Impact of the COVID-19 pandemic on diets, nutrition services and nutrition practices in Eswatini

September 2022
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Key findings

Results of a remote survey in 2021 revealed that the COVID-19 pandemic led to changes in the diets of infants, children, adolescents, and pregnant and lactating women in Eswatini.

10% of caregivers reported that their infant under two years was breastfed less frequently due to the COVID-19 pandemic.

75% of caregivers reported that their child consumed less variety of foods due to the COVID-19 pandemic.

Reduced consumption of animal source foods and staple foods was frequently reported by all age groups due to the COVID-19 pandemic.

Some positive changes in diets were reported due to the COVID-19 pandemic, including reduced consumption of unhealthy foods and drinks and increased consumption of vegetables.

87% of pregnant and lactating women reported reduced consumption of one or more food groups due to COVID-19.

Many respondents reported that reduced household income, and increased food prices, led to changes in the types of foods purchased during the COVID-19 pandemic.

76% of caregivers reported that they ate less during the pandemic to enable their children to eat.

A very high level of moderate or severe food insecurity was reported in this sample during the COVID-19 pandemic according to the Food Insecurity Experience Scale (82% of caregivers of children < 2 years, 79% of caregivers of children aged 2-18 years, and 73% of PLW).

Health workers reported disruptions in the delivery of all nutrition services during the pandemic, with disruptions in delivery of iron and folic acid supplementation for adolescent girls and maternal micronutrient supplementation most frequently reported.
Background

The first case of COVID-19 was detected in Eswatini on 13th March 2020, after which it spread across the country. By July 2022, 1,417 confirmed COVID-19 deaths had been reported. According to the COVID-19 INFORM risk scale, Eswatini is classified as a high COVID-19 risk country (score 5.3). While there are no known direct impacts of COVID-19 on child nutrition status globally, secondary impacts of the virus have led to reduced household incomes, disruption to food systems and reduced uptake of nutrition and health services.

Eswatini was one of six countries included in research undertaken by UNICEF’s Eastern and Southern Africa Regional Office (ESARO) in 2021 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 in the region using remote methods including telephone and internet-based surveys, the overall objective of which was to identify changes since the COVID-19 pandemic began in child, adolescent and women’s nutrition practices, food security and nutrition services. Results of the second phase for Eswatini are presented here.

Methodology

Primary data were collected in Eswatini in August 2021. Target groups included caregivers of children aged 0-2 years and 2 to 18 years; adolescents aged 10 to 18 years; pregnant and lactating women (PLW) and women who recently gave birth; and health workers. Surveys were designed and administered using Computer Assisted Telephone Interviewing (CATI) and U-Report (using the RapidPro platform). Surveys and polls were tailored to each respondent group, with standardized indicator modules integrated where possible. Respondents were reached through lists provided by Geopoll.

Findings

Sample characteristics

Sample characteristics from the CATI surveys and U-Report surveys are described in Table 1. Most CATI respondents were caregivers of children aged 0-2 years (46%) and female (96%). Analysis of the characteristics of the caregiver 0-2 year CATI sample showed that it was biased towards more educated mothers compared to household survey samples. This should be considered in the interpretation of results.

1 https://covid19.who.int/region/afro/country/ls
2 The total score is 10, of which a score of 6.5 or more is considered very high, 5 or more high, 3.5 or higher medium, 2 or higher low, and below that very low.
3 Women who gave birth within 20 months prior to the survey.
4 Data on socioeconomic status and urban versus rural location were not collected so level of bias is unknown.
Table 1: Characteristics of CATI and U-Report respondents from Eswatini

<table>
<thead>
<tr>
<th>Survey type</th>
<th>Total planned sample size</th>
<th>Total actual sample size</th>
<th>Male</th>
<th>Female</th>
<th>Caregivers of children aged 0-2</th>
<th>Adolescents</th>
<th>Caregivers of children aged 10-18</th>
<th>PLW</th>
<th>HW</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATI</td>
<td>2,218</td>
<td>2,495</td>
<td>4%</td>
<td>96%</td>
<td>46%</td>
<td>8%</td>
<td>11%</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>U-REPORT</td>
<td>2,218</td>
<td>715</td>
<td>41%</td>
<td>58%</td>
<td>N/A</td>
<td>26%</td>
<td>34%</td>
<td>N/A</td>
<td>40%</td>
</tr>
</tbody>
</table>

*Adolescents aged 15-18 years **Adolescents aged 10-18 years were targeted, but 94% of respondents were aged 20-29 years.

Nutrition practices and behaviour

Children under two years: Ten percent of caregivers of children under two years of age reported via the CATI survey that their child was breastfed less frequently due to COVID-19. Forty three percent of caregivers reported that their child aged 6-23 months reduced consumption of one or more food groups due to COVID-19. The mean number of food groups with reduced consumption was 1.9 (out of 11). Decreased consumption was reported most frequently for the following food groups: dairy products (24%), meat and poultry (24%), cereals, roots and tubers (23%), pulses and beans (21%), eggs (19%) and oils and fats (19%). Many caregivers reported that unhealthy foods were also consumed less (sugary foods 20% and savoury and fried snacks 17%). Food groups most frequently reported to be consumed more were vitamin A rich fruits and vegetables (14%) and other fruits and vegetables (12%).

Figure 1: Proportion of caregivers in Eswatini reporting changes in consumption of children under two years by food group (CATI U2 survey)
75% of caregivers reported that their child consumed less variety of foods due to the COVID-19 pandemic.
Reduced consumption of animal source foods and staple foods was frequently reported by all age groups due to the COVID-19 pandemic.
Children and adolescents aged 2-18 years: Eighty-eight percent of caregivers of children aged 2-18 years and adolescents reported via the CATI survey reduced consumption of one or more food groups due to COVID-19. The mean number of food groups with reduced consumption for this age group was 5.8 out of 13 food groups. Healthy food groups most frequently reported to be consumed less by children aged 2-18 years due to COVID-19 were rice, bread, cereals and tubers (60%), meat and poultry (56%), eggs (51%), dairy products (50%), beans and pulses (50%), fish and seafood (48%), and oils and fats (48%). Many respondents also reported reduced consumption of unhealthy food groups (savoury and fried snacks 46% and sugary foods 45%) as well as sugary drinks (47%). The foods most frequently reported to be consumed more by children aged 2-18 years due to COVID-19 were dark green leafy vegetables (33%), vitamin A rich fruits and vegetables (24%) and other vegetables (19%).

Figure 2: Proportion of caregivers and adolescents reporting changes in consumption of children aged 2-18 years by food groups (CATI U19 survey)

Of the caregivers of children who responded via U-Report, 75% reported that their child consumed less variety of food, 52% of respondents reported that their child consumed less meals, 35% reported that their child consumed smaller portions, 40% reported that their child skipped meals, and 34% reported that their child snacked less because of COVID-19. Food groups most frequently reported to be consumed less due to COVID-19 by adolescents self-reporting via U-Report were meat (42%) and dairy products (36%) and the food group most likely to be consumed more was vegetables (36%).

Pregnant and lactating women and women who recently gave birth: Eighty-seven percent of PLW and women who recently gave birth reported via CATI reduced consumption of one or more food groups due to COVID-19. The mean number of food groups with reduced consumption for this group was 5.67 (out of 13). Decreased consumption was reported frequently across all healthy food groups, with the food groups reported most frequently being dairy products (55%), eggs (50%), meat and poultry (50%), beans and pulses (47%), and organ meat (47%). Many respondents also
reported reduced consumption of unhealthy food groups (sugary foods 52%, savoury and fried snacks 43%), as well as sugary drinks (43%). Foods most frequently reported to be consumed more were dark green leafy vegetables (31%), other vegetables (22%), other fruits (20%) and vitamin A rich fruits and vegetables (20%).

**Figure 3:** Proportion of pregnant and lactating women in Eswatini reporting changes in consumption by food group (CATI MQ survey)

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Increased COVID-19</th>
<th>Decreased COVID-19</th>
<th>No change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark green leafy vegetables</td>
<td>31%</td>
<td>29%</td>
<td>40%</td>
</tr>
<tr>
<td>Other vegetables</td>
<td>22%</td>
<td>32%</td>
<td>46%</td>
</tr>
<tr>
<td>Other fruits</td>
<td>20%</td>
<td>46%</td>
<td>34%</td>
</tr>
<tr>
<td>Vitamin A rich fruits and vegetables</td>
<td>20%</td>
<td>43%</td>
<td>37%</td>
</tr>
<tr>
<td>Rice, bread, cereals, tubers</td>
<td>19%</td>
<td>42%</td>
<td>39%</td>
</tr>
<tr>
<td>Beans and pulses</td>
<td>18%</td>
<td>47%</td>
<td>36%</td>
</tr>
<tr>
<td>Meat and poultry</td>
<td>16%</td>
<td>59%</td>
<td>37%</td>
</tr>
<tr>
<td>Dairy products</td>
<td>11%</td>
<td>55%</td>
<td>35%</td>
</tr>
<tr>
<td>Eggs</td>
<td>9%</td>
<td>50%</td>
<td>41%</td>
</tr>
<tr>
<td>Fish and seafood</td>
<td>3%</td>
<td>45%</td>
<td>47%</td>
</tr>
<tr>
<td>Nuts and seeds</td>
<td>7%</td>
<td>42%</td>
<td>51%</td>
</tr>
<tr>
<td>Organ meat</td>
<td>0%</td>
<td>47%</td>
<td>47%</td>
</tr>
<tr>
<td>Oils and fats</td>
<td>6%</td>
<td>45%</td>
<td>49%</td>
</tr>
</tbody>
</table>

**Food insecurity**

**Food access:** The most frequently reported reason for reduced consumption of foods by PLW and mothers who recently gave birth was diminished purchasing power. Substituting expensive items (such as meat) for cheaper items was commonly reported. Fifty seven percent of PLWs reported that their household income had decreased since before the pandemic. Caregivers reported via U-Report that the most common reason for changes in food consumption patterns during COVID-19 were financial, either due to the family having no money (60%) or the high cost of food (35%). Seventy six percent of caregivers reported that they ate less during the pandemic to enable their children to eat.

**Food Insecurity Experience Scale (FIES):** According to the Food Insecurity Experience Scale (FIES), severe household food insecurity was experienced by 42% of caregivers of children under two years, 25% of caregivers of children aged 2-18 years, and 20% of PLW and mothers who recently gave birth. Severe or moderate household food insecurity was experienced by 82% of caregivers of children under two years, 79% of caregivers of children aged 2-18 years, and 73% of PLW and mothers who recently gave birth.

**Social protection:** School meals are an important form of social protection that serve to protect child diets. In Eswatini, 28% of adolescents aged 15-18 years reported receiving free school meals during the COVID-19 pandemic, while 22% attended school but did not receive free school meals and 50% did not attend school because schools were closed.
Nutrition services

User experiences: Six percent of caregivers of children under two years of age reported having a sick child during the past year and not seeking treatment. Of these, 40% did not seek treatment because of lack of money, 12% due to COVID-19 movement restrictions and 8% due to fear of contracting COVID-19. Eighteen percent of caregivers of children aged 2-18 years (and adolescents aged 15-18 years) did not seek treatment when sick during the past year. Of these respondents, 49% reported that they did not seek treatment due to lack of money and 6% due to risk of COVID-19. Six percent of pregnant women did not attend an ANC visit due to risk of COVID-19 and 28% of women who recently gave birth changed their birth plans due to COVID-19.

Health worker perceptions: Health workers reported some disruption to nutrition services during COVID-19. Services most frequently reported to be disrupted were iron and folic acid (IFA) supplementation for adolescent girls (30%), maternal micronutrient supplementation (25%), nutrition counselling (24%), and delivery of micronutrient powders (MNPs) (21%) and vitamin A supplementation (18%). Very few health workers reported the disruption of wasting screening and severe wasting treatment services.

Health workers reported that nutrition programmes were adapted to enable delivery in the COVID-19 context. Adaptations included physical distancing at contact points, use of alternative delivery platforms in the community and the use of radio, TV and other media to deliver nutrition messages. Health workers reported that some services had not yet restarted at the time of the survey, including IFA supplementation (55%), delivery of MNPs (46%), maternal micronutrient supplementation (23%) and vitamin A supplementation (20%) which suggests a high level of ongoing disruption.

Discussion and conclusions

Results indicate that the COVID-19 pandemic had a negative impact child, adolescent, and women’s diets in Eswatini in terms of reduced variety of foods consumed, and reduced consumption of healthy foods, especially animal source foods and staple foods. 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. Dietary changes in Eswatini were largely driven by changes in foods purchased due to reduced household incomes and increased food prices. A high level of food insecurity was reported in this sample across all age groups during the COVID-19 pandemic, which is very concerning.

Respondents reported reduced health seeking behaviours due to COVID-19, primarily due to lack of money. Health workers reported disruption in the delivery of some nutrition services, with disruptions to IFA supplementation for adolescent girls and maternal micronutrient supplementation being reported most frequently, with evidence of ongoing disruption. This may indicate the need to build the resilience of nutrition services targeted to adolescent girls and pregnant women.

The negative impact of COVID-19 on diets, nutrition services and nutrition practices is likely to affect progress against child nutrition targets in Eswatini for 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, adolescents and pregnant and lactating women. To protect against future emergencies, routine health systems must be strengthened, and population nutrition resilience built by expanding national social safety nets and developing strategies to build sustainable livelihoods.

Remote survey methods proved useful for collecting information on caregiver, adolescent and health worker perceptions and experiences in Eswatini at a time when movement restrictions prevented household surveys. The utility of their wider use to complement household survey data should be explored.
Some positive changes in diets were reported due to the COVID-19 pandemic, including reduced consumption of unhealthy foods and drinks and increased consumption of vegetables.