

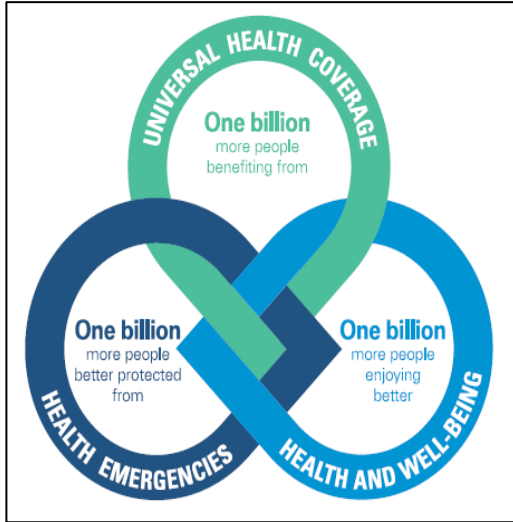
Impact of COVID-19 and civil unrest on fertility-related behavior and service delivery in the Middle East and North Africa

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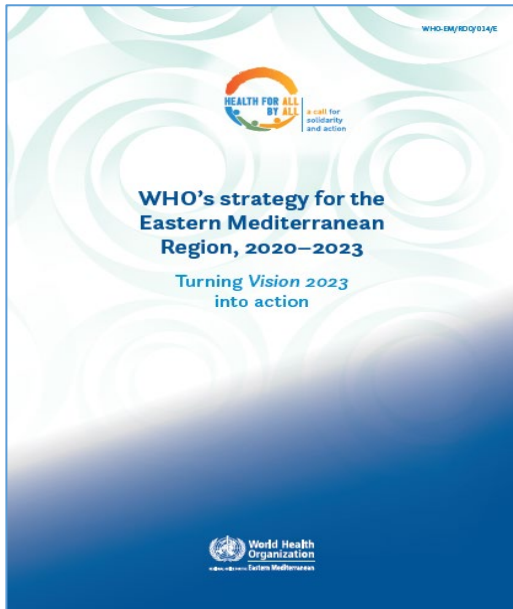
UN DESA Expert meeting on the impact of the COVID-19 pandemic on fertility (virtual meeting), 10-11 May 2021



WHO triple billion targets, 2019-2023 and *Regional Vision 2023*



Source: WHO (2019)



- WHO's General Programme of Work (GPW 13; 2019–2023) developed based on SDGs
 - Development, with commitment to SDG 3 and all other health-related SDGs
- GPW 13 structured around 3 interconnected strategic priorities:
 - **Advancing UHC** – 1 billion more people benefiting from UHC. Aligned with SDG 3.8 (achieving UHC).
 - **Addressing health emergencies** – 1 billion more people better protected from health emergencies (based on SDG 3.d.1 - IHR)
 - **Promoting healthier populations** – 1 billion more people enjoying better health and well-being.
- *Vision 2023* intended to leverage all available assets in the Region
 - Core principle – **health for all, by all**
 - recognizes that every country, community and individual has a valuable contribution to make
- 4 priorities reflecting both regional and global strategies:
 - Expanding UHC
 - Address health emergencies
 - Promoting healthier populations
 - Making transformative changes

An overview of the Eastern Mediterranean Region

Maternal mortality ratio

Target: <70 per 100 000 live births

- 2015: 175
- 2019: 164

Child mortality rate

Target: <25 per 1000 live births

- 2015: 52
- 2019: 46

Health service coverage index

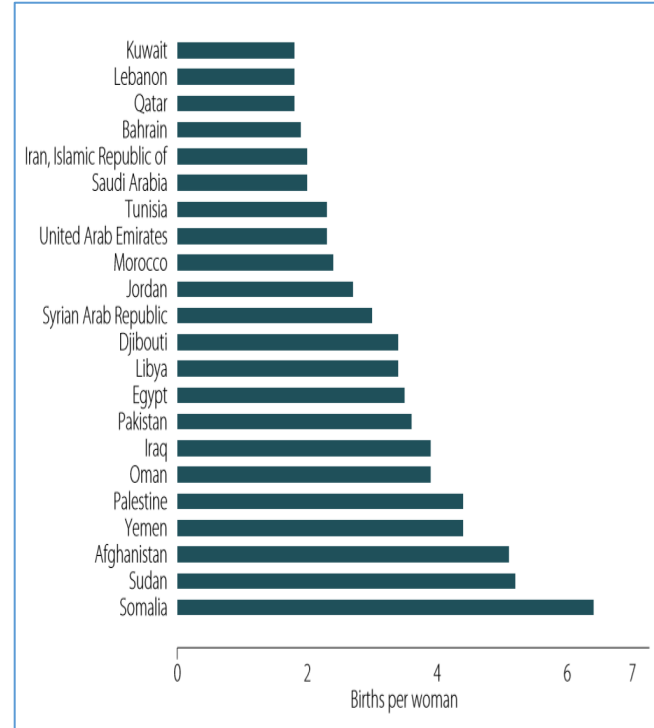
Target: 80+

- 2015: 53
- 2017: 57

Emergency information

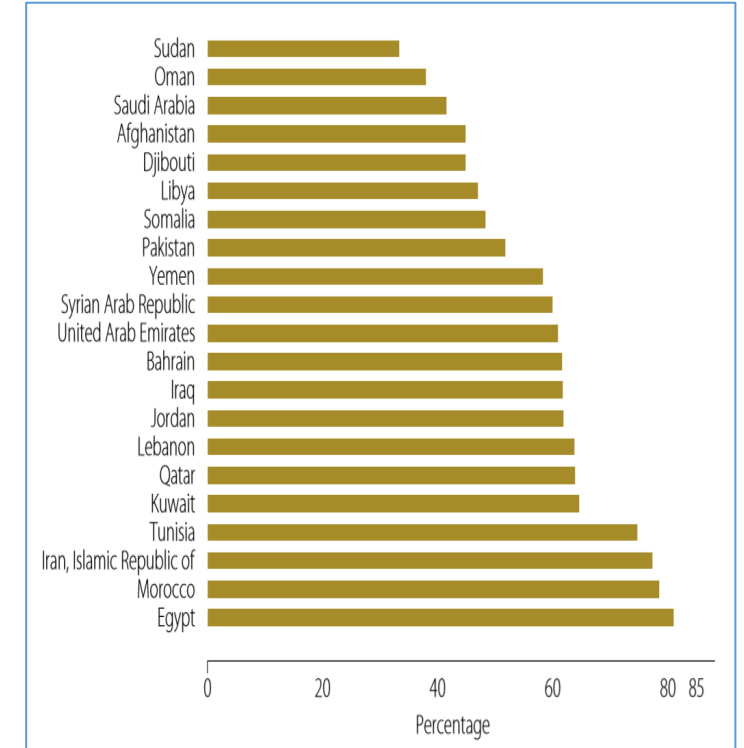
- In 2019, 15 of 22 countries faced major emergencies, including 3 at Grade 3.
- More than 70 million people needed humanitarian assistance, and the Region was both the source of more forcibly displaced people and host to a larger number of forcibly displaced people than anywhere else in the world.

Total fertility rate, 2013-2018



- TFR ranges from 1.8 to 2.0 in six countries (Bahrain, Iran, Kuwait, Lebanon, Qatar and Saudi Arabia)
- Highest TFR is 6.4 in Somalia

Demand for FP satisfied (modern methods), 2017



- Ranges from 33.3% (Sudan) to 81% (Egypt)
- Many countries struggle with weak implementation of FP programmes (Shrestha et al. 2019; East Mediterr Health J)

Pathways to low fertility

- The (modified) Bongaarts Model

$$TFR = C_m * C_i * C_a * C_p * C_c * TF$$

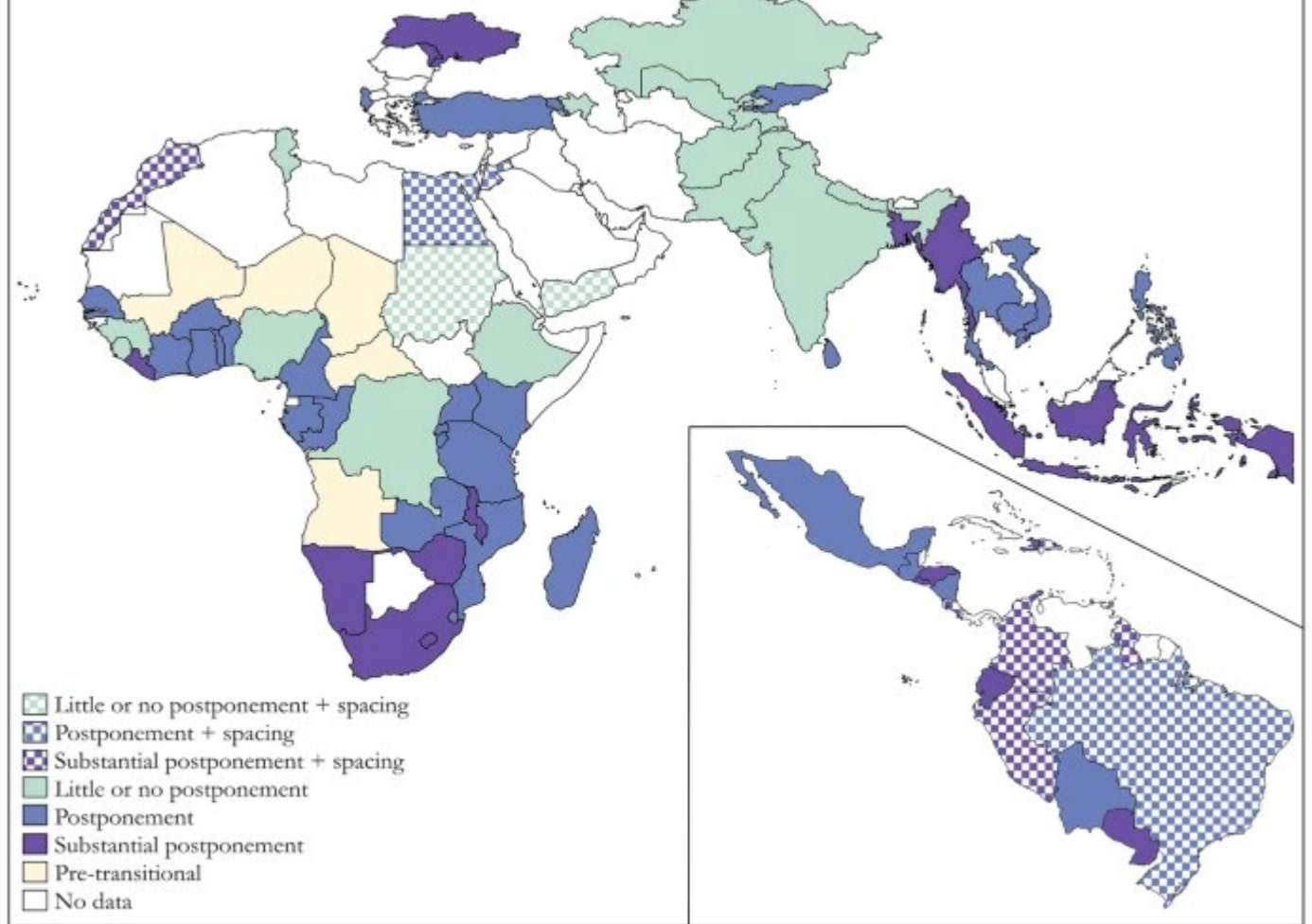
- Limitation and spacing – key phrases in fertility transition and intention studies ([Timæus & Moultrie 2020](#))

- Long birth intervals common
- Postponement of births
- Women's preferences
- Economic hardship, insecurity, ill health

- [Pourreza et al. 2021](#) systematic review (Middle East and N. Africa)

- Fastest decline in TFR recently (Lebanon, Egypt, Iran)
- Iran, Lebanon and Tunisia have TFR below replacement level
- Main factors: health-care related, cultural, economic, social and political

b Degree of postponement and/or spacing



Pathways to low fertility, 1965–2014

Source: [Timæus & Moultrie 2020](#), Fig. 7

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

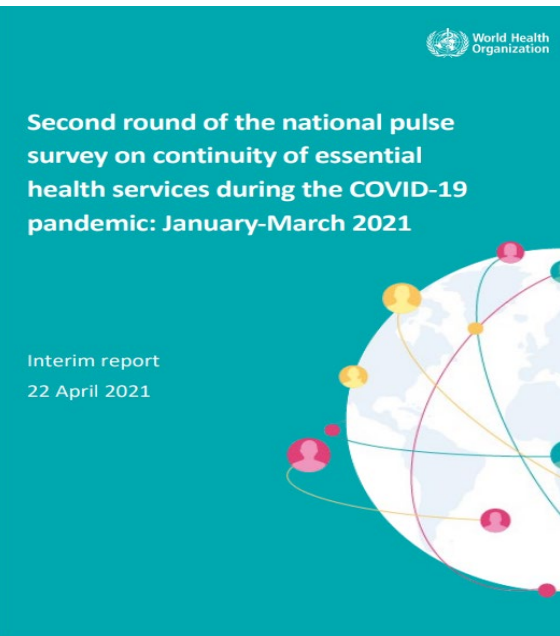
- **Objective:** To better understand the extent of disruptions to essential health services caused by the COVID-19 pandemic
- **Second wave:** Jan-Mar 2021
- **Coverage:** Global (135 countries and territories)
- **Reporting period:** 3 months preceding date of survey submission

>40%

Most frequently disrupted services are for NTDs (46%) and RMNCAH (32%)

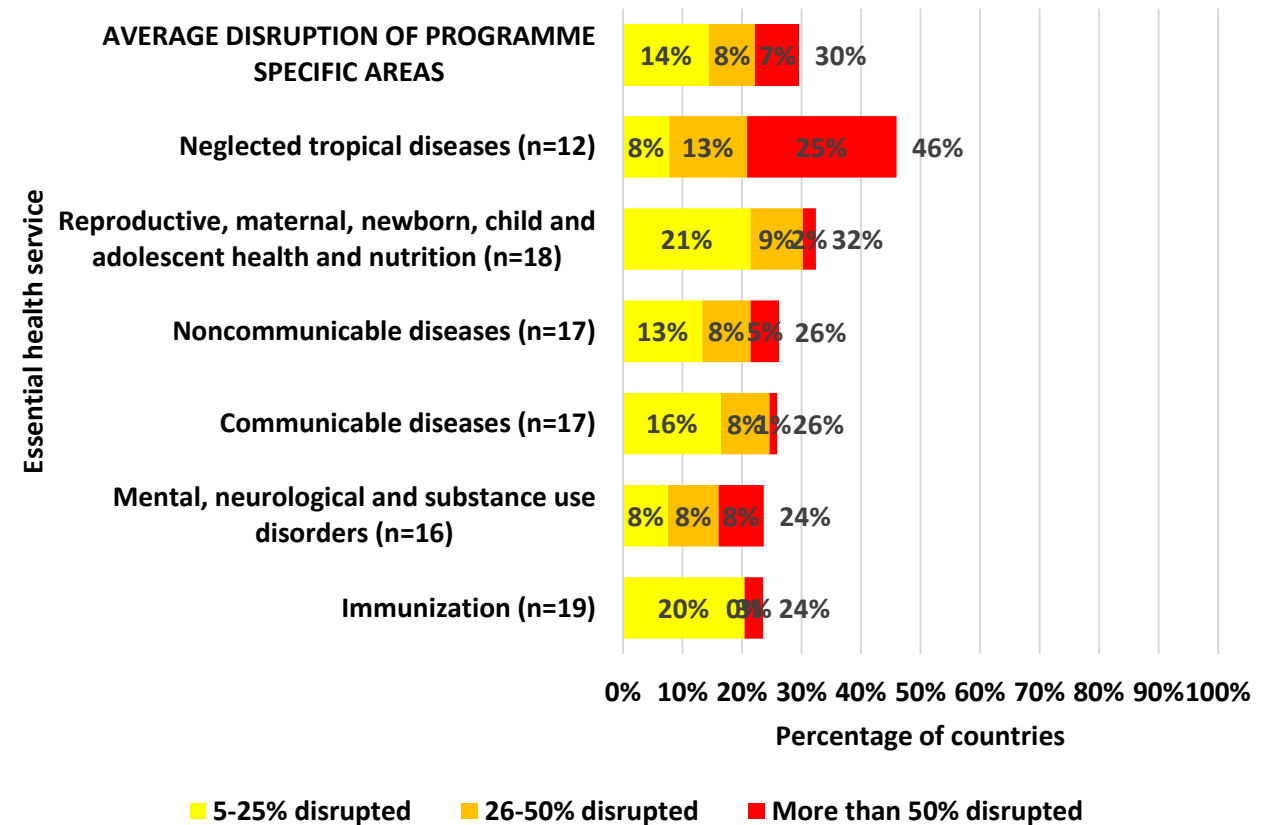
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Other essential health services are disrupted in approximately 1/4 of countries



Disruptions were reported across major service areas with Neglected Tropical Diseases (NTDs) showing the highest level of disruption

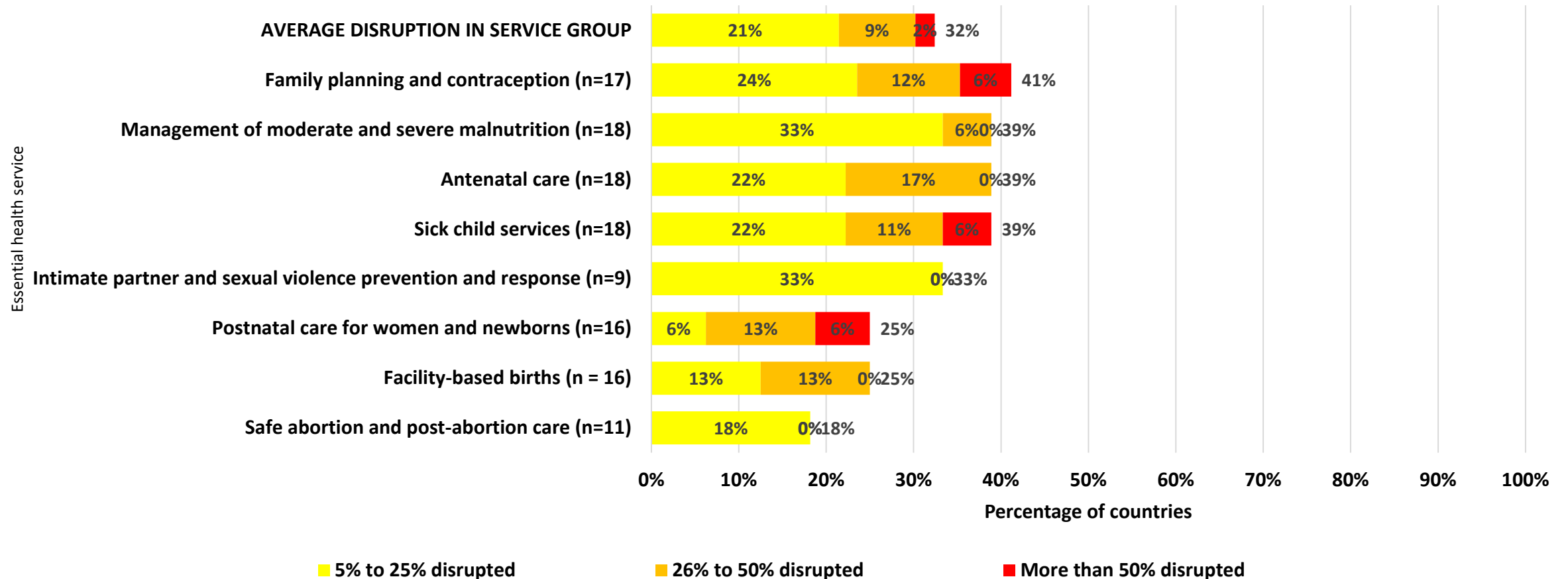
Percentage of countries reporting disruptions across tracer service areas



Disruptions in services for RMNCAH and nutrition

- Nearly 40% of countries have reported disruptions to **family planning and contraception**, antenatal care (39%), sick child services (39%) and management of moderate and severe malnutrition services (39%)

Percentage of countries reporting disruptions in RMNCAH and nutrition services

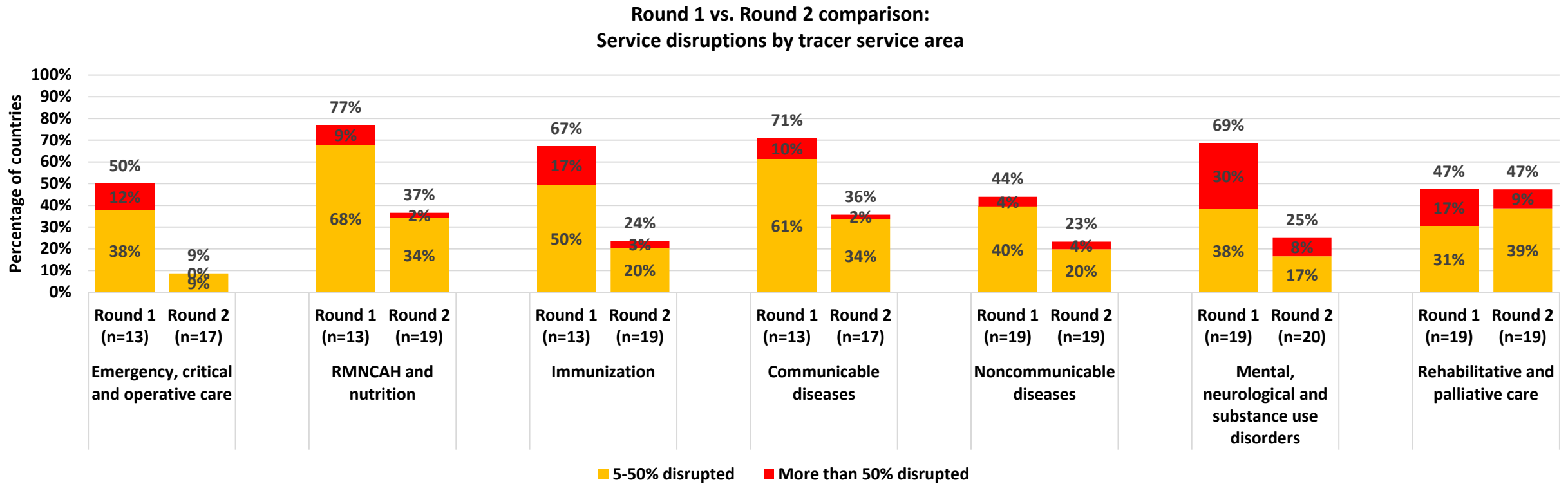


Reproductive health and the COVID-19 pandemic

- Socio-economic impact influence reproductive health services for women
- Negative consequences for women access to family planning
- Women are vulnerable during the COVID-19 pandemic (forced/early marriages)
- Limited access to reproductive health services
- Systematic review studies on impact of COVID-19 on fertility
 - [Male Fertility and the COVID-19 Pandemic: Systematic Review of the Literature](#)
 - [COVID-19 may affect male fertility but is not sexually transmitted: a systematic review](#)
 - [A review of initial data on pregnancy during the COVID-19 outbreak: implications for assisted reproductive treatments](#)
 - [Impact of COVID-19 on female fertility: a systematic review and meta-analysis protocol](#)
 - [Potential impacts of COVID-19 on reproductive health: Scientific findings and social dimension](#)

Average % of countries reporting disruptions dropped across all tracer service areas

- Countries participating in either survey round



Note: represents global findings from all countries that participated in **either round 1 or 2 of survey**. Denominator: does not include "Not applicable" or "Do not know" responses

Emergency and critical care services include: 24-hour emergency room/unit services; urgent blood transfusion services; inpatient critical care services; and emergency surgery.

RMNCAH and nutrition services include: family planning and contraception; antenatal care; facility-based births; sick child services; and management of malnutrition.

Immunization services include: facility-based routine immunization; and outreach routine immunization.

Communicable disease services include: Outbreak detection and control (non-COVID); continuation of established antiretroviral treatment; malaria diagnosis and treatment; ITN malaria prevention campaigns; IRS malaria prevention campaigns; and SMC malaria prevention campaigns.

NCD services include: cancer diagnosis and treatment; hypertension management; diabetes management; and asthma services.

MNS disorder services include: MNS emergency services; counselling for MNS disorders; medicines for MNS disorders; services for children and adolescents; services for older adults; school mental health programmes; suicide prevention programmes; overdose prevention programmes; and critical harm reduction services.

Rehabilitative and palliative care services include: rehabilitation services; palliative services.

Country disruptions to tracer services: RMNCAH, nutrition and immunization (2/2)

		RMNCAH + nutrition							
	Total N services disrupted	Family planning and contraception	Antenatal care	Facility-based births	Postnatal care	Abortion & post-abortion care	Sick child services	Management of severe and moderate malnutrition	Gender-based violence response
Pakistan	4	5-25%	Less than 5%	Less than 5%	Less than 5%	5-25%	Less than 5%	5-25%	5-25%
Qatar	0	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Not applicable	Less than 5%	Less than 5%	Less than 5%
Saudi Arabia	0	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Less than 5%
Somalia	5	5-25%	5-25%	26-50%	Do not know	Do not know	5-25%	5-25%	Do not know
Sudan	5	Less than 5%	5-25%	5-25%	5-25%	Do not know	5-25%	5-25%	Do not know
Syrian Arab Republic	0	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Less than 5%
Tunisia	-								
United Arab Emirates	0	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Less than 5%	Do not know
occupied Palestinian territory, including east Jerusalem	-								
Yemen	1	Do not know	Do not know	Do not know	Do not know	Not applicable	Do not know	5-25%	Not applicable

RMNCH interventions coverage disruption

Service Package	COVID-19 impact on coverage, by country					
	Afghanistan	Morocco	Iraq	Pakistan	Somalia	Sudan
Family Planning	23%	36%	21%	30%	15%	2%
Antenatal Care	24%	21%	38%	31%	22%	13%
Delivery Care	14%	14%	4%	19%	36%	9%
Newborn Care	14%	16%	19%	18%	36%	19%
Breastfeeding	4%	--	3%	18%	--	--
Vaccines	18%	17%	23%	26%	6%	5%
Child Health	9%	17%	--	33%	18%	9%

- Based on Risk-Benefit analysis study of maintaining essential RMNCH services vs. Risk of COVID-19 infection while obtaining such services
- Relative changes in coverage based on HMIS data
- Estimate coverage reduction/disruption due to COVID-19
- March-June 2019 compared with March-June 2020

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

Timothy Robertson, Emily D Carter, Victoria B Chou, Angela R Steynmoller, Bianca D Jackson, Yvonne Tam, Talata Sawadogo-Lewis, Neff Walker

Summary
Background While the COVID-19 pandemic will increase mortality due to the virus, it is also likely to increase mortality indirectly. In this study, we estimate the additional maternal and under-5 child deaths resulting from the potential disruption of health systems and decreased access to food.

Methods We modelled three scenarios in which the coverage of essential maternal and child health interventions is reduced by 9–8–51–9% and the prevalence of wasting is increased by 10–50%. Although our scenarios are hypothetical, we sought to reflect real-world possibilities, given emerging reports of the supply-side and demand-side effects of the pandemic. We used the Lives Saved Tool to estimate the additional maternal and under-5 child deaths under each scenario, in 118 low-income and middle-income countries. We estimated additional deaths for a single month and extrapolated for 3 months, 6 months, and 12 months.

Findings Our least severe scenario (coverage reductions of 9–8–18–5% and wasting increase of 10%) over 6 months would result in 253 500 additional child deaths and 12 200 additional maternal deaths. Our most severe scenario (coverage reductions of 39–3–51–9% and wasting increase of 50%) over 6 months would result in 1 157 000 additional child deaths and 56 700 additional maternal deaths. These additional deaths would represent an increase of 9–8–44–7% in under-5 child deaths per month, and an 8–3–38–6% increase in maternal deaths per month, across the 118 countries. Across our three scenarios, the reduced coverage of four childbirth interventions (parenteral administration of

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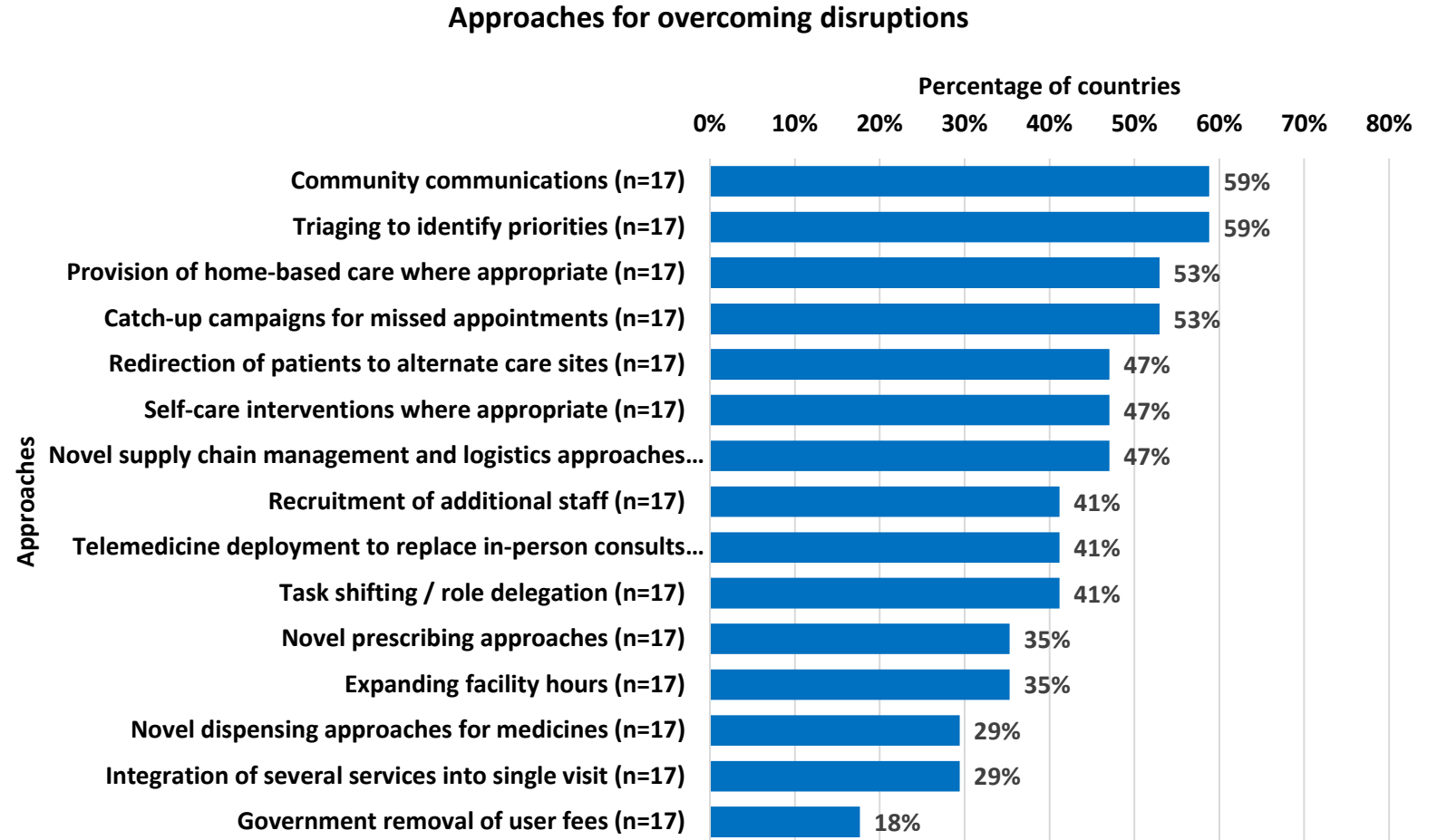
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[https://doi.org/10.1016/S2214-1098\(20\)30228-2](https://doi.org/10.1016/S2214-1098(20)30228-2)

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Recommended strategies to restore or adapt service delivery being implemented by many countries

- >50% of countries report using community communications and triage to identify priorities
- Provision of **home-base care** where appropriate, catch-up campaigns, **and redirection of patients to alternate care sites** among the most frequently used approaches to restore service delivery



Disasters and their impact on reproductive health behavior

- Evidence of effects of disasters on RH behaviour:
 - [Impact on age of sexual debut, first marriage and first birth in young women](#)
 - [Impact on women's reproductive health in developing countries](#)
- "Impact of disasters such as natural hazards depends upon the extent of vulnerability among populations exposed to unanticipated hazardous events." (Swatzyna and Pillai 2013)

Libya example

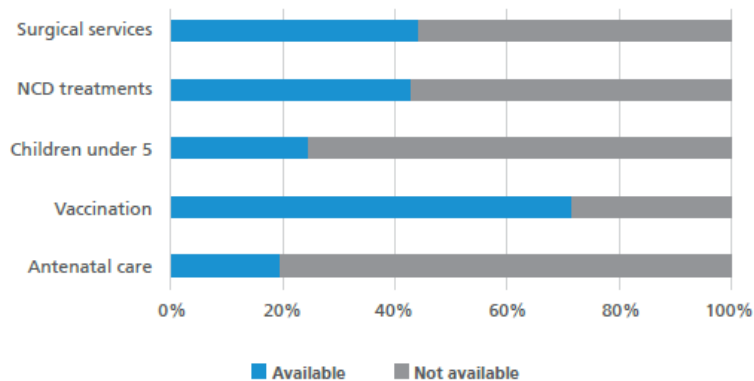
- >50% of Libya's health care facilities functioning in 2019 forced to close in 2020.
- Closures severe in rural areas, mainly because of security threats and lack of national and health sector funding
- In 2020, WHO assessed health situation and needs in 79 Libyan communities (comprising over 850 000 people) in 111 of Libya's 22 districts
- Over 90% of these communities were in areas ranked as 3 or above on the severity scale
- Nearest health care facility for patients was on average 14 km away, and this meant that they were inaccessible for many people.

Attacks on health care facilities, Libya



Source: WHO Libya Country Office Annual Report 2020

Availability of five essential health care services in 56 PHC facilities in south Libya



Source: WHO Libya Country Office Annual Report 2020

RMNCAH interventions in Libya

Introduce new RMNCAH guidelines, complemented by protocols for pre-conception care, family planning, antenatal and intra-partum care, in 30 PHC centres across the country (WHO Country Office Libya Annual Report 2020)

Conclusion

- Low fertility levels in most countries of the region
 - Health care-related factors, Cultural, Economic, Social and Political
- Significant disruption of RMNCH services due to COVID-19
- Humanitarian crises already affected delivery of health services (pre-COVID)
 - COVID-19 affecting countries with already lowest levels of fertility
- Mitigation strategies available but depends on people's confidence in safety measures at the facility

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