jump Start Package affected allocation and use of resources?
- How has UNICEF leveraged existing partnerships to support the Jump Start Package? How efficient is partner coordination?

## III. Background

*Yemen context.* The current conflict in Yemen began in 2015 and has continued to spiral downward. Approximately 80 percent of the population live in the area controlled by the de facto authorities (DFA), and the balance living in the south and east in areas controlled by the Internationally Recognized Government (IRG), Figure 1. Currently 24.1 million of Yemen's estimated population of 29.8 million people (81 percent) require humanitarian assistance.<sup>1</sup> Between the conflict and the effects of disease, hunger, poverty and poor access to health care, perhaps one percent of the population has died. Poverty has steadily increased during the conflict years, now affecting more than three-quarters of the population.

*Health services in Yemen.* Health services were similarly affected by conflict and decline in resources. A 2018 WHO Health Resources and Services Availability Mapping System survey (HeRAMS) found that of all health facilities, 50percent of health facilities were fully functional, 35 percent partially functional and 15 percent nonfunctional.<sup>2</sup> The lowest level of functionality were in Marib, Al Jawf, Al-Mahra and Al Bayda governorates. Twelve governorates had less than 10 health workers per 10,000 population. No doctors were present in 60 of Yemen's 333 districts. Although data since 2018 are not readily available, it appears that the health workforce numbers outside of major urban areas has



Figure 1. Yemen: areas of control and conflict May 2020.

continued to decline. Data from rural areas of Abyan and Lahj governates found maternal health promotive activities were underutilized and community perceptions of facility care was poor.<sup>3</sup> While the sample was representative of Abyan and Lahj governates, the findings were thought to be similar to other locations in Yemen.

The Ministry of Public Health and Population (MoHPH) and supporting units such as the Health Education Center are in Sana'a, controlled by the DFA. The IRG is headquartered in Aden, and has a separate health administration, with fewer resources than in Sana. International agencies work in both areas, though health activities can differ substantially between these two areas of control. Tensions during several months of 2020s between humanitarian organizations and government over finances and other issues, especially in the DFA area has seriously hampered delivery of humanitarian assistance.

### *Covid-19 in Yemen*

The first laboratory-confirmed case of COVID-19 was declared on 19 April in Hadramaut, and by May there were 314 documented cases.<sup>4</sup> Shortly after the first case, borders were closed, public gatherings minimized, movement inside the country restricted. There were anecdotal reports of illness and death in persons with Covid-19-like symptoms, many of whom reportedly tested positive for the infection. Isolation health facilities were established in anticipation of a major outbreak.

Although few persons were hospitalized, a fear of health facilities caused people to stop using facilities dreading illness or death.<sup>5</sup> On July 14 authorities of the DFA eased restriction, indicating that there were now few if any cases present, and blaming migrants for bringing some of the infections. Minimal Covid-19 testing was conducted, and the DFA forbade public awareness campaigns to use the term Covid-19. UNICEF has provided test kits to health authorities in the DFA and IRG areas, but little testing is being conducted in the DFA areas.<sup>6</sup> Currently reports from hospitals indicated many patients in intensive care units with Covid-19 like symptoms. In the areas controlled by the IRG testing for Covid-19 was allowed and cases were recorded. The high case fatality rates noted suggested that many mild cases were not being detected and that hospitalized patients may not have received optimum care.<sup>7</sup> The absence of a surveillance system for Covid-19 has proved a major barrier to understand the disease risks. The WHO is supporting a seroprevalence survey in the IRG area which may give an approximation of infection prevalence.

### **Impact of Covid-19 on health services**

Covid-19 caused a reluctance of persons to utilize health facilities, and a concern about interacting with community and immunization campaign health workers, which are major health activities supported by UNICEF. This initial drop in utilization in services spurred agencies to focus on maintaining continuity of services. At the same time programming had to be adapted to political restrictions associated with Covid-19 denial in the DFA area. Covid-19 only added stresses to other complications such as a declining economic situation, decreasing remittances, continuing conflict and bombing, and a worsening nutritional status among children. Among international agencies, Covid-19 led to a temporary but substantial reduction in expatriate staff and limitation of movement of local staff involved in training and supervision.

### **Response**

#### *Regional Response plan*

The Jump Start initiative came as a response to a 2020 *Lancet* paper estimating up to 51,459 additional child deaths as an indirect effect of COVID-19 on essential service delivery<sup>8</sup> and from country health service data showing a decline in utilization of child health programs. There was a

concern that in the MENA region (and others), governments had responded with forceful unilateral prevention measures, such as universal lockdowns and facility closures but not providing alternative health access opportunities.<sup>9</sup> This gave rise to a UNICEF MENARO multi-pronged, multi-sectoral response to protect service coverage. A package was developed to include Health and Nutrition (H&N), WASH, Communications and Communication for Development (C4D) sections in an integrated approach.

The regional office developed a MENA theory of change for the Jump Start programme that was informed by country experiences to date and customizable to the unique needs of each country office. Country offices were given flexibility to determine which components of the package they would focus on.

### **Country level response plan**

#### *Yemen national response plans*

As part of Phase I preparedness, on 18 March the Yemen National Covid-19 Preparedness and Response Plan was published, building on the eight core pillars developed by WHO Geneva in February, 2020.<sup>10</sup> The national plan had a strong focus on diagnosis, clinical care and quarantine.

#### *UNICEF country plan*

The UNICEF country office began considering initial activities during phase one, in advance of the first case being reported in Yemen and engaging multiple sectors. These activities were well in place by the time the first Covid-19 case was reported in April, marking the beginning of Phase II, and activities were further accelerated with the launch of the Jump Start initiative in May 2020. The focus of the UNICEF response plan is in supporting the continuity of services, providing information to the population about Covid-19, making program activities safe, and protecting health workers and the population against transmission. The design of the response was informed by earlier efforts to contain previous epidemic conditions in Yemen such as cholera and diphtheria.

At the beginning, a UNICEF Covid-19 response task force was established which worked in coordination with the MoPHP and the WHO. An early decision was taken that existing resources would be reprogrammed for the response, rather than create a separate Jump Start initiative or funding stream, although some additional donations were realized. The term “Jump Start” was not widely used for activities in Yemen. The initial planning was for 12 months, but resources have been acquired for an 18-month time frame. It is likely that this time frame may need to be extended. In time, the UNICEF COVID-19 response taskforce was fully integrated into Yemen’s multi-sectoral response and programming in Yemen and is now part of regular country office monthly meetings across sectors. A theory of change for the Jump Start program was developed, and existing program indicators were selected to monitor the Covid-19 response. As part of programming, a community shielding model to address community level transmission and to protect vulnerable community members, integrates the health approach to COVID-19 and Risk Communication and Community Engagement (RCCE) and social policy.<sup>11</sup> Implementation of the country plan has run into multiple difficulties from conflict, disasters, weak infrastructure and particularly the deteriorating operating environment in the DFA area of the North, particularly related to restrictions and controls imposed by SCMCHA.<sup>a</sup> These latter restrictions represent a change from the strong working relationship of previous years. These restrictions are not present in the IRG area of the South.

---

<sup>a</sup> The Supreme Council for the Management and Coordination of Humanitarian Affairs (SCMCHA).

## IV. Specific Findings

### 1. Essential Health and Nutrition

#### 1a. Essential Health

##### *Role in Jump Start*

The goal was to ensure continuity of services

##### *Impact of Covid-19*

At the beginning of the outbreak there was a noticeable increase in children presenting for IMCI services with respiratory symptoms. In the absence of Covid-19 testing this was taken as an early sign of community

spread. When Covid-19 was recognized to be present in Yemen, there was a rapid drop in IMCI service utilization (Figure 2). Mothers would not bring children to clinics for immunization, and community-based activities were shunned. Health workers also had hesitation carrying out duties. A lack of trust created risks with people with other treatment needs. For both information and treatment related to COVID-19 there was little trust of the persons surveyed in the health services, as noted in the rapid assessment surveys (figure 3). To counteract this hesitancy to utilize services and extensive RCCE information campaign was undertaken to address services at health facilities as well as in community programming.

##### *Activities*

In May and June supplies of PPE became available. This gave confidence to the health workers and trust to community members and services began to pick up again. A similar pattern was seen with SBA deliveries both in community and facilities once midwives were supplied with PPEs. A challenge was that health services were already weak, and the fear and hesitation only weakened services further.<sup>12</sup> A strong supply chain for PPEs has been established, with forward planning, and inclusion of PPEs in the PHC supplies package which is sent regularly to facilities.

##### *Bottlenecks*

The restrictions by the DFA on community health promotion concerning Covid-19 were met in several ways. The major change was shifting Covid-19 health education to IPC messaging. This could incorporate messages on the prevention of respiratory infection. An additional measure was to upgrade IMCI screening to an integrated outreach approach. This screens children and women for malnutrition, diseases and pregnancy-related complications and provide vitamin A, health education and medical treatment where possible or referral to facilities was acceptable to the DFA. No such restrictions were present in the IRG area.

##### *Challenges*

Work is needed to maintain PPE use and IPC practices in health services. Travel for support supervision at facilities is difficult.

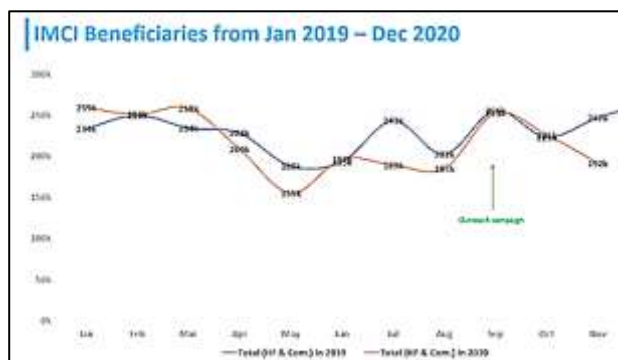


Figure 2 IMCI beneficiaries, January 2019-Dec 2020.

#### Trust in Health Services

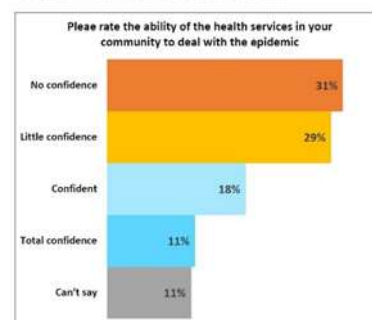


Figure 3. Trust in health services from July 2020 KAP survey.

## 1b. Nutrition

### *Role in Jump Start*

The goal is to minimize the impact of Covid-19 on nutritional status of children

### *Impact of Covid-19*

The pre-existing nutritional of children in Yemen was poor. Programs were severely disrupted for several reasons including conflict and administrative difficulties from the DFA. There was a substantial reduction in nutritional services, not just the Outpatient Therapeutic Program (OTP) services but also programs of other agencies (TFC—WHO, TSFP and BSFP—WFP), Figure 4. While some of these trends occur annually, the pattern this year far outstrips typical patterns. The SMART surveys regularly used to assess status could not be conducted except in early 2020. A current IPC analysis is likely to show an increase of MAM in Yemen of some 11 percent. A likely second wave of virus infection, coupled with deteriorating economic and food security will exacerbate this alarming trend.

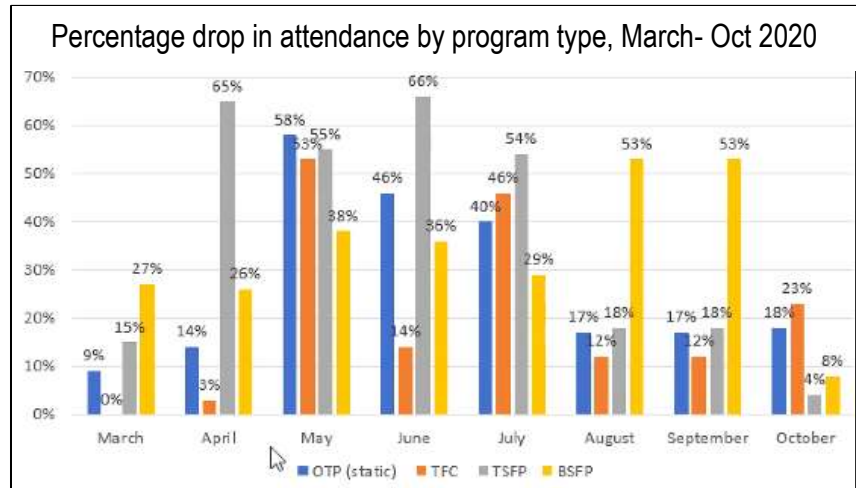


Figure 4. Percent drop in nutritional program attendance.

### *Activities*

Compensatory approaches were put into place which included PPE for clinic and outreach staff, reduction in client density in treatment sites, and temperature checking. PPE supplies have also given confidence to health care workers, and probably encouraged more regular work attendance. For community nutrition volunteers, PPE have helped restore trust outreach as well as facility services, and that community nutritional services can be continued. WASH provisions at health facilities were substantially increased including sanitizers. Weight-for-height measurements were replaced by MUAC, reducing patient-provider proximity.<sup>13</sup> The revised protocols, with PPE and WASH interventions helped achieve a treatment of 88% of the target population of malnourished children in November.

### *Bottlenecks*

In addition to access and supply issues, there are problems monitoring data in the DFA area. In addition to lacking SMART surveys, nutritional data from clinics in the DFA area can no longer come directly to UNICEF but must go first to the MoPHP and eventually come to UNICEF, making monitoring difficult.

### *Challenges*

Devaluation, loss of remittances and food insecurity, suggests that rates of chronic malnutrition will rise substantially in 2021 and 2022. Phase III will pose major nutritional challenges for Yemen.

## 1c. Immunization

### *Role in Jump Start*

Maintain continuity of immunization coverage

### *Impact of Covid-19*

While many UNICEF activities have been affected by Covid-19, probably immunizations suffered to the greatest extent, particularly at the beginning. The initial response to Covid-19 was a drop in immunizations at health facilities, and a decision to halt immunization campaigns when lockdowns and travel restrictions were implemented.

### *Activities*

Supplying PPE and IPC training to immunization staff restored confidence by households in immunizations services. In the third quarter, immunization activities returned, with strong acceptance at health facilities and in campaigns, particularly in the the IRG area. The inclusion of routine immunizations for children, and TT for mothers as part of integrated outreach activities is proving successful. Subsequently, the numbers of immunizations rose in the FDG areas. The most recent national campaign achieved a national coverage for polio of 93% (Fig 5) and 74% for diphtheria. However, in all immunization coverage for 2020, is likely to be down somewhat on 2019.

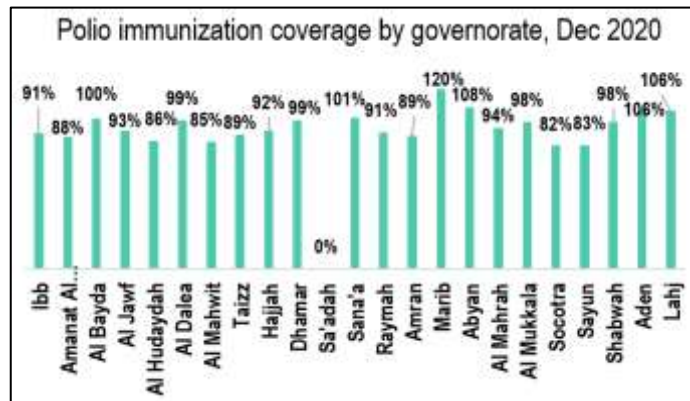


Figure 5. Polio immunization by governorate, Dec 2020.

### *Bottlenecks*

Restrictions on mobility has been a big challenge. The difficulties obtaining timely facility data from clinics in the DFA area makes tracking difficult. There were disputes with the DFA over labelling on some vaccine shipments which resulted in lost vaccine.

### *Challenges*

Maintaining immunization coverage and health worker and client safety going forward without active Covid-19 interventions will be difficult. In the face of declining nutritional status, the threats of epidemic disease among children is of concern.

## 2. Infection Prevention and Control

### *Role in Jump Start*

Prevent infections and control their transmission.

### *Impact of Covid-19*

With the first cases of Covid-19 patients lost trust in health services and were fearful of accessing health facilities, as some were isolation facilities. A rapid assessment found poor IPC capacities in health facilities and an extensive lack of knowledge. The poor status of many water and sewage systems increased risks of individual and household Covid-19 infections.

### *Activities*

Using an adapted curriculum developed by the UNICEF regional office, extensive training of health workers in IPC was conducted for PHC facilities and community activities. Sanitizers were provided and widely distributed in health facilities. A second part was wide-scale assistance

to communities with WASH activities. This included support of water treatment and sewage disposal systems in larger areas, and specific programs with soap and hygiene kits to smaller communities. A strong partnership with the Ministry of the Environment, MoPHP and WHO were great assets in these interventions. Yemen has a large cadre of skilled WASH personnel with experience in previous outbreaks including cholera, dengue and malaria.

#### *Bottlenecks*

The existing status of IPC provisions in Yemen is weak. Getting the necessary supplies and equipment in place for improvement is a challenge, in a system already battered by floods, conflict and previous outbreaks of communicable diseases. The water and sanitation provisions in the country require a level of support which exceeds what is available. These are other factors cause the number of persons trained in IPC to lag substantially behind the goals, one element of IPC activities. Although provision of hygiene items has done quite well.

#### *Challenges*

Much WASH work is hands-on and difficult to do by Zoom but is assisted by local partners. Adding solar energy sources will help reduce dependence on electricity and diesel for water and sewage plants, promoting sustainability, but difficult in the time of Covid. Transportation to field sites has made IPC training difficult.

### **3. PPEs and Supplies**

#### *Role in Jump Start*

Provide protection to health workers in facilities and communities, clients and build trust in safety in seeking health care

#### *Activities*

The ordering and distribution of PPEs was started early, and with a reliable supply chain established, Forward purchasing assures that adequate stock will be available well into 2021. The appropriate use of PPE has been a component of the IPC training as well as with the various components of essential health services. Working with the Regional Office guidance and the MoPHP and the WHO, standard training and utilization protocols were implemented. Getting PPE included in the PHC supplies package will help ensure that PPE supplies regularly reach all supported facilities in a regular manner.

#### *Bottlenecks*

Transport presents problems at time when supplies come by land or sea. Sustaining interest in using PPE, especially in warm weather has already become evident.

#### *Challenges*

Ensuring that the health workforce continue to use the PPE in an acceptable manner, and in conjunction with other IPC measures remains a challenge. With difficulty in travel for supportive supervision, and continuing education, this presents a concern. In the current environment where there is a general disregard for protection in the population, there are major potential problems.

### **4. Risk Communication and Community Engagement (RCCE)**

#### *Role in Jump Start*

Communicating Covid-19 risks and engaging communities for protective behavior, promoting IPC at health facilities and in the communities, and promoting continuity of health services.

#### *Impact of Covid-19*

The threat of infection with Covid-19 created rumors and widespread fear in a country with a recent pattern of epidemics. By May and June there was a substantial dip in utilization of child and maternal health services.

### *Activities*

The C4D resources of UNICEF played a major role in building awareness and perception of risk as well as in behavior change communication. This started in Phase I of the pandemic. This was done in close partnership and in coordination with other UN agencies, NGOs and with extensive use of the private media sector. The presence of five regional communications hubs and many local partners gives it unsurpassed population access. This was possible with existing resources and adapting some previous materials. Initial messages concerned symptoms of Covid-19, but the next messages concerned preventing infection with a strong emphasis on IPC and WASH. Many channels were used including media, religious leaders, and two-way communications as an effort to combat rumors. A community workforce of nearly 20000 frontline workers/volunteers was mobilized for community engagement. During Ramadan messages about Covid-19 and IPC were included in TV drama as well as flash presentations. Information for children was produced through coloring books (Fig 6). The IPC themes were also included in other RCCE activities such as cholera, and immunization campaigns.



Figure 6. Covid-19 coloring book.

Rapid population surveys were carried out twice in 2020, with a third survey postponed because of the national polio immunization campaign. These surveys have shown that awareness of Covid-19 is high, and most people have an awareness of risk reduction measures. In April, 83% of persons had heard of coronavirus, which rose to 97% in the July report. Between the two surveys prevention practices rose from 56% or 66%, though there was little change in the knowledge of the symptoms of COVID-19 over this time. The number of people engaged on COVID-19 through RCCE actions reached 10.1 million by 21 January, 2021 101% of the target amount.

An important tool from there C4D section was the Rapid Assessment of Knowledge, Attitudes and Practices related to COVID-19 assessment survey. This assessed knowledge of various aspects of COVID-19, sources of this knowledge, preventive measures to be taken, where treatment would be sought if ill, and trust in health services. The initial assessment was completed in April 2020 and the second round, in July 2020. Although the population is now well informed about COVID-19 adequate prevention is not practiced, and there is limited faith in health facility workers. A third assessment for December was delayed. The assessment is one of the main sources of information about community attitudes toward COVID and trusted sources of information and care.

### *Bottlenecks*

Communication programs in the DFG area were forbidden to mention Covid-19, requiring a shift to an IPC focus. Direct communication outside of DFG channels was blocked. Program development needed to be done with the Health Education Center, which was slow to respond. In the South there were fewer restrictions on communication. However, the TV stations were based in Saudi Arabia or Turkey, making them harder to use.

### *Challenges*

Authorities in nether North nor South see Covid-19 as a serious threat and leaders behave accordingly. The replacement of specific Covid-19 messaging in the North with more general IPC or respiratory infection messaging will likely blunt the full risk-reduction communication.

## V. Monitoring information

Among the various program indicators specific outcome indicators were selected as Covid-19 indicators, and these are set out in the table below which corresponds to the activities in the Terms of Reference. As noted above, some indicators relating to the UNICEF activities particular in the DFA areas are difficult to collect in a timely manner because of MoPHP restrictions.

### Covid-19 selected indicators

Indicator number	COVID-19 Indicator	UNICEF Target 2020	Accumulative progress as of 5 Jan 2021	% Achieved
<b>C4D</b>				
1	Number of people reached on COVID-19 through messaging on prevention and access to services	18,000,000	16,500,000	92%
2	Number of people engaged on COVID-19 through RCCE actions	10,000,000	10,122,434	101%
3	Number of people sharing their concerns and asking questions/clarifications for available support services to address their needs through established feedback mechanisms	25,000	40,692	163%
<b>WASH</b>				
4	Number of people reached with critical WASH supplies (including hygiene items) and services.	910,000	783,440	86%
<b>Health &amp; Nutrition</b>				
5	# of healthcare facility staff and community health workers trained in Infection Prevention and Control (IPC), detecting, referral and appropriate management of COVID-19 cases including among children, pregnant and breastfeeding women	12,000	7,244	60%
6	Number of healthcare facility staff and community health workers trained in Infection Prevention and Control (IPC)	12,000	7,244	60%
7	Number of healthcare providers trained in detecting, referral and appropriate management of COVID-19 cases	12,500	7,244	58%
8	Number of children and women receiving essential healthcare, including prenatal, delivery and postnatal care, essential newborn care, immunization, treatment of childhood illnesses and HIV care in UNICEF supported facilities	2,000,000	3,397,188	170%
9	Number of caregivers of children aged 0-23 months reached with messages aiming to protect breastfeeding in the context of COVID through national communication campaigns	1,400,000	2,399,686	171%
10	Number of children 6-59 months admitted for treatment of severe acute malnutrition (SAM) (NEW)	263,430	231,062	88%
11	Number of healthcare facilities staff and community health workers provided with Personal Protective Equipment (PPE).	25,000	35,062	140%

## Rapid Assessment Selected Indicators

One of the most important sources of information about the COVID-19 pandemic were the Rapid Assessments. These measured KAPs and were not strictly a monitoring tool for Jump Start supported activities, though indirectly assessed RCCE activity for which UNICEF was a major partner. In the section below for illustrative purpose are a few indicators and additional categories for the two assessments completed. A third was delayed by the December national polio campaign. A major source of concern was the lack of trust in health-facility based workers in the July 2020 assessment, which is consistent with other poor trust measures.

<b>Rapid Assessment of Knowledge, Attitudes and Practices related to COVID-19 (selection of indicators)</b>		
	<b>April 2020</b>	<b>July 2020</b>
<b>Selected Indicator</b>	580-phone, 100-qualitative 67% males	1312-F2F or phone 209-qualitative 61% males
<i>Knowledge of COVID-19</i>	83% had heard of Coronavirus disease Information received on Protection-56% Transmission 69.1% Symptoms 61% Actions to take 56%	97% had heard of Coronavirus disease Information received on Protection-66% Transmission 67% Symptoms 59% Actions to take 6%
<i>Sources of information</i>	TV 69.7% WhatsApp 54.8% Other social media 54.7%	TV 67% WhatsApp 58% Other social media 56%
<i>Trust</i>	TV more trusted source than health workers	55% mentioned TV 30% mentioned facility health worker
<i>Risk perception</i>	Dangerous virus 90.5% Likely to get Covid-19 38%	Dangerous virus 90% Likely to get Covid-19 51%
<i>Treatment</i>	If sick will go to health unit 64% If sick would quarantine 49% Would by medicines in market 2%	If sick will go to health unit 64% If sick would quarantine 49% Would by medicines in market 23%

## VI. Evaluation

### 1. Relevance

#### 1.a strategy, approach and design

The initial assumption that Covid-19 would have a major impact on continuity of services in Yemen was certainly a realistic conclusion. Several factors make it difficult to quantify this impact of actual infections. The first is the lack of surveillance data. In spite of diagnostic kits provided to the MoPHP by UNICEF and others, they were not used for surveillance purposes. As was correctly assumed, the fear generated by infection coupled with the distrust of health services caused a drop-in facility and community-based services. The strategy of addressing these fears through multiple approaches was a sound decision. This strategy also recognized potential fear among health workers, though the methods of addressing this was not extensively mentioned. This experience could be something useful to share with other programs.

The approach chosen by the country office of reinforcing various components which could address the anticipated impact of Covid-19 without creating a separate structure was very logical. Although a Covid-19 taskforce was created at the beginning, this was quickly folded into regular program planning. The advantage of the approach chosen is that it builds on experience with assisting in previous disease outbreaks in Yemen. Indeed, some of the materials and approaches from these were repurposed for Covid-19. The C4D program could reformat cholera campaign information and had great experience at leveraging multiple channels needed for communicating

behavior change messaging. The WASH sector had strong capacities in the IPC and hygiene sector. In particular they had strong local partners, that gave them some flexibility that other sectors did not have. Long term interaction with fragile water and sanitation systems gave them a certain indispensability. Several programs could build on well-established community programs and a community workforce. The IPC principles in health care are part of formative work for all health professionals, which could provide a ready springboard for IPC and PPE reinforcement or introduction.

Working in a humanitarian crisis situation gives the country office the experience and the capacities to make quick decisions, partner with other humanitarian partners and mobilize resources rapidly. This flexibility and adaptability build a capacity to cope with unexpected events. As one person interviewed said “In Yemen, every morning you awake to a new surprise.” The Jump Start package was well suited to new surprises in Yemen.

The theory of change was fully relevant, though it is hard to image any ToC which could have anticipated all events occurring in Yemen. A feature of ToC is the ability to change directions and steps based on changing circumstances and input from stakeholders. This the Yemen team were able to accommodate very well. It would have been good to have specifically documented the changes required to the ToC as the implementation progressed.

During 2020 Yemen was affected by continuing conflict, an attempted coup in Socotra, floods, financial crises and devaluations, vanishing remittances, an outbreak of vaccine derived polio, and food insecurity. All affected utilization of health services in various ways. Disentangling these confounding factors from the impact of Covid-19 in producing an early drop in service delivery is probably not possible.

### **1b. Human rights, gender and inclusion**

The rights of minority and vulnerable groups were highlighted in planning. Concerns for targeting messages to the Muhamasheen<sup>b</sup> were noted in several Covid-19 activities. There were several mentions of WASH activities as part of community shielding, although the evaluation did not find specific documents related to these activities. Female headed households, especially those with undernourished children were a specific concern of community IPC and nutrition activities. Much of the efforts of the initiatives were spent in accommodating the frequent changes in DFA decisions and policies. The various sections concerned with these decisions proved to be nimble in making the adjustments required.

## **2. Effectiveness**

**2.1 Early lessons.** In the face of many barriers the UNICEF team exhibited extraordinary creativity in devising various workarounds. Among an unintended outcome was the Integrated Outreach intervention which may be more effective than the various stand-alone interventions which it incorporated. The focus on IPC and respiratory disease messaging in the DFA area as a substitute may have been an effective substitute when Covid-19 precautions could not be mentioned, though it is not sure this was measured. The 2-way messaging for rumor control, and the rumor tracking activities were innovative approaches which could be used in other similar situations. Other early lessons were the ability to build on previous outbreak program approaches and materials, specifically C4D and IPC programming for cholera and diphtheria. Strong community links proved useful both for community WASH interventions and reducing fear of contracting disease at the health facilities. A clear success was that in spite of the many barriers from Covid-19 and

---

<sup>b</sup> A visible Yemeni minority who suffer from caste-based discrimination

other factors, a very successful national polio immunization was carried out in December 2020, a true credit to the resourcefulness of the health team.

**2.2 Bottlenecks and workarounds.** One of the major barriers to effectiveness of the various sections was the serious tensions between the humanitarian community and DFA government elements in the North in mid-2020. There were financial issues, many program restrictions and communication limitations. Data which previously passed from facilities to UNICEF to track treatment of nutrition, now has to pass through the DFA MoPHP with considerable delay. Some community health interventions were curtailed. Some of the workarounds were noted in the previous paragraph. Strong partnerships, such as the link between WASH programming and the Ministry of the Environment was an effective ballast to manage changing policies and restrictions. Links with the religious leaders, especially female religious leaders proved to be an excellent Covid-19 channel for community information. A printing error on a child's Covid-19 coloring book, in which the colors were all inadvertently printed in, turned this coloring book into an effective childhood bedtime reading book.

Undermining the effectiveness of the Jump Start initiative is the low priority that DFA government leadership gives to the infection and the illusion that the disease has vanished. Epidemiologically it can be expected that any lull in infections is only temporary and the virus will return with and intensity. UNICEF and its partners must be prepared for this return.

**2.3 Monitoring mechanisms.** Rather than create a separate monitoring system, certain existing program indicators were selected as Covid indicators, and accordingly targets were assigned these. These data have been effectively captured and are appended. The two rounds of the KAP monitoring system were excellent indicators to help guide programming. The delayed third round will track important information.

### **3. Efficiency**

**3.1** The decision by the country office to create a Covid-19 taskforce and quickly integrate this into its existing structure without creating a separate mechanism a very efficient move, and possible because of excellent resources. UNICEF was efficient in creating Covid-19 responses building on previous products and approaches. Examples are the work to contain cholera and helping shift water and sanitation systems to solar power. Other examples are the Integrated Outreach approach including multiple interventions. The areas of inefficiency that the Yemen office experiences are largely related to delays and frequent policy changes from the DFA and SCAMCHA. Efficient Covid-19 programming is difficult where authorities deny the existence of the disease.

**3.2** Covid-19 components have been supported largely through existing budget lines with some reprogramming and a few additional funds. The human resources have been sufficient to design and implement activities.

**3.3** The country office has developed extensive partnerships with NGOs, private companies, government ministries, the media and humanitarian agencies. It has fully utilized these partnerships to design and implement components of the Jump Start package. Building on these partnerships was done efficiently and very effectively.

---

## VII. Conclusions and recommendations

Under difficult circumstances, Jump Start components were effectively implemented in Yemen. This was made difficult because of changing positions of government policy, particularly in the North. The lack of effective Covid-19 surveillance and pandemic denial by the DFA made for difficulties implementing activities against a disease which could be named.

### Key findings

1. The approach taken by the country office was sound and appropriate. Reprogramming existing resources to meet the anticipated impact of the pandemic was a sound decision.
2. Incorporating Jump Start activities within the existing programs rather than creating a separate structure was an efficient step.
3. There was an initial dip in service utilization which spurred a strong UNICEF response. In retrospect it appears that Covid-19 may have been only one of the factors responsible, and to some degree utilization changes many have been seasonal as the pattern was also seen in 2019.
4. The country office was able to build on its previous work combating outbreaks particularly in the WASH/IPC section and C4D for a quick pandemic response.
5. The impediments to implementation of Covid-19 response plans cannot be underestimated, not least of which were political.
6. In the face of these impediments, the UNICEF Yemen office showed remarkable resourcefulness and ingenuity. Several new programming approaches were developed as a consequence.
7. The successful December 2020 national polio immunization campaign is a solid example of how effectiveness of programming was retained in spite of the many challenges that UNICEF faced from Covid-19 and other threats.
8. The general decline of household economic and childhood nutritional status during 2020, create a serious scenario moving forward, especially if, as seems likely, as second wave or worsening of the Covid-19 situation occurs.
9. With strong messaging and PPE, the decline of health facility utilization by mothers and their children was halted, a tribute to the impact of quick actions
10. The C4D interventions were quick and wide reaching. The behavior monitoring rapid assessment instrument of knowledge and practices was strong evidence to guide programming in the absence of surveillance and other population information.
11. The inadvertent error in the printing of children's Covid-19 coloring books that made them good bedtime reading opens the possibility of using a similar approach for other health promotional opportunities.
12. Perhaps one of the strongest findings was in the strengths of the partnerships which UNICEF has develop in the course of its humanitarian work, and how calling on these partnerships could produce a quick and robust response to threats posed by the pandemic.

### Recommendations

1. A strong initial response by UNICEF which has helped maintain continuity of services should not obscure the fact that Yemen is likely still in an early phase of the pandemic. The possibility of rapid acceleration or a "second wave" is almost certain. This can certainly dwarf experience to date. It is vital that UNICEF consider this and determine its response which may not have the same level of local resources available.
2. The Theory of Change originally developed is very comprehensive. As some things have changed since its original development it would be appropriate to revisit this in the CO

and perhaps with stakeholders to review and amend, as well as to consider how this might influence indicators for Covid-19 related activities.

3. The rapid KAP assessments should be continued, and the scope amplified with adequate sample size to detect any regional variations which could be addressed specific messaging as required through individual C4D hubs.
4. The impact of 2020 on childhood nutrition is most certainly going to be strongly negative. This poses major problems with increased chronic undernutrition for 2021, and 2020. This needs to be considered in forward planning.
5. The geopolitical trends will most certainly continue to buffet Yemen added to the continuing impact of Covid-19. Contingency planning should be carried out for consequences of possible and probable events.
6. Maintaining a PPE and IPC vigilant state for health workers will be difficult moving forward. Continuing support and supervision are needed to keep these functioning.
7. Some of the achievements to date, such as with WASH can contribute to SDGs, and some thought should be given to linking the short-term Jump Start goals into longer term achievements.
8. Although Yemen is likely a low tier country for Covid-19 immunization, when it does arrive, most certainly UNICEF will be expected to play a role in mass immunization. Doubtless, this is already being considered, as there will be extensive demand promotion and heightened RCCE needed.
9. At some point soon the UNICEF Yemen experience with addressing Covid-19 needs to be documented both for internal UNICEF learning purposes and for persons outside who are concerned with maternal and child health in these unstable times.

### **Limitations**

This evaluation was limited by time and some limitations to various people who may have helped in the review. The inability to be physically present in the field and to interview beneficiaries is a major restriction.

### **Ethical Approval**

Access to secondary de-identified data for this Evaluative Review was considered by the Institutional Review Board of the Johns Hopkins Bloomberg School of Public Health and deemed not human subjects.

### **Acknowledgements**

The UNICEF staff interviewed both in Amman and Yemen were extraordinarily helpful. They volunteered additional documents and PowerPoints as well as referring the interviewer to additional persons. We were most impressed by the dedication and helpfulness of the UNICEF staff.

## VIII. Annexes

### Annex 1. Persons interviewed

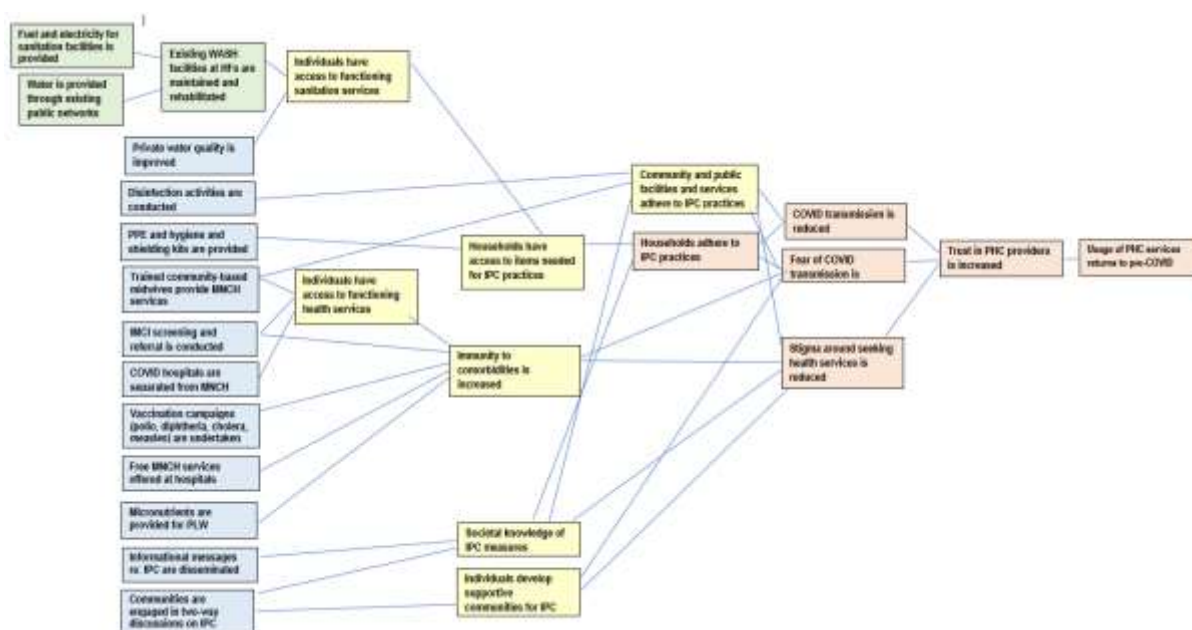
#### Country Office

- Kennedy Ongwae, Health and Nutrition Chief:
- Nuzhat Rafique, Health Manager
- Adane Bekele, WASH Manager,
- Nana Garbrah-Aidoo, C4D Chief,
- Victor Sule, Immunizations
- Vivienne Forsythe, Nutrition Manager
- Isaack Biseko Manyama, Nutrition Cluster Coordinator
- Sufyan Al Mathani, RCCE, WHO, with Adham Abdel Muniem, and Ahmed ben Lesued

#### Regional office

- Neha Kapil, C4D
- Chris Cormency WASH
- Anirban Chatterjee, Health and Nutrition
- Sara Capper, Monitoring and Evaluation---*Special acknowledgement*

### Annex 2. Theory of Change, Yemen



### References

- <sup>1</sup> Brookings Institution, March 31 2020. Yemen's civilians: Besieged on all sides. <https://www.brookings.edu/blog/future-development/2020/03/31/yemens-civilians-besieged-on-all-sides/> accessed Jan 15, 2021.
- <sup>2</sup> WHO. Yemen: Health Resources and Services Availability Mapping Systems 2018 (HeRAMS). <https://www.who.int/health-cluster/news-and-events/news/HeRAMS-dashboard.pdf?ua=1> accessed Jan 10 2021.

- 
- <sup>3</sup> Hyzam D, Zou M, Boah M, Saeed A, Li C, Pan S, Zhai J, Wu LJ. Health information and health-seeking behaviour in Yemen: perspectives of health leaders, midwives and mothers in two rural areas of Yemen. *BMC Pregnancy Childbirth*. 2020 Jul 14;20(1):404. doi: 10.1186/s12884-020-03101-9. PMID: 32664887; PMCID: PMC7359610.
- <sup>4</sup> UNICEF Yemen. Yemen Country Office Humanitarian Situation Report. 1-31 May, 2020.
- <sup>5</sup> BBC. War-torn Yemen's Covid-19 struggle. 6 Sept 2020 <https://www.bbc.com/news/av/world-middle-east-54034803> accessed 8 January 2021.
- <sup>6</sup> UNICEF Yemen. Yemen Country Office Humanitarian Situation Report. 30 June 2020.
- <sup>7</sup> UNICEF Yemen. Yemen Country Office Humanitarian Situation Report. 31 August 2020.
- <sup>8</sup> Robertson T, Carter ED, Chou VB, Stegmuller AR, Jackson BD, Tam Y, Sawadogo-Lewis T, Walker N. 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. *Lancet Glob Health*. 2020 Jul;8(7):e901-e908. doi: 10.1016/S2214-109X(20)30229-1. Epub 2020 May 12. PMID: 32405459; PMCID: PMC7217645.
- <sup>9</sup> WHO. Community-based health care, including outreach and campaigns, in the context of the COVID-19 pandemic. Interim Guidance, 5 May 2020. [https://www.who.int/publications/i/item/WHO-2019-nCoV-Comm\\_health\\_care-2020.1](https://www.who.int/publications/i/item/WHO-2019-nCoV-Comm_health_care-2020.1) accessed Jan 10 2021.
- <sup>10</sup> WHO. COVID-19 Strategic Preparedness and Response Plan: Operation Planning Guidelines to Support Country Preparedness and Response” which can be accessed through WHO COVID-19 website ([https://www.who.int/docs/default-source/coronaviruse/srp-04022020.pdf?sfvrsn=7ff55ec0\\_4&download=true](https://www.who.int/docs/default-source/coronaviruse/srp-04022020.pdf?sfvrsn=7ff55ec0_4&download=true)). Accessed Jan 7 2021.
- <sup>11</sup> UNICEF Yemen. Yemen Country Office Humanitarian Situation Report. 31 October, 2020.
- <sup>12</sup> Tappis H, Elaraby S, Elnakib S, AlShawafi NAA, BaSaleem H, Al-Gawfi IAS, Othman F, Shafique F, Al-Kubati E, Rafique N, Spiegel P. Reproductive, maternal, newborn and child health service delivery during conflict in Yemen: a case study. *Confl Health*. 2020 May 27;14:30. doi: 10.1186/s13031-020-00269-x. PMID: 32514295; PMCID: PMC7254736.
- <sup>13</sup> UNICEF, Yemen. Yemen Country Office, Humanitarian Situation Report, 31 July 2020.