The impact of the coronavirus disease 2019 (COVID-19) pandemic on global public health is unprecedented. The World Health Organization (WHO) declared the COVID-19 disease a public health emergency in January 2020 and a pandemic in March 2020. After this announcement, countries across the world adopted social distancing and took other actions to contain the spread of the virus. These measures impacted health systems in multiple ways—reducing the workforce, the availability of medical supplies, and the demand for and access to services. Mortality and morbidity were exacerbated, both directly from the outbreak and indirectly from other communicable and preventable diseases. This was largely due to changes in the priority of care, isolation, travel restrictions, interruptions in services, limited access to medicines and technologies, and economic slowdowns.

South Asia, where malnutrition continues to be a serious public health problem, has been severely impacted by the pandemic. Preventive antenatal and young child health care services have been dramatically underutilized in this period, and changes in the availability and consumption of food in households have put more women and children at risk in this region where 26.9 million children were already stunted (low height-for-age ratio), according to 2018 data.

Two separate studies in India and Bangladesh, led by the International Food Policy Research Institute (IFPRI) and Alive & Thrive (A&T), assessed the effects of the COVID-19 pandemic on maternal, infant, and young child nutrition (MIYCN) services and household food insecurity (HFI). These studies built upon implementation research that took place in India and Bangladesh just before the pandemic.

**Maternal nutrition study in rural India.** From 2017–2019, A&T implemented an intervention package to strengthen the delivery of maternal nutrition services through the government antenatal care (ANC) platform in Uttar Pradesh. In-person baseline and endline surveys were conducted to assess the impact of the intervention. The endline survey was completed just before the onset of COVID-19. The follow-up study used this study’s contacts and data to compare the situation within the health system and households before and during the pandemic.

**MIYCN counseling study in urban Bangladesh.** Before the pandemic, A&T initiated implementation research to standardize the delivery of MIYCN counseling services in Maternal, Newborn, and Child Health (MNCH) facilities in Dhaka City. In-person surveys with pregnant women and mothers were conducted in February 2020 to assess their receipt of health and nutrition services. This follow-up study in September 2020 used the sampling frame from the baseline survey—collected through phone interviews with health providers, pregnant women, and mothers—to assess how service delivery and receipt had changed during and after the government imposed restrictions on movement and gatherings.

### ABOUT THIS BRIEF
This brief summarizes the findings of studies undertaken in India and Bangladesh and outlines the health sector’s efforts to adapt MIYCN services. It also provides suggestions for further adaptations in the event of future pandemics or critical situations of similar scale.

### SAMPLE & METHODS

<table>
<thead>
<tr>
<th>Country</th>
<th>Health Providers</th>
<th>Mothers of children under 2</th>
<th>In-person survey</th>
<th>Phone survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>313</td>
<td>587</td>
<td>December 2019</td>
<td>August 2020</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>45</td>
<td>387</td>
<td>February 2020</td>
<td>August 2020</td>
</tr>
</tbody>
</table>
How Service Delivery Changed
FOR ANTENATAL AND YOUNG CHILD NUTRITION SERVICES

INDIA
In India, Accredited Social Health Activists (ASHA) and Anganwadi Workers (AWW) shared information on delivery of services through home visits and Village Health Nutrition Day (VHND).

- Between December 2019 and April 2020 provision of services declined substantially.
- Only 4% of frontline workers surveyed reported providing VHSND services; 29% home visits.
- Many frontline workers were involved in COVID activities, such as surveillance or quarantine management.
- Antenatal care was almost unavailable during the restrictions; focus was on high-risk pregnancies and women in their third trimesters.
- Young child nutrition services also were similarly unavailable; Anganwadi centers were closed.
- By July 2020, most services recovered to within 10 percentage points of levels seen prior to restrictions.

Services

<table>
<thead>
<tr>
<th>Services</th>
<th>December 2019</th>
<th>April 2020 (restrictions)</th>
<th>July 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducted VHND</td>
<td>96%</td>
<td>4%</td>
<td>89%</td>
</tr>
<tr>
<td>Provided ANC</td>
<td>100%</td>
<td>1%</td>
<td>78%</td>
</tr>
<tr>
<td>Prescribed IFA supplementation for pregnant women</td>
<td>97%</td>
<td>4%</td>
<td>86%</td>
</tr>
<tr>
<td>Monitored child growth</td>
<td>55%</td>
<td>5%</td>
<td>53%</td>
</tr>
<tr>
<td>Referred malnourished cases</td>
<td>10%</td>
<td>2%</td>
<td>9%</td>
</tr>
<tr>
<td>Provided immunization services for children</td>
<td>89%</td>
<td>4%</td>
<td>85%</td>
</tr>
</tbody>
</table>

BANGLADESH
In Bangladesh, A&T activities are on-going in urban health facilities within the city of Dhaka. Health workers from those clinics reported on the provision of care before and during the pandemic.

- Access to antenatal care diminished when restrictions were in place, but not significantly.
- Prescriptions and counseling for IFA supplementation continued.
- Facility services provided for mothers with children under two years of age were more severely affected during the COVID-19 restrictions. Growth monitoring and promotion declined as did immunizations.
- When clinics could resume service delivery, because of continued fear of COVID-19, none reached pre-pandemic levels.

Services for Pregnant Women

<table>
<thead>
<tr>
<th>Services</th>
<th>February 2020</th>
<th>April 2020 (restrictions)</th>
<th>July 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provided ANC</td>
<td>71%</td>
<td>64%</td>
<td>73%</td>
</tr>
<tr>
<td>Prescribed IFA supplementation</td>
<td>96%</td>
<td>93%</td>
<td>78%</td>
</tr>
<tr>
<td>Counseled on IFA supplementation</td>
<td>92%</td>
<td>88%</td>
<td>85%</td>
</tr>
</tbody>
</table>

Services for Children <2 Years

<table>
<thead>
<tr>
<th>Services</th>
<th></th>
<th>April 2020 (restrictions)</th>
<th>July 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measured weight</td>
<td>92%</td>
<td>55%</td>
<td>62%</td>
</tr>
<tr>
<td>Measured height</td>
<td>88%</td>
<td>31%</td>
<td>43%</td>
</tr>
<tr>
<td>Measured MUAC</td>
<td>67%</td>
<td>26%</td>
<td>31%</td>
</tr>
<tr>
<td>Provided immunization</td>
<td>100%</td>
<td>63%</td>
<td>78%</td>
</tr>
<tr>
<td>Counseled on EB</td>
<td>100%</td>
<td>88%</td>
<td>83%</td>
</tr>
<tr>
<td>Counseled on CF</td>
<td>100%</td>
<td>81%</td>
<td>79%</td>
</tr>
</tbody>
</table>
Provider Challenges

DELIVERING ANTENATAL AND YOUNG CHILD NUTRITION SERVICES

Reasons for the lapse in services were similar in both countries; fear of contracting the virus and transportations issues were common.

- In India, providers reported lacking personal protective equipment (PPE) and that mothers/pregnant women did not want providers to come to their homes.
- Providers in health facilities in Bangladesh reported having all necessary PPE.
- In Bangladesh, providers shared that their workload had increased during the pandemic.

<table>
<thead>
<tr>
<th>Top Challenges for Providers</th>
<th>India</th>
<th>Bangladesh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased workload during the pandemic</td>
<td>N/A</td>
<td>56%</td>
</tr>
<tr>
<td>Need to walk long distances</td>
<td>42%</td>
<td>16%</td>
</tr>
<tr>
<td>No transport to reach mothers/women in India/health facilities in Bangladesh</td>
<td>29%</td>
<td>29%</td>
</tr>
<tr>
<td>Women/mothers did not want providers to come to their homes</td>
<td>26%</td>
<td>N/A</td>
</tr>
<tr>
<td>Did not have PPE</td>
<td>26%</td>
<td>4%</td>
</tr>
<tr>
<td>Scared to deliver food or services to homes for fear of contracting virus</td>
<td>25%</td>
<td>38%</td>
</tr>
<tr>
<td>Discomfort due to weather/mask wearing</td>
<td>20%</td>
<td>7%</td>
</tr>
<tr>
<td>Village/community angry with providers</td>
<td>16%</td>
<td>2%</td>
</tr>
<tr>
<td>Provider family members did not want them to work during restrictions.</td>
<td>15%</td>
<td>11%</td>
</tr>
</tbody>
</table>
How Use of Services Changed
FOR ANTENATAL AND YOUNG CHILD NUTRITION SERVICES

INDIA
- During the restrictions, few women sought care at the VHND and in most cases they were not available.
- Home visits dropped to half the level prior to the pandemic.
- Use of counseling services whether through a home visit, VHND or through a mobile phone declined significantly and did not rebound when restrictions were eased.

USE OF SERVICES

<table>
<thead>
<tr>
<th>Use of Services</th>
<th>December 2019</th>
<th>April 2020 (restrictions)</th>
<th>July 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended VHND/community event</td>
<td>53%</td>
<td>16%</td>
<td>22%</td>
</tr>
<tr>
<td>Received home visit (from AWW/ASHA)</td>
<td>90%</td>
<td>44%</td>
<td>50%</td>
</tr>
<tr>
<td>Counseling on health/nutrition</td>
<td>93%</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>Counseling on BF</td>
<td>60%</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td>Counseling on CF</td>
<td>10%</td>
<td>9%</td>
<td>14%</td>
</tr>
</tbody>
</table>

BANGLADESH
- In urban Dhaka, large declines occurred in the use of services among pregnant women.
- After restrictions were lifted, use of services did not return to pre-pandemic levels.
- Similarly, clinic use for young children slowed, especially for preventative services such as child or infant growth monitoring and promotion, but also for immunization.

USE OF SERVICES BY PREGNANT WOMEN

<table>
<thead>
<tr>
<th>Use of Services</th>
<th>February 2020</th>
<th>March-May 2020 (restrictions)</th>
<th>September 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visited health facility</td>
<td>100%</td>
<td>65%</td>
<td>58%</td>
</tr>
<tr>
<td>Received IFA supplementation</td>
<td>40%</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Counseling on IFA supplementation</td>
<td>80%</td>
<td>8%</td>
<td>18%</td>
</tr>
<tr>
<td>Calcium supplementation</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Counseling on calcium supplementation</td>
<td>40%</td>
<td>13%</td>
<td>18%</td>
</tr>
<tr>
<td>Weight measured</td>
<td>93%</td>
<td>55%</td>
<td>65%</td>
</tr>
<tr>
<td>Counseling on weight gain</td>
<td>25%</td>
<td>25%</td>
<td>38%</td>
</tr>
</tbody>
</table>

USE OF SERVICES FOR CHILDREN <2 YEARS

<table>
<thead>
<tr>
<th>Use of Services</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Visited health facility</td>
<td>100%</td>
<td>33%</td>
</tr>
<tr>
<td>Child weight measured</td>
<td>73%</td>
<td>24%</td>
</tr>
<tr>
<td>Counseling on child growth</td>
<td>16%</td>
<td>8%</td>
</tr>
<tr>
<td>Immunization services</td>
<td>97%</td>
<td>36%</td>
</tr>
<tr>
<td>Counseling on BF</td>
<td>60%</td>
<td>7%</td>
</tr>
<tr>
<td>Counseling on CF</td>
<td>13%</td>
<td>12%</td>
</tr>
</tbody>
</table>
Reasons for Lack of Demand
FOR ANTENATAL AND YOUNG CHILD NUTRITION SERVICES

- Service use declined in both India and Bangladesh due to transportation difficulties and fear of leaving the house.
- Women/mothers also reported that services and providers were not available.

### Top Challenges

<table>
<thead>
<tr>
<th>Challenge</th>
<th>India</th>
<th>Bangladesh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of transport to health facility</td>
<td>30%</td>
<td>7%</td>
</tr>
<tr>
<td>Services providers/services were not available</td>
<td>26%</td>
<td>10%</td>
</tr>
<tr>
<td>Scared to leave house</td>
<td>22%</td>
<td>33%</td>
</tr>
<tr>
<td>Scared of getting infected at health center</td>
<td>N/A</td>
<td>28%</td>
</tr>
<tr>
<td>Did not want to meet with service providers</td>
<td>14%</td>
<td>N/A</td>
</tr>
<tr>
<td>Family didn't want mother/woman to leave house</td>
<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td>Lack of access to PPE</td>
<td>1%</td>
<td>0%</td>
</tr>
</tbody>
</table>

India Pregnant Women  Mothers
Bangladesh 19%  13%  19%
India 30%  7%  19%
Bangladesh 26%  10%  13%
India 22%  33%  19%
Bangladesh N/A  28%  14%
Bangladesh N/A N/A N/A
Bangladesh 9%  5%  3%
Bangladesh 1%  0%  5%
Both India and Bangladesh providers used multiple approaches to try to strengthen delivery and increase uptake of services during COVID-19 restrictions.

In addition to applying the standard COVID-19 safety protocols—social distancing and wearing PPE—they provided counseling via phone in Dhaka, and focused on delivering services to homes in India.

Other strategies included targeting priority and/or high-risk beneficiaries (India), bundling MIYCN counseling and services during scheduled ANC visits or childcare visits (Bangladesh), and coordinating with colleagues to arrange for child immunization.

**INDIA**

**Key Provider Adaptations**

- 80% provided counseling services at home
- 90% delivered take-home rations to households
- 50% delivered ORS and zinc to young children at home
- 40% delivered IFA to pregnant women
- 20% used cell phones for communication

**BANGLADESH**

**Key Provider Adaptations**

- 49% provided ANC counseling by phone
- 48% arranged immunization visits for children
- 44% provided IYCF counseling by phone
- 37% used the phone to provide ANC
- 16% used WhatsApp or SMS to remind mothers of immunizations for children
- 5% went to women’s homes to provide ANC
The pandemic dramatically increased household food insecurity (HFI) in the households surveyed by reducing the food supply as well as household incomes. This combined with the decline in use of MIYCN services—such as counseling on maternal nutrition and IYCF—places the most vulnerable at further risk for malnutrition and poor health outcomes.

Mothers/women in both countries shared their coping strategies to address the food security issue during restrictions.

- Many mothers in India, and about a third in Bangladesh reported sacrificing consumption of a preferred food because of lack of resources.
- Diet diversity was greatly affected as well. Two-thirds of Indian mothers reported less household diet diversity (eating a few kinds of food consecutively) compared to only 14% before the pandemic.
- Other common coping strategies included: skipping meals, eating less desired foods, or having smaller meals.
- Mothers in both countries reported devising ways to increase their income to buy food, including spending savings, reducing expenditures on other items, or borrowing money from friends or relatives.
Conclusion

LESSONS FOR THE FUTURE

The COVID-19 pandemic had a profound effect on both MIYCN services and HFI. HFI rose while the availability and use of nutrition services declined. Overall, the study findings highlight the need and potential benefit of making adaptations in both social protection strategies and service provision to reach vulnerable households and make nutrition services and quality diets more accessible.

Further, they reveal a need to prioritize strengthened, multisectoral approaches to MIYCN service delivery to ensure that during a pandemic or emergency at this scale, strategic adaptation plans will already be in place and can be activated swiftly and congruently.

Government authorities, service providers, and local NGOs in both countries made service and provision adaptations to cover gaps in both nutrition and ANC services to mothers of young children. They:

1. Delivered services to beneficiary homes
2. Prioritized high-risk beneficiaries.
3. Ensured compliance with COVID-19 safety guidelines in clinics such as the use of personal protective equipment (PPE) and social distancing.
4. Used telephone calls in place of in-person visits for counseling and even examinations.
5. Bundled services by providing nutrition counseling during scheduled ANC visits.

Despite all the adaptations, barriers to delivering and receiving adequate MIYCN care persisted. To address the challenges to MIYCN care and use, efforts are needed to:

1. Ensure adequate PPE for FLWs and beneficiaries during service provision, including masks, hand-sanitizer, gloves, etc.
2. Identify and address barriers to demand for adaptive services, i.e. fear of infection, lack of information, and/or lack of transport through social behavior change communications, and community engagement to ensure that the most vulnerable will be aware of and have facilitated access to nutrition services.
3. Bundle nutrition counseling and other MIYCN services with ANC or young infant and child appointments.
4. Ensure provider capacity to provide nutrition services while also responding to emergencies, adding supplemental staff and resources where needed.
5. Make further investments in safety, protocol, and risk communication training for health providers, as well as address their barriers to effective service delivery.
6. Reduce workloads and provide incentives for health workers to compensate for high-risk, high stress workloads over an extended period.
7. Expand and improve simple phone mHealth (audio) services for beneficiary communication, counseling services, and data collection.
8. Ensure the most vulnerable receive care via prioritized adaptation plans for women and underserved groups.

The combined impact of the pandemic on food insecurity and MIYCN services highlights the indirect and direct influence of other sectors such as food supply, transportation, and livelihoods on a mother’s ability not only to receive MIYCN services, but apply them in her daily life. There is clearly a need for cross-sector collaboration on these linked issues of income generation, food security, and MIYCN. Some potential actions and adaptations to address them include:

1. Plan for reinforced food-supply chains during emergencies.
2. Provide for supplemental rations for previously food insecure households (FIH) as well as rations for newly FIH.
3. Create sustainable programs for maintenance or restoration of livelihoods during emergencies.
4. Target social protection strategies and safety nets to improve household food security during and after emergencies.

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ALIVEANDTHRIVE.ORG