Impact of the COVID-19 pandemic on diets, nutrition services and nutrition practices in UNICEF’s Eastern and Southern Africa region: Evidence from remote surveys

Technical Brief

August 2022
Acknowledgements

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Please contact:

United Nations Children’s Fund
Eastern and Southern Africa Regional Office
P.O. Box 44145 Nairobi, Kenya 00100
Telephone: (254) 20-76 22226 | Facsimile: (254) 20-76 22078

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Key findings

Results of a remotely administered survey in six countries in Eastern and Southern Africa region (ESAR) revealed.

There was a shift away from healthy diets for children, adolescents, and pregnant and lactating mothers during the COVID-19 pandemic in terms of reduced variety of foods consumed and reduced consumption of animal source foods.

One fifth of caregivers reported that their infant was breastfed less often due to the COVID-19 pandemic.

Dietary changes during the COVID-19 pandemic were driven by cost-related changes in foods purchased due to reduced household incomes and higher food prices.

The COVID-19 pandemic may have resulted in some positive dietary changes in terms of decreased consumption of unhealthy drinks and snacks and increased consumption of micronutrient-rich vegetables.

A very high level of food insecurity was reported across all age groups according to the Food Insecurity Experience Scale and the Child Food Insecurity Experiences Scale.

Resources are urgently needed to re-expand and prioritize efforts to prevent stunting and micronutrient deficiencies in ESA by protecting breastfeeding, delivering micronutrient supplementation at scale, and increasing access to diverse, healthy diets.

Remote surveys may provide a useful means of collecting nutrition data, but more research and guidance is needed to ensure data quality and accounting for potential biases.
**Background**

In 2021, UNICEF’s Eastern and Southern Africa Regional Office (ESARO) undertook research to understand the impacts of the COVID-19 pandemic on diets, nutrition services and nutrition practices in the region. The research was undertaken in two parts: the first phase involved a desk review of all available literature across the ESAR, with a detailed report produced. The second phase involved primary data collection in six countries (Botswana, Eswatini, Kenya, Lesotho, Malawi, and Uganda) using telephone and internet-based surveys. The results of this second phase are presented in this report.

The overall objective of the study was to identify changes in child, adolescent and women’s nutrition practices, food security and nutrition services in six countries in ESAR (Botswana, Eswatini, Kenya, Lesotho, Malawi, and Uganda) since the COVID-19 pandemic began in 2020.

**Methodology**

Data collection took place remotely in six countries (Botswana, Eswatini, Lesotho, Kenya, Malawi, Uganda) between May and August 2021. Target groups included caregivers of children aged 0-23 months and 2-18 years; adolescents aged 10-18 years; pregnant and lactating women and women who recently gave birth; and health workers. Surveys were designed and administered using both Computer Assisted Telephone Interviewing (CATI) and U-Report (using the RapidPro platform) in all six countries. Surveys and polls were tailored to each respondent group, with standardized indicator modules integrated where possible. Respondents were reached either through lists provided by UNICEF that matched the target group criteria (Eswatini, Lesotho, Malawi, Uganda) or using the GeoPoll service provider and recruitment through Facebook (Kenya and Botswana).

**Results**

Overall, 57,589 respondents took part in the survey. A total of 14,869 people took part in the CATI surveys including 7,672 caregivers of children aged under two years; 1,466 caregivers of children aged 2-18 years; 1,386 adolescents aged 15-18 years; 2,451 pregnant and lactating women; and 1,894 health workers. A total of 42,720 people participated in U-report polls, including 16,990 caregivers of children; 23,104 adolescents aged 10-18 years; and 2,626 health workers. U-Report results were not reported for Kenya due to very low number of respondents. Overall, 63% of CATI survey respondents and 62% of U-report respondents were female and there was a bias towards mothers and caregivers with a higher level of education in Eswatini, Kenya, Malawi, and Uganda. Data on socio-economic status were not collected.

**Nutrition practices and behaviour**

**Children under two years:** Twenty percent of caregivers of children under two years who responded via the CATI survey reported that their infant was breastfed less often due to COVID-19 (Figure 1). Fifty nine percent of this sample reported reduced consumption of one or more healthy food groups for children aged 6-23 months (average 3 out of 11 healthy food groups). Animal source foods and unhealthy snacks were most frequently reported to be consumed less due to COVID-19. Respondents from the Lesotho sample were most likely to report reduced consumption for all food groups, while respondents from Botswana were least likely to report reduced consumption for all food groups. Across all countries, fruits and vegetables were most frequently reported to be consumed more. Reported breastfeeding rates were very low in this sample and minimum dietary
diversity (MDD) based on 24-hour dietary recall was higher than expected, possibly due to sample and respondent bias (Box 1). In this sample, unhealthy foods were consumed on the day prior to interview by 51% of children aged 6-23 months and sweetened beverages by 48% of children.

**Figure 1:** Reported change in the frequency of breastfeeding infants under two years (CATI U2 survey)

Children and adolescents aged 2-18 years: Eighty two percent of caregivers of children aged 2-18 years and self-reporting adolescents aged 15-18 years who responded via the CATI survey reported reduced consumption of one or more healthy food groups due to COVID-19 (5.7 out of 13 food groups). Seventy three percent of caregivers of children who responded via U-Report reported that their child consumed reduced variety of foods since COVID-19 (Figure 2). Animal source foods and unhealthy drinks and snacks were the food groups most frequently reported via the CATI survey to be consumed less among children aged 2-18 years due to COVID-19, and vegetables were most frequently reported to be consumed more. Respondents from the Kenya sample were most likely to report reduced consumption for all food groups, while respondents from Botswana and Malawi were least likely to report reduced consumption for all food groups. Results from the adolescent U-Report survey for adolescents aged 10-18 years also found that animal source foods and unhealthy drinks and snacks were the food groups most frequently reported to be consumed less, and vegetables and staple foods were the food groups most frequently reported to be consumed more.

**Figure 2:** Reported change in variety of foods consumed by children aged 2-18 years (U-Report caregivers survey)
Pregnant and lactating women and recent mothers: Eighty four percent of pregnant and lactating women and recent mothers who took part in the CATI survey reported reduced consumption of one or more healthy food groups due to COVID-19 (5.5 out of 13 food groups). Animal source foods (organ meat, meat and chicken, fish and dairy products), and unhealthy drinks and snacks were the food groups most frequently reported to be consumed less, and vegetables, beans and pulses were most frequently reported to be consumed more.

Food insecurity

A high level of food insecurity was reported in this sample. Severe household food insecurity according to the Food Insecurity Experience Scale (FIES) was reported by 39% of caregivers of children under two years, 33% of caregivers of children aged 2-18 years, and 34% of pregnant and lactating mothers and mothers who recently gave birth. Severe or moderate household food insecurity according to the FIES was reported by 76% of caregivers of children under two years, 74% of caregivers of children aged 2-18 years, and 72% of pregnant and lactating mothers and mothers who recently gave birth. The countries with respondents reporting the highest levels of food insecurity were Lesotho (84.8% of caregivers of children under two years) and Kenya (81.4% of adolescents). Adolescents reported on their food security experiences through the child FIES. According to the three-point scale, many food insecurity experiences were reported by 60% of adolescents aged 15-18 years via CATI and 76% of adolescents aged 10-18 years via U-Report.

Results from the caregivers U-Report survey revealed that, while food continued to be available on markets, access to food fell due to reduced purchasing power because of lack of money (62% of respondents) and/or higher food prices (33% of respondents) (Figure 3). Foods most frequently reported to have reduced access were animal source foods (meat, dairy, eggs) and fruit. Access to vegetables was largely reported to be unchanged or improved since COVID-19. Sixty-five percent of respondents from the pregnant and lactating women CATI survey reported that their household income had decreased since the pandemic began.

Figure 3: Reported main reason for changes in child’s food consumption during COVID-19 pandemic (U-Report caregivers survey)

<table>
<thead>
<tr>
<th>Country</th>
<th>Total</th>
<th>Higher food prices</th>
<th>Food unavailable</th>
<th>Less money</th>
<th>Other reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>31%</td>
<td>3%</td>
<td>62%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>19%</td>
<td>3%</td>
<td>74%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Malawi</td>
<td>36%</td>
<td>2%</td>
<td>58%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Lesotho</td>
<td>40%</td>
<td>4%</td>
<td>56%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Eswatini</td>
<td>35%</td>
<td>3%</td>
<td>60%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Botswana</td>
<td>33%</td>
<td>4%</td>
<td>55%</td>
<td>7%</td>
<td></td>
</tr>
</tbody>
</table>

Nutrition services faced disruption during the COVID-19 pandemic across the six countries studied in ESA as reported by both service users and service providers. Almost all caregivers reported that they continued to seek treatment for their sick child during the COVID-19 pandemic. Those that did not seek treatment cited lack of money as the main reason, although COVID-19 infection and COVID-19-related movement restrictions were cited as reasons by some. COVID-related disruption to maternal health and nutrition services was frequently reported by pregnant and recent mothers: 24% did not attend one or more antenatal care appointment; 20% reduced the frequency of their Iron and Folic Acid (IFA) supplement consumption; and 29% had disrupted birth plans. Disruptions to maternal services were most frequently reported by users in Eswatini, Kenya and Uganda.

From a health worker perspective, the largest disruptions in the provision of services were experienced in the delivery of IFA to adolescent girls due to the closure of schools (reported by 54% of health workers – up to 81% in Uganda), delivery of IFA and MMS to pregnant women, and nutrition counselling. Wasting screening and treatment were the services least frequently reported to be disrupted. Many health workers reported adaptations to normal modes of service delivery to allow their continuation in the COVID-19 context, including physical distancing and use of alternative community platforms. Service-specific adaptations were also reported, such as the integration of vitamin A supplementation into campaigns, prepositioning of wasting treatment supplies, reduced frequency of follow up visits and use of the Family mid-upper arm circumference (MUAC) approach.
Discussion and conclusions

Results from the CATI and U-Report surveys indicate that the COVID-19 pandemic had a negative impact on infant and young child feeding practices in terms of reduced frequency of breastfeeding and a negative impact on child, adolescent and mothers’ diets in terms of reduced variety of foods consumed, and reduced consumption of animal source foods rich in protein and micronutrients. Results also suggest some positive impacts on diets in terms of reduced consumption of unhealthy drinks and snacks high in sugar, salt and fat, and increased consumption of micronutrient-rich vegetables. The decreased consumption of unhealthy foods is contrary to findings of the literature review reported in phase one of this study, which suggested that consumption of unhealthy foods increased in some countries. The largest dietary changes were reported in the 2-18 year and pregnant, lactating and recent mother groups, which suggests that the negative impact on young child diets (age 6-23 months) was buffered to some extent.

There was large variation in the results between the six countries, with Lesotho showing the largest negative impact on diets for the under two years age group and Kenya for the 2–18-year age group. The different demographic characteristics of the Lesotho sample compared to other countries (older age and lower level of education) may explain some of these differences.
There are several limitations in the use of remote survey methodology to estimate dietary patterns for whole countries. There are large demographic differences between the population sampled in this study and the general population, as well as potential respondent bias (Box 1). Results are therefore not generalizable across the entire population and rather should be interpreted only as an indicator of how and to what extent the COVID-19 pandemic affected diets and feeding practices in the region.

A very high level of food insecurity was reported in this sample across all age groups, which is very concerning. The highest levels of food insecurity were reported in Lesotho and Kenya. Dietary changes appear to have been driven by changes in foods purchased in markets due to both reduced incomes and higher food prices.

Results indicate that access to and uptake of nutrition services reduced during the COVID-19 pandemic, especially maternal health and nutrition services, IFA for adolescent girls due to school closures and nutrition counselling. Other services, such as wasting screening and treatment, appear to have been more resilient. In contrast, administrative data collected from countries by UNICEF in 2020 showed a sharp decline in Vitamin A supplementation coverage, especially in the first trimester, and an increase in people reached with Infant and Young Child Feeding (IYCF) counselling and messaging. Health workers reported that nutrition services were adapted to enable the continuation of service delivery. Reported adaptations are in line with other documented experiences of programming in the COVID-19 context and demonstrate the outworking of policy-decisions at programme level.

The negative impact of COVID-19 on diets, nutrition services and nutrition practices is likely to affect progress against child nutrition targets in ESA for many years to come. Resources are urgently needed to re-expand and prioritise efforts to prevent stunting and micronutrient deficiencies by protecting breastfeeding, delivering micronutrient supplementation at scale, and increasing access to diverse, healthy diets for children, pregnant and lactating women, and young people. Routine health systems must be strengthened to ensure access to nutrition services for all, national social safety nets expanded to support nutritionally vulnerable households, and comprehensive strategies developed to build sustainable livelihoods. To protect against the impact of future health emergencies, social safety nets must be shock responsive, nutrition and health services delivered via platforms able to flex during crises, and nutrition risk communication and community engagement (RCCE) strategies developed during the emergency preparedness stage to enable rapid rollout at the onset of new emergencies.

**Limitations**

This study provided important learning for UNICEF on the use of remote survey methods to collect nutrition data in the ESA region. Use of remote survey methods enabled the collection of data on caregiver, adolescent and health worker perceptions and experiences at a time when COVID-19 related movement restrictions prevented household surveys. However, there are important limitations that limit the generalizability of some of the results. Respondent and sample bias are indicated by the very high non-response rate (significantly higher than in household surveys); large proportion of male respondents in caregiver surveys; the high level of disagreement between IYCF standardized indicator results compared to household survey data in the same countries; high level of missing IYCF data; and higher level of maternal education of survey respondents compared to household surveys in some countries. As demographic data were not collected, it is not possible to understand the direction or extent of bias or apply weightings to results. As a result, data for standardized indicators (particularly IYCF indicators) are not generalizable and should not be compared to country household survey data. More research is needed to understand inherent bias in remote survey methods and how and when remote surveys can be used to inform nutrition programming.
Recommendations

To support optimal nutrition practices

• Expand efforts to protect breastfeeding during shocks through Risk Communication and Community Engagement (RCCE) strategies that result in clear, targeted messaging, and the continuation and expansion of breastfeeding counselling services.
• Expand multi-sectoral efforts to ensure access to a diverse diet for vulnerable households during shocks, including social protection and livelihoods programmes, with an emphasis on protecting access to animal source foods including flesh foods, dairy products, and eggs.
• Routinely include standardized indicators on the consumption of unhealthy foods and sugar-sweetened beverages in all national and sub-national diet-related surveys to build a repository of trend data.

To support food security

• Build preparedness plans for future crises like the COVID-19 pandemic to protect livelihoods and incomes when movement is restricted.
• Build the shock-responsiveness of social protection systems to enable scale up during crises that impact food security, livelihoods, and incomes.
• Build linkages between social protection, livelihoods, and nutrition interventions to protect incomes, support household food security and sustain and improve child diets.

To build resilience of nutrition services

• Explore further examples of system resilience during COVID-19 to identify characteristics and lessons that can be learned and applied to other contexts.
• Research barriers to access of ANC, IFA, and birthing services in countries most negatively impacted by COVID-19 (Eswatini, Kenya and Uganda) to identify possible entry points for building system resilience in these countries.
• Explore the impact and acceptability of programme adaptations used during the COVID-19 pandemic to identify the potential for their long-term integration into national protocols and emergency preparedness plans.
• Explore alternative platforms for the delivery of IFA to adolescent girls in the context of school closures and to target out-of-school girls.

To inform the use of remote surveys for measuring child, adolescent and women’s feeding practices

• Explore possible sample and respondent bias in this and other remote survey results to understand the reasons for differences between the results of remote versus household surveys and identify best practice interpretation of results.
• Develop guidance for remote surveys that gives specific guidance on sample selection and survey design to mitigate potential biases.
• Collect data on socioeconomic indicators and geographical location in all remote surveys to build an understanding of sample bias.
• Explore the utility of routine use of remote national and sub-national surveys to complement less frequent national household survey data.
Dietary changes during the COVID-19 pandemic were driven by cost-related changes in foods purchased due to reduced household incomes and higher food prices.
### Key data

#### Nutrition behaviours and practices indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Indicator definition</th>
<th>Botswana</th>
<th>Eswatini</th>
<th>Kenya</th>
<th>Lesotho</th>
<th>Malawi</th>
<th>Uganda</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced breastfeeding frequency due to COVID-19</td>
<td>Percentage of mothers who reported reduced frequency of breastfeeding due to COVID-19</td>
<td>9.7%</td>
<td>9.7%</td>
<td>36.9%</td>
<td>13.5%</td>
<td>70%</td>
<td>32.7%</td>
<td>19.9%</td>
</tr>
<tr>
<td>Decreased consumption of one or more healthy food groups 6-23 months due to COVID-19</td>
<td>Percentage of mothers or caregivers reporting decreased consumption of one or more healthy food groups (out of 11 food groups) by their child aged 6-23 months due to COVID-19</td>
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<td>42.8%</td>
<td>64.2%</td>
<td>72.2%</td>
<td>67.2%</td>
<td>66.2%</td>
<td>59.2%</td>
</tr>
<tr>
<td>Average number of healthy food groups with decreased consumption 6-23 months due to COVID-19</td>
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<td>3.2 (3.3)</td>
<td>4.5 (3.8)</td>
<td>3.1 (3.2)</td>
<td>3.4 (3.3)</td>
<td>3.0 (3.4)</td>
</tr>
<tr>
<td>FIES moderate and severe – caregivers of children &lt;2 years</td>
<td>Percentage of mothers or caregivers of children &lt;2 years reporting moderate or severe household food insecurity according to the Insecurity Experience Scale (FIES)</td>
<td>58.3%</td>
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<td>81.2%</td>
<td>84.8%</td>
<td>73.8%</td>
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<tr>
<td>Reduced health seeking for children &lt;2 years due to COVID-19 risk</td>
<td>Percentage of mothers/caregivers who did not seek treatment for their sick child &lt;2 years (n=192) due to risk of COVID-19</td>
<td>25.0%</td>
<td>2.9%</td>
<td>8.3%</td>
<td>8.0%</td>
<td>35.7%</td>
<td>6.5%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Reduced health seeking for children &lt;2 years due to COVID-19 movement restrictions</td>
<td>Percentage of mothers/caregivers who did not seek treatment for their sick child &lt;2 years (n=192) due to COVID-19 related movement restrictions</td>
<td>15.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>12.0%</td>
<td>0.0%</td>
<td>16.1%</td>
<td>7.4%</td>
</tr>
</tbody>
</table>

#### Food insecurity indicators

#### Uptake of health and nutrition services indicators

### CATI summary table

<table>
<thead>
<tr>
<th>Respondent group</th>
<th>Indicator</th>
<th>Indicator definition</th>
<th>Botswana</th>
<th>Eswatini</th>
<th>Kenya</th>
<th>Lesotho</th>
<th>Malawi</th>
<th>Uganda</th>
<th>Total</th>
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<td>12.0%</td>
<td>0.0%</td>
<td>16.1%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Caregivers of children age 2-18 years (n=1,466) and adolescents age 15-18 years (n=1,386)</td>
<td>Decreased consumption of one or more healthy food groups 2-18 years due to COVID-19</td>
<td>Percentage of children aged 2-18 years with reported decreased consumption of one or more healthy food groups (out of 13) due to COVID-19</td>
<td>69.2%</td>
<td>87.5%</td>
<td>92.1%</td>
<td>78.7%</td>
<td>71.5%</td>
<td>91.9%</td>
<td>81.9%</td>
</tr>
<tr>
<td></td>
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<td>5.8 (4.0)</td>
<td>7.4 (4.0)</td>
<td>5.7 (4.6)</td>
<td>4.3 (4.2)</td>
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<td>5.7 (4.3)</td>
</tr>
</tbody>
</table>
### Caregivers of children age 2-18 years (n=1,466) and adolescents age 15-18 years (n=1,386)

**FIES moderate and severe – caregivers of children 2-18 years**

- Percentage of caregivers of children aged 2-18 years reporting moderate or severe household food insecurity according to the Food Insecurity Experience Scale (FIES)
  - **Botswana**: 55.6%
  - **Eswatini**: 79.3%
  - **Kenya**: 81.4%
  - **Lesotho**: 81.4%
  - **Malawi**: 65.0%
  - **Uganda**: 73.0%
  - **Total**: 73.8%

**FIES severe – caregivers of children 2-18 years**

- Percentage of caregivers of children aged 2-18 years reporting severe household food insecurity according to the Food Insecurity Experience Scale (FIES)
  - **Botswana**: 25.0%
  - **Eswatini**: 32.0%
  - **Kenya**: 39.5%
  - **Lesotho**: 33.9%
  - **Malawi**: 37.2%
  - **Uganda**: 28.6%
  - **Total**: 33.2%

### Child FIES

**Average number of food security experiences – adolescents aged 15-18 years**

- Average number of food insecurity experiences (out of 20) according to the Child Food Insecurity Experience Scale (FIES)
  - **Botswana**: 6.7 (6.0)
  - **Eswatini**: 10.1 (6.5)
  - **Kenya**: 10.5 (6.8)
  - **Lesotho**: 10.4 (6.6)
  - **Malawi**: 8.2 (5.6)
  - **Uganda**: 8.5 (6.3)
  - **Total**: 9.1 (6.4)

**Child FIES many experiences (4-point scale) – adolescents aged 15-18 years**

- Percentage of adolescents aged 15-18 years reporting many food insecurity experiences according to the Child Food Insecurity Experience Scale (FIES) using 4-point scale (none, some, many, very many)
  - **Botswana**: 12.4%
  - **Eswatini**: 18.0%
  - **Kenya**: 16.2%
  - **Lesotho**: 19.6%
  - **Malawi**: 24.5%
  - **Uganda**: 19.8%
  - **Total**: 19.0%

**Child FIES very many experiences (4 point scale) – adolescents aged 15-18 years**

- Percentage of adolescents aged 15-18 years reporting very many food insecurity experiences according to the Child Food Insecurity Experience Scale (FIES) using 4-point scale (none, some, many, very many)
  - **Botswana**: 28.9%
  - **Eswatini**: 48.1%
  - **Kenya**: 52.5%
  - **Lesotho**: 48.3%
  - **Malawi**: 33.6%
  - **Uganda**: 38.1%
  - **Total**: 41.2%

**Child FIES many experiences (3-point scale) – adolescents aged 15-18 years**

- Percentage of adolescents aged 15-18 years reporting many food insecurity experiences according to the Child Food Insecurity Experience Scale (FIES) using 3-point scale (none, some, many)
  - **Botswana**: 41.2%
  - **Eswatini**: 66.0%
  - **Kenya**: 68.7%
  - **Lesotho**: 67.9%
  - **Malawi**: 58.2%
  - **Uganda**: 57.9%
  - **Total**: 60.2%

### Reduced health seeking for child 2-18 years due to COVID-19 risk

- Percentage of caregivers and adolescents reporting that they did not seek treatment for child aged 2-18 years when sick (n=268) due to risk of COVID-19
  - **Botswana**: 25.0%
  - **Eswatini**: 16.7%
  - **Kenya**: 30.8%
  - **Lesotho**: 11.5%
  - **Malawi**: 33.3%
  - **Uganda**: 13.0%
  - **Total**: 21.3%

### Reduced health seeking for children 2-18 years due to COVID-19 related movement restrictions

- Percentage of caregivers and adolescents reporting that they did not seek treatment for child aged 2-18 years when sick (n=268) due to COVID-19 related movement restrictions
  - **Botswana**: 10.0%
  - **Eswatini**: 4.2%
  - **Kenya**: 0.0%
  - **Lesotho**: 3.8%
  - **Malawi**: 3.3%
  - **Uganda**: 17.4%
  - **Total**: 6.6%

### Pregnant and lactating women (PLW) and women who just gave birth (n=2,451)

**Reduced consumption of one or more healthy food groups PLW and new mothers due to COVID-19**

- Percentage of PLW and women who just gave birth reporting reduced consumption of one or more healthy food groups due to COVID-19
  - **Botswana**: 64.5%
  - **Eswatini**: 87.2%
  - **Kenya**: 90.0%
  - **Lesotho**: 92.0%
  - **Malawi**: 78.4%
  - **Uganda**: 92.6%
  - **Total**: 84.2%

**Average number of healthy food groups with decreased consumption by PLW and new mothers due to COVID-19**

- Average number of healthy food groups (out of 13) with decreased consumption due to COVID-19 by PLW and women who just gave birth - mean value (standard deviation)
  - **Botswana**: 3.7 (4.2)
  - **Eswatini**: 5.6 (4.3)
  - **Kenya**: 6.5 (4.0)
  - **Lesotho**: 6.7 (3.7)
  - **Malawi**: 4.4 (3.9)
  - **Uganda**: 6.0 (3.8)
  - **Total**: 5.5 (4.1)
Pregnant and lactating women (PLW) and women who just gave birth (n=2,451)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Botswana</th>
<th>Eswatini</th>
<th>Kenya</th>
<th>Lesotho</th>
<th>Malawi</th>
<th>Uganda</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIES moderate and severe - PLW and new mothers</td>
<td>49.6%</td>
<td>72.9%</td>
<td>80.2%</td>
<td>83.4%</td>
<td>66.7%</td>
<td>77.4%</td>
<td>71.8%</td>
</tr>
<tr>
<td>FIES severe - PLW and new mothers</td>
<td>19.7%</td>
<td>30.7%</td>
<td>42.1%</td>
<td>45.6%</td>
<td>35.6%</td>
<td>30.6%</td>
<td>34.1%</td>
</tr>
<tr>
<td>Reduced ANC visits due to COVID-19 risk</td>
<td>5.6%</td>
<td>6.5%</td>
<td>18.5%</td>
<td>9.2%</td>
<td>9.5%</td>
<td>8.3%</td>
<td>8.9%</td>
</tr>
<tr>
<td>Reduced ANC visits due to COVID-19 related movement restrictions</td>
<td>4.3%</td>
<td>6.0%</td>
<td>12.2%</td>
<td>3.1%</td>
<td>1.2%</td>
<td>25.6%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Reduced consumption IFA tablets due to lack of supply during COVID-19</td>
<td>12.4%</td>
<td>28.6%</td>
<td>26.7%</td>
<td>9.4%</td>
<td>3.4%</td>
<td>18.6%</td>
<td>14.4%</td>
</tr>
<tr>
<td>Reduced health facility births due to COVID-19 risk</td>
<td>19.3%</td>
<td>28.4%</td>
<td>42.8%</td>
<td>19.9%</td>
<td>11.4%</td>
<td>42.8%</td>
<td>29.2%</td>
</tr>
</tbody>
</table>

U-Report results summary table

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Botswana</th>
<th>Eswatini</th>
<th>Kenya</th>
<th>Lesotho</th>
<th>Malawi</th>
<th>Uganda</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced variety of foods consumed by children since COVID-19</td>
<td>68.7%</td>
<td>74.4%</td>
<td>72.0%</td>
<td>72.8%</td>
<td>75.0%</td>
<td>73.0%</td>
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</tr>
<tr>
<td>Reduced frequency of meals consumed by children since COVID-19</td>
<td>33.4%</td>
<td>51.5%</td>
<td>53.8%</td>
<td>68.9%</td>
<td>64.7%</td>
<td>65.1%</td>
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</tr>
<tr>
<td>Reduced meal portion consumed by children since COVID-19</td>
<td>46.0%</td>
<td>34.6%</td>
<td>24.0%</td>
<td>46.7%</td>
<td>41.5%</td>
<td>45.2%</td>
<td></td>
</tr>
<tr>
<td>Children skipping meals since COVID-19</td>
<td>30.7%</td>
<td>40.2%</td>
<td>44.0%</td>
<td>14.9%</td>
<td>41.2%</td>
<td>22.8%</td>
<td></td>
</tr>
<tr>
<td>Reduced snacking for children since COVID-19</td>
<td>23.0%</td>
<td>23.8%</td>
<td>32.0%</td>
<td>20.5%</td>
<td>16.6%</td>
<td>19.8%</td>
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<tr>
<td>Reduced food consumption due to high food cost since COVID-19</td>
<td>33.0%</td>
<td>34.5%</td>
<td>40.0%</td>
<td>35.9%</td>
<td>19.3%</td>
<td>31.2%</td>
<td></td>
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<tr>
<td>Reduced food consumption due to lack of money since COVID-19</td>
<td>55.3%</td>
<td>59.6%</td>
<td>56.0%</td>
<td>57.7%</td>
<td>73.8%</td>
<td>61.9%</td>
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</tr>
</tbody>
</table>
### U-Report results summary table (Continued)

<table>
<thead>
<tr>
<th>Respondent group</th>
<th>Indicator name</th>
<th>Indicator definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescents aged 10 - 18 years (n=23,104)</td>
<td>Simplified Child FIES many experiences – adolescents aged 10-19 years</td>
<td>Percentage of adolescents aged 10-18 years reporting many food insecurity experiences (out of 10) according to the Simplified Child FIES using 3-point scale (none, some, many)</td>
</tr>
<tr>
<td></td>
<td>COVID-19 adolescent messaging</td>
<td>Percentage of adolescents aged 10-19 years who reported seeing or hearing messaging on healthy eating/diets since COVID-19</td>
</tr>
<tr>
<td></td>
<td>COVID-19 no adolescent messaging</td>
<td>Percentage of adolescents aged 10-19 years who did not report seeing or hearing messaging on healthy eating/diets since COVID-19</td>
</tr>
<tr>
<td></td>
<td>Botswana</td>
<td>Eswatini</td>
</tr>
<tr>
<td>Adolescents aged 10 - 18 years (n=23,104)</td>
<td>63.3%</td>
<td>88.2%</td>
</tr>
<tr>
<td>COVID-19 adolescent messaging</td>
<td>62.5%</td>
<td>47.2%</td>
</tr>
<tr>
<td>COVID-19 no adolescent messaging</td>
<td>30.2%</td>
<td>44.4%</td>
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</table>