Effects of COVID-19 on Essential MNCHN/FP/RH Care and the Strategies and Adaptations Emerging in Response Rapid Evidence Summary

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SECTION 01

Background

Maintaining Accessible, Quality MNCHN/FP/RH Coverage

- It is important to:
 - Understand causes of changes
 - Identify and implement strategies to work on provision of and demand for health care to:
- **PREVENT** decline from happening
- **DETECT & MITIGATE** decreases when they start
- **RESPOND** if a decrease in care coverage/access/quality is already occurring



Why Is a Rapid Evidence Summary Necessary?

- COVID-19 is a potential threat to equal access to, provision of and demand for quality MNCHN/RH/FP health care
- The summary
 - Builds on learning from earlier outbreaks*
 - Provides information on impacts and responses emerging from the COVID-19 pandemic in lower- and middle-income countries (LMICs)
 - Is designed to inform USAID program planning and identify priority gaps to address during and after the COVID-19 pandemic

*Stammer, E., Hirschhorn, L., Semrau, K., Vaz, L. "Rapid Evidence Summary: Lessons for COVID-19: Impact of prior disease outbreaks on maternal, newborn, and child health, voluntary family planning, and reproductive health services." Webinar, MOMENTUM Knowledge Accelerator, Washington, DC, July 2020.

Guiding Questions for Current Evidence Summary

- 1. How are the COVID-19 pandemic and responses to it affecting provision of and demand for MNCHN/FP/RH care?
 - Explore evidence of effect on MNCHN/FP/RH health and well-being
- 2. What (a) strategies are being used and (b) adaptations being made to existing health systems, and (c) what are their effects on provision of and demand for MNCHN/FP/RH care?
 - What contextual factors should be considered when choosing strategies to prevent, mitigate, or respond to effects of COVID-19 on MNCHN/FP/RH care provision and demand?



SECTION 02

Findings

Findings

As of September 30, 2020

- Peer-reviewed articles (19), Articles pending peer-review (3), Gray lit (17)*
 - Areas of focus (could be more than one)
 - Provision of care (24), demand (24), health outcomes (11)
 - Data sources referenced
 - HMIS, internet surveys, key informant interviews
 - **Study design** (could be more than one)
 - Retrospective observational (24), intervention studies (18)

Geographic Representation of Resources Reviewed



*23/39 resources include USAID priority MCH/PRH countries

Findings, cont.

As of September 30, 2020



Notes: *Reference could cover more than one area ^"Other" includes mental health, HIV, other essential health care, WASH

Reduced Provision of Essential Health Care

- Reduced numbers of health care workers due to reassignment^{25,7}, COVID-19 infection and death^{18,30,7}
- Increased stress among health care workers due to lack of training, exhaustion, fear^{4,26, 30,18}
 - Workers report they are seen as threats to safety of family and community, leading to stigma, rumors, and violence^{4,30}
- Increasing cost of sustaining MNCH care due to COVID-19 adjustments (e.g., PPE, isolation capacity)⁷
- Reduced provision of MNCH/FP/RH care^{7, 34,11}, immunization campaigns, outreach^{25,32}, lab capacity⁷
- Deteriorating data monitoring²⁴ and delays in routine reporting³⁵
- Disruptions in the supply chain^{9,33}, resulting in stock-outs/shortages (e.g., drugs^{16, 22,7}, PPE^{7, 30})

Reduced Demand for Health Care and Effects on Health

Demand for care

- Many patients have been unable/unwilling to seek care at health facilities^{7,18, 23, 29, 17,11}
 - Shifting to community-based care²⁸
 - FP: Varied shifts between longacting and short-acting methods^{2,29,} 35,39

Effects on health and wellbeing

- Higher levels of anxiety and depression among pregnant women and mothers^{6,10,19}
- Increase in teenage/adolescent pregnancy^{18,29}
- Increase in institutional stillbirth rate^{15,29}
- Increase in gender-based violence^{34,32,10}

*See Annex 2: Detailed Findings

National Policy Adaptations

- Development and dissemination of protocols for provision of RMNCH health care during the pandemic^{7,25,28}
- Designation of MNCH/FP/RH health care as "essential" to promote continuity of care and allow for advocacy efforts during lockdown^{25,13,32}
- Improved coordination, integration, and stakeholder/institutional alignment²⁸
- Use of data for rapid, dynamic policy decision-making^{23,28}
 - e.g., immunization targeting, placement of staff and to influence lockdown policy

Facility-Level Strategies and Adaptations

COVID-19 Risk Reduction:

- Social distancing, provision of PPE, and promotion of Infection Prevention and Control (IPC) measures in facilities^{18,27,28,1,7,25,37}
- Improved systems to triage patients^{7,23,28,37}

Health Care Worker-Focused:

- Recognition of and support for health care workers¹⁸
- More frequent communication for patient management⁷ and capacity building¹⁸

Technological Adaptations at the District and/or Facility Level

- Use of mobile/web-based technologies for:
 - Triage and referral^{23,7,24}
 - Requests for transportation to facilities²³
 - Remote monitoring and follow up^{20,38,25,24}
 - Hotlines providing information about care options and where to seek care^{28,13}
 - Training, learning, and supervision^{32,24}
- Commodity delivery (e.g., drones)^{7,25}

MNCHN/FP/RH STRATEGIES AND ADAPTATIONS

Community-based Care and Other Community-focused Strategies

- Using and coordinating with local Community Emergency Transport Systems^{7,21}
- Combatting fears with community mobilization and advocacy efforts^{18,25,27,28}
- Tools for promoting home-based antenatal care by community health workers with COVID-19 precautions¹²
- Increasing outreach to prevent teenage pregnancy spikes seen in Ebola²⁷

Home-based Antenatal Care Protocols for Community Health Workers

COVID-19 COMMUNITY COVID-19 COMMUNITY PRENATAL VIST CHECKLIST PRENATAL VIST CHECKLIST Before you leave your home: VISIT t to self-isolate at home PRE-VISIT Once outside the patient's home Clean all PowHER kit prenatal supplies with Proceed to the next patient's home and repeat steps 1-4. If not go straight home Ensure there are enough supplies in your kit for every scheduled visit Once you are home POST-VISIT 6 Maximum of 3 household visits a day a saving mothers

Hernandez, et al.

Ghana: Multi-Pronged Strategies Used to Improve Maternal Health Care

Policy and Systems	 Development and dissemination of guidelines for maternal and newborn care to all regions Strengthening of triaging at Emergency Obstetric and Newborn Care facilities (EmONC)
Use of mHealth	 Deployment of information technology for learning, supervision, and transfer of care information to improve quality of care e.g., calls, WhatsApp platforms to connect facilities, Zoom meetings, eMPDSR, Kybele Mobile Platform in Accra Use of drones for emergency MNH supplies and COVID-19 samples
Facility-Level and Community Adaptations	 Reorganization of health care delivery and introduction of appointment system for Maternal and Newborn care Improving quality Audit and feedback for learning related to health care, distance expert consultation Increased coordination for emergency referrals, including use of community emergency transport

EXAMPLE

Bangladesh: Adaptations May Be Helping Immunization Coverage Rebound

Shamsul Haque²⁸

Trend in EPI coverage during the period Jan- June 2020



Health Systems Solutions

- **Close collaboration between essential care and COVID-19 teams** to identify priorities, restructure care to accommodate physical distancing, promote task shifting at primary level²⁴
- Health product delivery changes: re-rerouting shipments; changing mode of transport for delivery; shipping to neighboring countries; exploring road transport and air charter options⁹
- **Production modified** through local sourcing options, alternative solutions (e.g., packaging, raw materials, hands-on TA), linkage to new markets, increased support to digital marketing/online presence, increased remote business advisory, introduction of new analytical tools³³
- Involve private sector and non-health departments to increase health system management capacity²⁴



SECTION 03

Summary of Evidence and Suggested Actions

What We Found

- Rapidly emerging evidence of effects on provision of and demand for MNCHN/FP/RH care
 - Combination of key informant interviews, quantitative surveys, and HMIS data
- Similar to prior outbreaks:
 - Robust evidence on negative impact on provision of and demand for MNCHN/FP/RH care
 - Potential for large-scale harm that could still be prevented
 - Less data on strategies used to lessen or respond to drops in care provision and demand—and their impact

What We Found, cont.

- Responses often involve employing multiple strategies, addressing different levels and factors associated with challenges
- Emerging strategies worth exploring or considering for spread include:
 - Responding to disruptions through changes in how health care is delivered
 - Effective protection and management of health workers
 - Engaging affected communities in decision-making to maintain or strengthen trust in health system
 - Ensuring safety of and confidence in health care
 - Harmonizing efforts of partners, national and donors for more efficient and effective
 - Measurement of access, quality, and equity, and
 - Identification of emerging solutions and mechanisms for spread

Evidence Gaps

- Very little publicly-available evidence on impact of strategies and adaptations
 - When data were available on outcomes of strategies
 - It was hard to determine relative contribution of strategy choices versus implementation, influential contextual factors, and other actions
 - Evidence not found on tailoring adaptations to different phases of the pandemic
- Limited insights into the quality of data presented
 - Many studies had weak study designs
 - e.g., small sample size, short timeframe (two- or three-month periods)
- Very little mention of private health sector
- Little evidence from fragile or conflict-affected settings

These limitations indicate a need to strengthen data collection and analysis at the community and facility level.

How We Can Contribute in Order to Better Learn and Translate Evidence into Action?

- Support improved documentation and sharing of adaptations and strategies, and their effects
- Apply adaptive learning, implementation research and context-aware monitoring approaches to understand contexts and results
 - Necessary to inform strategy choice, adaptation, and implementation in different settings
- Help translate emerging evidence into action



Useful Sources of Information

- Additional products from the Rapid Evidence Summary:
 - Policy brief (coming soon)
 - Annotated bibliography (coming soon)
- UNICEF <u>Rapid Situation Tracking Dashboard</u>
- Partnership for Evidence-Based Response to COVID-19
- Path <u>COVID-19 EHS Policy Tracker Dashboard</u>
- PMA <u>COVID-19 Surveys</u>
- World Bank/Global Financing Facility <u>Pulse Surveys</u>
- WHO/UNICEF Analysing and Using Routine Data to Monitor the Effects of COVID-19 on EHS: Module 1: Life-course Stages: RMNCAH, Including Immunization and Nutrition
- Universal Health Coverage Partnership: Stories from the field







SECTION 04

Annexes

ANNEX 01

Additional Notes on Methodology

ANNEX 1 NOTE ON METHODOLOGY

This note serves as a supplement to the evidence summary of the impact of COVID-19 on maternal, newborn, and child health, nutrition, voluntary family planning, and reproductive health (MNCHN/FP/RH) service delivery and utilization. It provides detailed information on the process used to search, filter, and extract relevant information for the summary. This note is organized according to three key questions: 1) What was the search strategy?

- 2) How were the results narrowed down?
- 3) How was key information extracted and compiled?

1. WHAT WAS THE SEARCH STRATEGY?

We conducted a search to identify peer-reviewed and gray literature related to the effects of COVID-19 on MNCHN/FP/RH services using a variety of sources detailed below.

PEER-REVIEWED

We used the <u>WHO COVID-19 Global Research Database</u> as the primary source of peer-reviewed literature for this evidence summary. This database is a repository of COVID-19 related peer-reviewed literature curated by the WHO that pulls from several sources including PubMed and Embase, among others, and is regularly updated with relevant articles. Given the basic search functionality available in the WHO database, we chose to cast a wide net in the search and then pare down the results during the screening phase.

The search was completed using terms focusing on MNCHN/FP/RH services. Using filters, results were limited to articles that were published between April 1 and August 17, 2020 and were in English. The final search phrase used in the WHO database is included in Box 1.





BOX 1

SEARCH TERMS USED IN THE WHO COVID-19 GLOBAL RESEARCH DATABASE

(("child health") OR ("diarrhea") OR ("malaria") OR ("malnutrition") OR ("measles") OR ("maternal") OR ("antenatal") OR ("perinatal") OR ("postpartum") OR ("newborn") OR ("postnatal") OR ("breastfeed") OR ("reproductive health") OR ("sexual health") OR ("contraceptive") OR ("contraception") OR ("primary health") OR ("family planning") OR ("immunization") OR ("health systems") OR ("community health") OR ("vaccination") OR ("immunization") OR ("abortion") OR ("miscarriage") OR ("stillbirth") OR ("pregnancy") OR ("careseeking") OR ("essential health services")) AND (entry_date:[20200401 TO 20200817])

PRE-PUBLICATION¹

Given the rapid emergence of information and need for dissemination in the era of COVID-19, prepublication databases have become increasingly important sources of up-to-date information. We searched a <u>repository</u> of COVID-19 related pre-publication papers curated by BioRxiv that combines articles from both the MedRxiv and BioRxiv databases. This repository had limited search functionality, requiring that we cast a wide net, using the provided subject areas, and pare down the results during the

BOX 2

PRE-PUBLICATION SUBJECT AREAS SELECTED

Subject areas: Health Informatics, Health Policy, Health Systems and Quality Improvement, Infectious Disease (except HIV), Nutrition, Obstetrics and Gynecology, Pediatrics, Primary Care Research, Public and Global Health, Sexual and Reproductive Health

¹Four relevant articles were identified from the pre-publication database (three from the search and one from an expert recommendation. However, at the time of writing (October 2020), one of the four articles had been published in peer-reviewed journals.





screening phase. Results were limited, using filters, to articles dated April 1 - August 12, 2020. The subject areas selected for the search are included in Box 2.

GRAY LITERATURE

To supplement the peer-reviewed and pre-publication database searches, we attended relevant webinars and included presentations and supporting documentation from events between August 1 and September 30, 2020. We also searched for gray literature on the websites of relevant organizations, including the United Nations International Children's Fund (UNICEF), USAID Learning Lab, the United Nations Population Fund (UNFPA), Healthy Newborn Network, Global Financing Facility and the World Health Organization, among others. Submissions were also solicited from MOMENTUM Knowledge Accelerator team members, who have broad global expert networks.

2. HOW WERE THE RESULTS NARROWED DOWN?

The WHO COVID-19 database search resulted in 3,377 articles, the pre-publication database search resulted in 329 articles, and the supplementary searches of gray literature and team member submissions resulted in 75 and 36 documents, respectively.

To determine a final set of documents for inclusion in the review, we carefully reviewed the abstracts of each document (or full text, in case the abstract was not available). We confirmed publication on or after April 1, 2020, and that resources were written in English. We also applied additional inclusion and exclusion criteria noted below. For inclusion, documents had to:

- Report on outcomes specifically resulting from COVID-19 pandemic or response
- Focus on human subjects
- Specify the outcome technical area (MNCHN/FP/RH) and outcome of interest (See Box 3)
- Focus on low- and middle-income countries

Documents were excluded if they focused on:

- Clinical drug or vaccine trials
- HIV/TB or COVID-19 related outcomes



3 EVIDENCE SUMMARY METHODOLOGY

After we applied the inclusion/exclusion criteria, we had 15 articles from the WHO database search, 3 articles from the pre-publication database, 18 documents from the gray literature search, and 11

documents from team submissions (see Figure 1). Once duplicates were dropped, 39 articles and reports were included for full extraction.

Additionally, documents were set aside² for background, context, or bibliography review if they focused on:

- Reviews of the literature
- Modeling outcomes solely
- Estimates of impact
- Recommendations only (no data collected or analyzed)

3. HOW WAS KEY INFORMATION EXTRACTED AND COMPILED?

We created a template to extract key information from the final 39 articles and reports. For each article, we recorded the geographic area, research methodology, study unit of interest, health domain, WHO building block addressed, findings, and intervention focus and impact (where applicable).

Three team members worked to extract relevant information from the 39 studies. Where questions emerged about studies, team members met and consulted one another to reach concurrence.

After extraction was complete, we analyzed the information compiled in the extraction form and

BOX 3

EVIDENCE SUMMARY OUTCOMES OF INTEREST

The <u>WHO Health Systems building blocks</u> were used to inform areas of interest included in the review. These were:

- Provision of health services
- Utilization of/demand for health services
- Service availability and readiness (access to routine care, and lack of routine care)
- Barriers to/enablers of access (e.g., transportation, financial barriers)
- Integration of services
- Decision-making related to care-seeking or treatment
- Quality of care provided
- Reproductive, maternal, newborn, and child health (RMNCH) commodity availability
- Human resource readiness, availability
- Health information system (HIS)
 functionality
- Funding for RMNCH
- Morbidity/Mortality (due to anything except the specific outbreak disease)

4 EVIDENCE SUMMARY METHODOLOGY



² Resources that were set aside are not included in the total number of articles found (N=39).



summarized the findings, noting trends across the various articles. The findings are documented in the PowerPoint report that accompanies this note and the forthcoming policy brief. Together, these documents provide a comprehensive description of the key findings from the evidence summary and the methodology that was used to develop it.



FIGURE 1: FLOW DIAGRAM OF LITERATURE REVIEW PROCESS

*Database collects COVID-19 related resources from a variety of databases including Embase and PubMed, among others.





Detailed Findings

How Much Information Found

QUESTION	AMOUNT OF AVAILABLE EVIDENCE	
1. How has COVID-19 affected provision of and demand for MNCHN/FP/RH care and health and well-being?		
Evidence of effects from country-based informants	Abundant—most evidence in this category	
Evidence of effects from data on care provision, utilization, and health and well-being gathered during the pandemic	Fewer studies reporting health care or survey data	

Reduced Provision of and Demand for Essential Health Care

FP/RH	 FP: 50% in FP visits-due to care provision (health care workers [HCWs] not available, no policies, inadequate PPE) and demand (fear of infection) (Malawi)¹⁸ 95% drop in FP visits in one hospital related to "preventive measures" for COVID (Ethiopia)¹ Preventive measures included: stopping care for non-emergency and self-referred, vulnerable HCWs exempted from work and transport shutdown In Gauteng, CYP dropped by 50%, 48% drop in LARC, 10% in IUCD. No similar drop in KZN (South Africa)^{2,31} STI: Internet survey patient-reported anecdotal challenges in STI care (China)¹⁶
MATERNAL AND NEWBORN HEALTH	 Antenatal care ANC drop >50% in setting of COVID-related care change (Ethiopia)¹ Drop in Guateng province, no similar drop seen in KwaZulu-Natal (South Africa)³¹ Impact on deliveries in facilities varied^{18,19,25} Remained relatively stable in some (Ethiopia, Kenya)^{1,29} Decreased in others (Nepal, Ghana)^{15,25} Decline in postnatal mothers registered and child welfare clinic registrants (Ghana)²⁵

EFFECTS ON PROVISION OF AND DEMAND FOR CARE

Reduced Provision of and Demand for Essential Health Care, cont.

Neonatal and Child Health	 >70% drop in emergency visits (Ethiopia)¹ Drop in pediatric admissions (Sierra Leone)²⁷ 68% reduction in overall facility-based care seeking and 37% reduction in overall community-based care seeking (Bangladesh)²⁸
Child Health	 37% of respondents reported some difficulty accessing growth monitoring (Zimbabwe)²⁰ Immunization^{22,27,28,25,5} Nearly 33,000 children (11%) missing vaccinations including 25% of children in Greater Accra area (Ghana)²⁵ 51% decline in the daily average total number of vaccinations administered - Around 8,438 children/day were missing immunization during the lockdown (Pakistan)⁵
Gender-Based Violence (GBV)	 Travel restrictions generate reduced access to sexual and gender-based violence (SGBV) services, especially in rural and remote areas (Zimbabwe and Somalia)^{32,34}
General	 Drop in utilization of primary health care 40% drop in outpatient visits per capita (Liberia)⁸ PHC utilization across the province declined by nearly 500,000 visits following the lockdown period (South Africa)² Surgical and medical emergency visits dropped by >50% (Ethiopia)¹

EXAMPLE

Countries Reported Disruptions Across Most Essential Care

WHO Pulse Survey, May-July 2020³⁷



EFFECTS ON PROVISION OF CARE

Effects on Human Resources

Reduction in human resources

- Infection and death among health care workers (HCW)
 - 700 HCW infected (Malawi)¹⁸; 183 HCW infected (Nepal)³⁰; Infected HCW (Ghana)⁷
- Reassignment for COVID-19 response (Ghana)^{25,7}

• Lack of training and support for emerging context

- Reported confusion and lack of training on what are perceived to be ever-changing guidelines regarding provision of care in the context of COVID (Malawi)¹⁸
- Increased psychosocial stress felt by maternal and child health providers (90%, reported globally) (Global & Nepal)^{4,26,30}
 - Lack of compensation/appreciation, fear/exhaustion, powerlessness due to conflicting guidelines (Nepal)³⁰
 - Worried they are being cast as disease vectors and a threat to safety of family and community, leading to stigma, rumors, and violence (Global, Nepal)^{4,30}

Challenges Due to Changes in Provision of Care

- Increasing cost of sustaining MNH care due to requirement to equip providers with PPE (Ghana)⁷
- Reduction in health care and lab capacity available
 - Facilities limiting care to only urgent cases (Ghana, Somalia)^{7, 34}
 - Postponing immunization campaigns and outreach (Ghana, Zimbabwe)^{25,32}
- Changes in quality
 - Intrapartum fetal heart rate monitoring decreased, and breastfeeding within 1 hour of birth decreased (Nepal)¹⁵
 - Maternal/newborn skin-to-skin increased (Nepal)¹⁵
 - Timely decision-making during obstetric emergencies reduced (due to delays in receiving COVID-19 test results) (Ghana)⁷
- Change in data quality
 - Deterioration in data monitoring (South Africa)²⁴
 - The number of public sector facilities reporting routine HMIS data fell (32% from district hospitals and 14% from primary health facilities in India)³⁵

Impact on Private Sector Delivery and Financing

World Bank Blog¹¹

- Government regulations require health care facilities to defer elective surgeries and outpatient care, often for an undefined period
- Private hospitals are spending more on PPE, isolation capacity, and supplies for treating respiratory illnesses, increasing their costs
- Economic disruption has reduced insurance coverage and the ability of individuals to pay for health care
- Private insurance companies are, in some cases, delaying claims settlements

EFFECTS ON DEMAND FOR CARE

Shifts in Care-Seeking Attitudes, Behaviors, and Practices

- Due to lockdowns, many patients have been unable or unwilling to visit hospitals (Global)¹¹
- Some patients perceive that it may be risky to seek care at health facilities out of fear of being infected (Ghana, Malawi, Uganda, Kenya, China)^{7,18,23,29,17,11}
- Larger reductions in IMCI care-seeking from facilities than from communities (Bangladesh)²⁸
- Changes in family planning method mix:
 - Shift from LARCs (IUDs, implants, injectables) to short-acting methods (South Africa, Kenya, India)^{2,29,35}
 - Decreases reported in short-term methods (India, Turkey)^{35,39}

Effects on Sexual, Reproductive, and Maternal Health Care

Maternal Health

 Higher levels of anxiety and depression for pregnant women and mothers (Turkey, Bangladesh, China)^{6,10,19}

Sexual and Reproductive Health

- Increase in teenage/adolescent pregnancy (Malawi, Kenya)^{18,29}
- Decreased desire for pregnancy (Turkey)³⁹
- Increased menstrual disorders (Turkey)³⁹

Effects on Newborn Health, GBV, and Nutrition

Newborn Health

- Increase in institutional stillbirth rate (Nepal, Kenya)^{15,29}
- Increase in institutional neonatal mortality (Nepal)¹⁵
- Higher incidence of fetal distress (China)¹⁷

GBV

- Increase in GBV (Somalia,
 Zimbabwe)^{34,32}
- Increase in emotional or moderate physical violence among women already experiencing it (>50) (Bangladesh)¹⁰

Nutrition and Food Security

- Significant increase in families experiencing moderate and severe food insecurity (Bangladesh)¹⁰
- Decrease in dietary diversity (Zimbabwe)²²
- Reduced physical activity and increased reported weight gain (Zimbabwe)^{22*}

EXAMPLE

GBV in Zimbabwe

Tapera³²

- Increase in calls to National GBV Hotline
 - 4,047 SGBV calls from the beginning of the lockdown on March 30 to July 15
 - Average increase of >70% compared to the pre-lockdown trends
- Closure of health facilities resulting from the current health sector crisis contributed to reduced accessibility of SGBV care
 - Includes timely access to post-rape treatment

STRATEGIES AND ADAPTATIONS TO EXISTING HEALTH SYSTEMS AND EMERGING EFFECTS

How Much Information Found

QUESTION	AMOUNT OF AVAILABLE EVIDENCE	
2. What strategies are being used and adaptations being made to the existing health system, and what are their effects on MNCHN/FP/RH provision of and demand for care?		
Strategies and adaptations made to existing health systems	Few studies capturing adaptations during outbreak; Little detail provided regarding implementation (e.g., cost, duration, etc.)	
Effects of adaptations on health systems	Little/no data on effects or impacts on health system	

National Policy Adaptations

- Development and dissemination of protocols regarding provision of RMNCH care during the pandemic (Ghana, Bangladesh)^{7,25,28}
- Designation of RMNCH care as "essential" to promote continuity of care and allow for advocacy efforts during lockdown (Ghana, Nigeria, Senegal, Zimbabwe)^{25,13,32}
- Improved coordination, integration, and stakeholder/institutional alignment (Bangladesh)²⁸
- Use of data for rapid, dynamic policy decision-making (e.g., immunization targeting, placement of staff and to influence lockdown policy) (Uganda, Bangladesh)^{23,28}

Facility-Level Strategies and Adaptations

COVID-19 Risk Reduction:

- Social distancing, provision of PPE and promotion of Infection Prevention and Control (IPC) measures in facilities (Malawi, Sierra Leone, Bangladesh, Ethiopia, Ghana, Global)^{18,27,28,1,7,25,37}
- Improved systems to triage patients (Ghana, Uganda, Bangladesh, Global)^{7,23,28,37}

Health Care Worker-Focused:

- Recognition of and support for health care workers (Malawi)¹⁸
- More frequent communication for patient management (Ghana)⁷ and capacity building (Malawi)¹⁸

Technological Adaptations at the District and/or Facility Level

- Use of mobile/web-based technologies for:
 - Triage and referral (Uganda, Ghana, South Africa)^{23,7,24}
 - Requests for transportation to facilities (Uganda)²³
 - Remote monitoring and follow up (China, Ghana, South Africa)^{20,38,25,24}
 - Hotlines providing information about care options and where to seek care (Bangladesh, Africa)^{28,13}
 - Training, learning, and supervision (Zimbabwe, South Africa)^{32,24}
- Commodity delivery (e.g., drones in Ghana)^{7,25}

MNCHN/FP/RH STRATEGIES AND ADAPTATIONS

Community-based Care and Other Community-focused Strategies

- Using and coordinating with local Community Emergency Transport Systems (CETS) (Ghana, Uganda)^{7,21}
- Combatting fears with community mobilization and advocacy efforts (Malawi, Ghana, Sierra Leone, Bangladesh)^{18,25,27,28}
- Developing tools to promote home-based antenatal care by community health workers with COVID-19 precautions (Guatemala)¹²
- Increasing outreach to prevent teenage pregnancy spikes seen in Ebola (Sierra Leone)²⁷

COVID-19 ANC Protocol for Community Health Workers



Hernandez, et al.

PRE-VISIT

EXAMPLE: EARLY SUCCESS IN USING MULTIPLE STRATEGIES

Ghana: Multi-Pronged Strategies Used to Improve Maternal Health Care

Policy and Systems	 Development and dissemination of guidelines for maternal and newborn care in the context of COVID-19 to all regions by the Family Health Division Strengthening of triaging at Emergency Obstetric and Newborn Care facilities (EmONC)
Use of mHealth	 Deployment of information technology for learning, supervision, and transfer of care information to improve quality of care Calls, WhatsApp platforms to connect facilities, Zoom meetings, eMPDSR, Kybele Mobile Platform in Accra Use of drones for emergency MNH supplies and COVID-19 samples
Facility-Level and Community Adaptations	 Reorganization of care delivery and introduction of appointment system for Maternal and Newborn care Improving quality Audit and feedback for learning related to care, distance expert consultation Increased coordination for emergency referrals, including use of community emergency transport

EXAMPLE: EARLY SUCCESS IN USING MULTIPLE STRATEGIES

Malawi: Multi-Pronged Strategies Used to Increase Safety and Maintain Care Delivery

Likaka¹⁸

Safety		Social distancing and mandatory use of face masks in all facilities
Provision of Care	HCWs	 Government recruited and deployed over 1,000 HCWs in late June Working in shifts Continuous professional development for sexual, reproductive, maternal, newborn, child and adolescent health (SRMNCAH) health workers Weekly peer-to-peer learning Awards quarterly to HCWs working on the frontlines to increase motivation
	Delivery of Care	 Suspended elective surgery cases Innovation and technology use in MNH, including digital tools
Demand		 Engage communities on a regular basis to change perception of HCWs as spreaders of COVID-19

EXAMPLE

Bangladesh: Adaptations May Be Helping Immunization Coverage Rebound

Shamsul Haque²⁸

Trend in EPI coverage during the period Jan- June 2020



CONTEXTUAL FACTORS ENABLING/PREVENTING SUCCESS

Additional Challenges in MNCHN/RH/FP Provision of and Demand for Care

Disruptions in the Supply Chain

- Global: Travel restrictions across countries affecting freight movements⁹
- Global: Reduced production in essential products due to supply and workforce challenges (e.g., 1-2month delays in India)^{9,33}
- Stock-outs/shortages for both COVID response and PHC:
 - Drugs (China, Zimbabwe, Ghana)^{16,22,7}
 - PPE (Ghana, Nepal)^{7,30}
 - Blood products, consumables, essential medicines (Ghana)⁷
- Risk of food insecurity due to disruptions in food production supply chain (Global)³³

Health Systems Solutions

- **Close collaboration between essential care and COVID-19 teams** to identify priorities, restructure essential care to accommodate physical distancing, promote task shifting at primary level (South Africa)²⁴
- Health product delivery changes: re-rerouting shipments; consolidating airfreight to ocean freight; changing mode of transport for final delivery; shipping to neighboring countries; exploring road transport and air charter options (Global)⁹
- Production modified through local sourcing options, alternative solutions (e.g., packaging, raw materials, hands-on TA), linkage to new markets, increased support to digital marketing/online presence, increased remote business advisory, introduction of new analytical tools (Global)³³
- Involvement of private sector and non-health departments to increase health system management capacity (South Africa)²⁴



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