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Effects of COVID-19 imposed school closure on school feeding program in Addis Ababa, Ethiopia

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ABSTRACT

The school feeding program in government schools in Addis Ababa was interrupted due to the COVID-19 pandemic. The study employed a qualitative research to explore the effects of the interruption on students’ well-being. The study participants were recruited from seven primary schools within six sub-cities of Addis Ababa using convenience sampling. Fifty-three in-depth interviews were conducted with students, parents, teachers, school principals, and school feeding agency officials. Thematic analysis was then conducted. The study found that the school feeding program has indeed improved school attendance and in class concentration; helped decrease lateness and dropout; reduced child labour and abuse; and taken off parent’s burden. The interruption of the program has dire consequences on students’ well-being, and their parents. Some effects this study finds troubling are: food shortage; skipping meals; eating poor quality food; eating reduced portion size; and children being subject to child abuse and child labour for menial activities. Effective use of available resources through existing channels, such as the food banks and the urban safety net program, and encouraging innovative ideas, including the ‘Each One Feed One’ initiative, would help vulnerable children and families survive during the pandemic.

1. Introduction

Hunger and malnutrition disrupts student’s school enrolment, regular attendance, learning, and health. The toll is severe in girls; it forces them to dropout of school and thereby increase their vulnerability to early marriage, early pregnancy and violence (WFP, 2020b). Healthy and well-nourished children perform better in education and have better chances to achieve their potential as adults, and this, in turn, strengthens individuals and countries stability, and make communities more resilient in this rapidly changing world (FAO, 2019; WFP, 2020b). Despite the great efforts made by countries to improve access to education over the past years, about 73 million primary schoolchildren in low-income countries go to school hungry (WFP, 2020b).

Provision of nutritious meals through school feeding programs is found to be a proven and cost-effective intervention in improving vulnerable children’s school enrolment and attendance, academic performance, cognitive development, girl’s equality and inclusion in education, and health (Adelman, Gilligan, & Lehrer, 2008; Bundy et al., 2009; FAO, 2019; WFP, 2020b). Furthermore, the school feeding programs could contribute to poverty reduction by enhancing income of schoolchildren’s households and their community (FAO, 2019; WFP, 2020b). At the beginning of 2020, about 388 million children in 161 countries ate meals at school every day of the school year (WFP, 2020b). Recognising its paramount benefit, governments in low-income countries has increased budget for school feeding programs (FAO, 2019; WFP, 2020b). As a result, school meals provision in low-income countries increased substantially over the last decade (36% more children enrolled in the school feeding program between 2013 and 2020 (WFP, 2020b).

In the face of the novel coronavirus (COVID-19) crisis, most governments around the world have temporarily closed educational institutions to contain the spread of the pandemic. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), as of March 23, 2020, nationwide school closures impacted about 90% of the world’s student population – about 1.38 billion students worldwide (UNESCO, 2020). During the peak of the crisis, schools were closed in
199 countries (WFP, 2020b). Ethiopia has also closed all its schools as of March 16, 2020 (3 days after the first confirmed COVID-19 case is reported in the country). Following the school closure, schoolchildren are kept away from schools and thus they are no longer getting school meals (Er, 2020; WFP, 2020b). As the school meals are the main meal of the day and the only source of nutritious food for many of the schoolchildren in low-income families (Cullen, 2020; Er, 2020; WFP, 2020b), its suspension will contribute to food insecurity and malnutrition apart from its potential impact on schooling and child labour.

1.1. School feeding program in Addis Ababa

In many of the government schools in Addis Ababa city (the capital of Ethiopia), a good sum of schoolchildren does not get basic food while at school as their parents are unable to pack meals. According to a survey conducted in public primary schools in Addis Ababa, about 27% of students eat only once a day while about 16% confirmed that there are times where they do not eat the whole day (BoE & BoWCA, 2015). In such situations, children could not follow their lessons effectively and their health and academic conditions deteriorated due to lack of food.

To tackle these problems, teachers, individual volunteers, and some Non-governmental Organizations (NGOs) have been trying to support those who were identified as needy by schools. For example, ‘Yenat Weg’, a charitable association supported by local donors, fed about 20,135 schoolchildren twice-a-day (breakfast and lunch) in two pilot sub-cities of Addis Ababa – Arada and Kirkos sub-cities (BoE, 2020). However, the psychosocial effect of being labelled as needy has been a challenge; students who were adamantly in need of the school feeding but were running away in fear of the discrimination. Therefore, such small scale and individually started initiatives to provide meals for needy students in some schools were not able to address the full scale of the problems and could not reach those who did not disclose their problems. As a result, students’ absenteeism and dropout were common challenges in the schools (Abiy, 2017; School Feeding Agency, 2019).

As of the 2019–20 academic year, the Addis Ababa city administration has taken the issue seriously and engaged in the school feeding program to make education accessible and equitable to all children in the city. The program aimed to tackle the challenges of previous ad-hoc initiatives by making the program not need based rather a right to have food. In this approach, anyone attending government primary schools (Kindergarten to Grade 8) has the right to have meals at school. Accordingly, about 360,000 children have been fed in all primary schools of the city twice-a-day (School Feeding Agency, 2019) before it has been suspended for an indefinite period due to the COVID-19 pandemic.

While the school feeding is interrupted due to COVID-19, children from low-income families who are already at higher risk for poor health and academic performance are in great danger; even brief periods of food insecurity can cause long-term developmental, psychological, physical, emotional and health problems (Althoff, Ametti, & Bertmann, 2016; Dunn, Kenney, Fleischacker, & Bleich, 2020; Ke & Ford-Jones, 2015). The conditions of the schoolchildren and their parents need to be investigated so as to develop evidence based intervention strategies to reduce the harmful effects of the pandemic. This study was therefore aimed to explore the effects of COVID-19 imposed interruption of the Addis Ababa school feeding program on the beneficiaries’ well-being, the very reason the program was launched.

2. Method

Qualitative research design was used to explore the perceptions of school children, children’s families, and other stakeholders about the benefits of the school feeding program and the impacts the interruption brought on the beneficiaries. We mainly used in-depth interviews with key informants to obtain data.

2.1. Participant recruitment

First, the school feeding agency officials were contacted to have an overview of the program progress across all the 10 sub-cities of Addis Ababa city, namely: Addis Ketema, Akaki Kality, Arada, Bole, Gulele, Kirkos, Kolfe Keranio, Lideta, Nifas Silk-Lafto, and Yeka sub-cities. The agency officials classified the sub-cities into two groups based on their locations: central and peripheral. Three sub-cities from the peripheral and three from the central were then selected randomly. From each of the sub-cities, except Yeka sub-city where two schools were selected, one primary school was selected in consultation with the school feeding agency. Accordingly, Ras Abebe Aregay primary school from Arada sub-city; Meles Fere from Bole sub-city; Ethiopia Hedase from Gulele sub-city; Abiot Ermiya from Kirkos sub-city; Hedase from Nifas Silk-Lafto sub-city; and, Mekane Hiwot and Tigil Lenetsanet from Yeka sub-city were included in the study.

Second, from the selected schools, stakeholders with significant roles in the school feeding program (students, parents, teachers, school principals, and school feeding agency officials) were purposely recruited through convenience sampling in consultation with the school principals and using the network of the researchers. The sample size for this study was therefore limited to 53 participants based on data saturation principle (successive interviews are consistently yielding little or no new information (Dawson, 2009)).

2.2. In-depth interviews and procedures

The interview guide was designed by multidisciplinary researchers based on literature reviews in the area and inputs from potential stakeholders. The guide was then shared among qualitative research experts in social work, sociology, economics, and nutrition for comments and pretesting. Comments were then incorporated, and the final interview guide was developed. The guide included questions on: benefits of the school feeding program; the school closure impact on household food insecurity; changes in feeding habit and health following interruption of school meals; and mechanisms to resume school feeding during the school closure, among others.

Four interviewers (2 females and 2 males) were recruited based on their educational qualifications (Master’s degree in social sciences or public health), previous experience in conducting qualitative interviews, and language skills – fluency in both English and Amharic languages. The interviewers then given a one-day training by the lead researchers on the study objectives and the interview guide. Finally, the interviewers conducted mock interviews among themselves to get familiarized with the interview guides.

Face-to-face interviews were then conducted complying with COVID-19 precautions, including physical distancing and wearing protective mask, when possible. Otherwise, phone interviews were arranged. Interviews were conducted in Amharic and transcribed into English by the interviewers. The interviews lasted between 8 min and 1 h, with an average of 19 min. The data collection was undertaken during May 11–28, 2020.

2.3. Analysis

Multidisciplinary team of three researchers (social work, education, and public health) conducted the analysis using a thematic approach (Castleberry & Nolen, 2018). The analysis was undertaken alongside the data collection with the aim to refine the interview questions and accommodate emerging as well as anticipated themes (Popa, Ziebland, & Mays, 2000; Ziebland & McPherson, 2006). The interviews were transcribed according to the different key themes developed before and during the data collection phase. The initial transcripts are thoroughly read and re-read by the researchers, and then the themes were revised to best capture quotes/data of importance for each of the questions.
3. Findings

3.1. Characteristics of the study participants

A total of 53 in-depth interviews were conducted with 16 students (7 girls and 9 boys), 17 parents (12 mothers and 5 fathers), 18 teachers and principals (7 females and 11 males), and 2 officials from the Addis Ababa school feeding agency. The age of students ranged from 11 to 17 years with a median of 14.5 years. The parent’s age range was from 26 to 62 years with a median of 37 years. Students are from 5th to 8th grade (a number of rooms per household was one (the maximum was 3). Eleven of the parents are either self-employed or civil servants while six are unemployed. On average, a parent had one child enrolled into the school feeding program (the maximum was 3) (See Table 1). The school feeding program is very welcomed by the students, parents, teachers and school administrators.

3.2. Benefits of the school feeding program in Addis Ababa

The school feeding program is considered as a very important and critical intervention for the success of teachers’ efforts in providing quality education. Analysis from response data in this study reveals some interesting findings that go in-line with the statements made about the importance of the school feeding program. Regarding the benefits of the school feeding program, four main themes emerged from the interviews: 1) improve children’s schooling, 2) improve food security and health, 3) reduce child labour and ensure child right, and 4) provide relief for parents.

3.2.1. Improve children’s schooling

This study finds that the school feeding program has made schools preferred places for students and a stress-free environment for teachers. While the primary beneficiaries from the school feeding program are students, teachers also report that the program has benefitted them in smoothening their instructional deliveries. One teacher’s notes on the benefits the program offers teachers as: “The program is helpful for teachers too because students started becoming more interested in their education which makes teachers more committed.” – Teacher, Abiot Ermija primary school.

The study also finds that the school feeding program has improved school attendance, in class concentration, and reduced lateness and dropout. All the parents, teachers, and school administrators report that the school feeding program is helping children stay at school and focus on their education. As one parent noted, “The school feeding program has benefited my youngest child to focus on his education and stay in school this year.” – Parent, Hedase primary school.

Teachers also agree that the intervention has helped improve student retention and span of attention. One teacher puts this as a success outcome, “There used to be many students who don’t pay attention in the class; some of them are forced to dropouts. The feeding program has a great part in reducing school absenteeism. They are now more interested and actively engaged in their schoolwork.” – Teacher, Meles Fere primary school.

School principals reported that the school feeding program has helped them achieve a 100% student retention and highly reduced school dropout.

3.2.2. Improve food security and health

Two principals at two different schools reported that the feeding program has practically improved student’s food security and thereby health. They recall the situation before the introduction of the feeding program as difficult and a hurdle in the way of a smooth teaching-learning process.

“Students used to fall in classrooms and in the playgrounds as they are coming to class without having breakfast. They spend the whole day in the school without even having lunch and they go to their house and might not get dinner too.” – Principal, Meles Fere primary school.

Another principal also puts the pre-feeding program students experience similarly, “It is very difficult for a child to sit long hours in the class without having food.” In the same vein, a teacher has put the situation at schools before the introduction of the school feeding program as dire, “There used to be many students who get frequently sick because of hunger.” – Teacher, Meles Fere primary school.

3.2.3. Reduce child labour and ensure child right

Dropping out from school pulls other strings, such as child labour. Children dropout of school to get menial jobs at an early age to cover the basic needs. Before the introduction of the school feeding program, some of the schoolchildren used to engage in menial jobs during and outside school hours to generate income for themselves and for their parents. One parent noted, “Last year, my older daughter dropped out of school and became a servant because she didn’t get this chance (the school feeding).” – Parent, Hedase primary school.

The school principals indicated that the school feeding program has contributed in reducing child labour and child abuse. Since all the

| Characteristics                  | Students | Parents | Teachers and Principals | SF agency officials |
|----------------------------------|----------|---------|-------------------------|---------------------|
| Sex                              | n (%)    | n (%)   | n (%)                   | n (%)               |
| Female                           | 7 (42.9%)| 12 (70.6%)| 7 (38.9%)               | 2 (100.0%)          |
| Male                             | 9 (56.2%)| 5 (29.4%)| 11 (61.1%)              | 0                   |
| Age                              | n (%)    | n (%)   | n (%)                   | n (%)               |
| Median                           | 14.5 years| 37 years| NA                      | NA                  |
| (Range)                          | (11–17)  | (26–62)| NA                      | NA                  |
| Education level                  | n (%)    | n (%)   | n (%)                   | n (%)               |
| Median                           | 7.5 grade| NA      | NA                      | NA                  |
| (Range)                          | (5–8)    | NA      | NA                      | NA                  |
| Household size                   | n (%)    | n (%)   | n (%)                   | n (%)               |
| Median                           | NA       | 5 members| NA                      | NA                  |
| (Range)                          | (2–8)    | NA      | NA                      | NA                  |
| Rooms in the house               | n (%)    | n (%)   | n (%)                   | n (%)               |
| Median                           | NA       | 1 room  | NA                      | NA                  |
| (Range)                          | (1–3)    | NA      | NA                      | NA                  |
| Current job                      | n (%)    | n (%)   | n (%)                   | n (%)               |
| Civil servant                    | 3 (17.6%)| NA      | NA                      | NA                  |
| Self-employed                    | 8 (47.1%)| NA      | NA                      | NA                  |
| Unemployed                       | 6 (32.3%)| NA      | NA                      | NA                  |
| Children in School feeding program| n (%)   | n (%)   | n (%)                   | n (%)               |
| Median                           | NA       | 1 child | NA                      | NA                  |
| (Range)                          | (1–3)    | NA      | NA                      | NA                  |
| Total                            | 16       | 17      | 18                      | 2                   |

NA: Not applicable; SF: School feeding.
children get food at school, they do come early in the morning for breakfast and do go to class on time. This, according to the principals, made their work smoother and productive. One of the officials from the feeding agency said,

“School feeding is not just about filling the belly of a hungry child. It has to do with child rights. When kids come to school without eating meals, they are being deprived of one of their basic rights. Coming to class without lunch box, the kids feel embarrassed in front of their peers. This is painful. It affects them psychologically, and health wise.” –

School feeding agency official.

A teacher emphasized by saying,

“The school feeding program created a balance between students who can afford eating and those who can’t. The gap created between students is highly reduced because of this program.” –

Teacher, Abiot Ermija primary school.

3.2.4. Provide relief for parents

The study also finds that school feeding lifts financial burden on parents’ as it covers a substantial portion of parents’ daily food expenses. In relation to the benefits of the school feeding program, a mother of three children in the program said that,

“… But now, I do not worry about my children’s breakfast or lunch; I just send the kids to school by washing and having them dressed. They go there (to school), play, eat, learn and come home, just like other students.” –

Parent, Ras Abebe Aregay primary school.

A teacher also noted in this respect as,

“… it took a great burden off their parents as well. I know one parent who decided not to send his child to the school this year. Thanks to the feeding program and other help they get from the government, including school uniform and books, they are now staying at school.” –

Teacher, Meles Fere primary school.

A principal in one of the schools reported that parents sending children to their school are economically poor and cannot satisfy their basic needs. The program has brought a relief to the parents according to the school feeding agency official.

3.3. COVID-19’s effects on the school feeding program in Addis Ababa

The participants responses with regards to the effect of COVID-19 on the school feeding were categorized in to two themes: 1) disruption on food security, feeding habit and health, and 2) induced child labour.

Disruption in food security, feeding habit, and health

The study finds that the suspension of school meals during the COVID-19 has affected the progress made by the program and students were skipping meals, reducing portion size, and eating poor quality foods. The school feeding program has been covering a substantial portion of parents’ daily food expenses and has lifted-off their burden. Its interruption has created a devastating impact as a mother of three children in the program says, “The disruption has taken a toll both on the physical wellbeing of students and a psychological one on parents.”

As one parent puts it, watching her kids unhappy and not having the kind of food they used to eat at school has an emotional toll,

“I am having a difficult time. My kids missed school meals. At home, they do not find the food they used to eat at school. They were happier at school; but now they seem a bit down psychologically. And this is painful for me.” –

Student, Abiot Ermija primary school.

Another parent puts the stress of not having the food program during COVID-19 as an additional burden on top of the struggle they are having with poverty,

“What am I going to feed my children? We are already poor and now it is getting worse with COVID-19 and no work.” –

Parent, Ras Abebe Aregay primary school.

This study finds that the interruption in the school feeding has posed a food security problem. Before the school closure, children used to eat breakfast and lunch and then take the leftover for their snack in the evening. Following the interruption of school meals, needy families reported to have faced food insecurity in the household. One parent said,

“I have three kids. My mother and my father (who is blind) are also my dependents. My husband was a security guard in a private organisation and has been suspended from his job due to the pandemic. I am under a lot of pressure. It is difficult to feed three kids and my old parents in this condition by selling fruits and vegetables– this has also been highly impacted due to COVID-19.” –

Parent, Ras Abebe Aregay primary school.

Some responses are even alarming as they shed light on the repercussions of the disruptions and the emotional toll on parents.

“A mother left her child in the school and never came back. She said she has nothing to feed at home. We called police and handed the child; maybe the child is in an orphanage by now. This shows how the suspension of this feeding program is affecting the parents and students. I can tell you for sure there are many students starving at home.” –

Teacher, Hedase primary school.

One of the agency officials explained the situation of families and their children following the school closure in general and the suspension of the school feeding program in particular as,

“With the discontinuation of the school feeding program due to COVID-19, we are receiving several distressing phone calls from parents. One mother called me and told me that she has four children all of whom were on the school feeding program. She makes her livelihood by washing clothes. But now all the four kids are staying at home. People do not offer the washing job anymore. So, she is in a very tough situation.” –

School feeding agency official.

Induced child labour

Since COVID-19 has left many parents unwaged and forced school closure where children able to have meals, the need to generate income to support the family were reported as push factor for the children to be engaged in menial jobs. As a result, the schoolchildren finds themselves in the position of the breadwinner for their family. For example, one schoolchildren said,

“We can only eat if my mother works. She used to be a waitress and currently she is laid-off because of COVID-19. My brother also suspended from his job. So, I started working to generate income. By repairing bicycles, I get 2000 birr per month (~60 USD). In this amount, I may not be able to provide food for all seven members of my family. That stresses me out.” –

Student, Abiot Ermija primary school.

One teacher bitterly expressed her feeling,

“Believe it or not students are begging on the street because they don’t have anything to eat. I ran into my old friend last week and she said “your
students are on the street begging” which is a very sad thing for a teacher to hear. When she was telling me how hungry he was and the way he ate the bread she bought for him, I almost cried.” –

Teacher, Meles Fere primary school.

Overall, the participants underscored that due to the interruption of the school feeding and parental loss of their jobs, the right of children to be protected from difficult jobs and family protections were denied.

3.4. Strategies to resume the school feeding during COVID-19

All the study participants agreed that the support for the needy must continue. As a result, though fragmented and not that much organized, some attempts have been made to organize a support system for students who are in a dire need of food were reported. Donation, grain and uncooked food item distribution and rationing were strategies taken by the school community to address the demands of their students. For example, one principal said,

“Whenever we receive something (donation) from the district or individuals, we immediately contact them (students with serious problems) and deliver the item because we know how intense their problem is.” –

Principal, Ras Abebe Aregaye primary school.

Some suggested cash provision while others suggested dry food and cereals distribution for the most vulnerable ones. A teacher noted,

“We have the list of students in our school who had been getting this support previously. Teachers are not currently doing anything, and we would be very glad to assist this program (door to door delivery of food items) if there is willingness from the government side.” –

Teacher, Abiot Ermja primary school.

One principal also suggested resuming the feeding program in a scheduled and safe way as,

“By keeping our distance and by wearing masks, teachers can facilitate and provide the service for the students. Since the situation doesn’t allow over crowdedness, a clear schedule needs to be designed in terms of grade/age.” –

Principal, Abiot Ermja primary school.

It seems that resources are not a concern since the school feeding program has an earmarked budget per child per day. However, lack of proven intervention mechanisms and rigidity of the government budget disbursement procedure have hampered timely response for the crisis. One of the feeding agency officials said,

“The allocated budget was being used directly for the feeding purpose until it was interrupted due to COVID-19. Till we receive decision, the money is still there put on hold. Many mothers come and ask for the money. But this is not acceptable as per the finance regulation.” –

School feeding agency official.

Some of the participants suggested integrating the needy schoolchildren with the food bank services (food banks are established by the Addis Ababa city administration to collect donations, including food items and money, from different sources and distribute to people who are adversely affected by the pandemic).

4. Discussion

School feeding programs are important to provide a social safety net during crisis, improve learning and educational outcomes, and enhance nutrition and health (WFP, 2020b; Bundy et al., 2009; FAO & WFP, 2018; Mastewal, Samson, Carol, & Nigatu, 2018). Consequently, the program has been gaining a large attention from the governments of low- and middle-income countries and being institutionalized as part of national social protection and education systems (WFP, 2020b; FAO & WFP, 2018). For example, between 2013 and 2020, countries that have a school feeding policies increased from 25% to 75%; and at the same period the share of domestic funding for the school feeding increased from 17% to 28% in low-income countries (WFP, 2020b). We have conducted in-depth interviews with children, parents, teachers, school administrators, school feeding agency officials, and conducted thematic analysis to explore the effects of COVID-19 imposed suspension of school feeding on the beneficiaries’ well-being in Addis Ababa city.

The school feeding program is well received by all the study participants. Providing food at school is considered as a concrete way to give poor children a chance to learn and succeed, and it is a relief for poor parents for taking away their burden. The program has improved children’s health and feeding habits, and contributed a lot in reducing lateness, absenteeism and dropouts. This finding is consistent with previous study findings (WFP, 2020b; Bundy et al., 2009; Alderman, 2009; Mastewal et al., 2018). Children who were out of school and those engaged in menial jobs during school hours were back to school and attending their lessons properly since the provision of school meals started. This finding is supported with a randomized trial finding in Burkina Faso where households send their children to school when they value the school meals more than the child labour; and they used to shift child labour from productive activities to domestic activities where children could combine with schooling (Kazianga, de Walque, & Alderman, 2009).

However, following the suspension of school feeding, low-income parents, whose burdens were taken off by the school feeding program are currently suffering from lack of resources to feed themselves and their children. They are forced to skip meals, reduce portion size, and eat poor quality foods. Such coping strategies are commonly practiced in Ethiopia during food security crisis (Adino et al., 2018). Some parents and children are visiting schools almost every day to see if the feeding is resumed. To the extent, the context forced some of the children to go out on the streets for begging and engaging in menial activities and this will, in turn, increases the risk of contracting and spreading the virus. In addition to that, some families reported that their children are not feeling well since the stay at home period; partly due to stress and anxiety of staying at home which might be aggravated by shortage of food. Dalton and his colleagues (Dalton, Elizabeth, & Stein, 2020) also reported that children’s exposure to distressing information about the outbreak from social conversation among adults and media could exacerbate stress and anxiety. This calls for immediate remedial action by the government or the community at large to save the lives of poor families. This, in turn, will contribute to the overarching vision of the school feeding program.

Countries with school feeding programs are facing similar challenges in the wake of the COVID-19 crisis. Some countries are trying their best to provide the school meals during the pandemic through different strategies, including take-home food rations, cash transfer to schoolchildren’s families, and mixed modalities (WFP, 2020a). For example, in certain states of India, home delivered meals or dry ration have benefited millions of schoolchildren (Alvi & Gupta, 2020). Similarly, the World Food Program (WFP), through its ‘School feeding at home’ initiative, has been providing take-home rations for families with schoolchildren to ensure children continue receiving the food they need. Some of the countries benefiting from this program include Congo, Colombia, and Cambodia (Er, 2020). In South Carolina, the education department introduced a strategy called “Grab-n-Go” where students collect 5-day of meals at once from the meal sites throughout the state. Similarly, in Michigan and New York, meals are delivered to students in bus stops or at their home (Dunn et al., 2020). In Bodo, Nigeria, on the other hand, a socially distanced school-based nutrition program is implemented where school children spread out across classrooms complying with the recommended social distancing guidelines and fed
The Addis Ababa city administration has already budgeted for the annual people who are most vulnerable due to the COVID-19 pandemic are during such crises is very important. For example, providing cafeteria mechanisms where schools could generate their own income to use food insecurity could lead to long term nutritional and health impact on the children. Therefore, interventions should be designed and implemented the soonest possible. Meanwhile, the context of the pandemic and the living conditions of the community should be taken into account and the intervention strategy should comply with COVID-19 precautions.

The study has limitations. Some of the interviews were conducted in a telephone and thus the depth of information obtained may not be as good as the one obtained using face-to-face interviews. Some of the national partners in the school feeding programs, such as the Ministry of Education, and the international partners, including FAO and WFP, were not interviewed regarding any interventions they are planning for students and families affected by the interruption of the school feeding program. But, we still explored the perceptions of the main beneficiaries and immediate stakeholders.

4.1. Implication for interventions and future actions

Based on the findings, we recommend the following intervention strategies and future actions. First, such interventions that would alleviate the burden of families and improve learning of the young should engage partners, including NGOs and community organizations, and beneficiaries in the process of implementation and risk identifications. Had the school feeding program closure involved these stakeholders, they would have developed a mitigation strategy that will be context sensitive.

Second, implementing and responsible offices should develop a strategy to use available resources through the existing channels. Since the Addis Ababa city administration has already budgeted for the annual school feeding program expenses, redistribution of the program budget through the food banks or the urban safety net programs to poor families and students who were in the school feeding program should be thought of. Food distribution to the most vulnerable families, establishing delivery times in schools or through mobile units, can address the challenges of the very needy groups and can help children stay at home.

Third, responsible offices such as the school feeding Agency should encourage and develop innovative ideas to help vulnerable families survive during the pandemic. One of such initiatives is the ‘Each One Feed One’ national challenge. Encouraging such initiatives and making the vulnerable school children accessible to the programs could help children even to be supported by students of their age in other schools or from their schools.

Fourth, school and educational leaders have to build resilience of schools to continue the feeding program in similar crises. Exploring mechanisms where schools could generate their own income to use during such crises is very important. For example, providing cafeteria services in the school compound; after-hour class on gym, art and music; depending on the size of the school compound, building complexes for rental services should be considered.

5. Conclusions

In conclusion, the school feeding program in Addis Ababa provided an opportunity for schoolchildren to have breakfast and lunch during school days, helped them concentrate on their study, reduced parents burden, and helped teachers and school administrators to focus more on their academic duty. Lateness, absenteeism and dropouts reduced; food security and health improved; and children engagement in menial jobs reduced. The school closure following the COVID-19 pandemic has suspended the feeding program; as a result, poor families and their children are faced with food shortage and are forced to skip meals, reduce portion size, and eat poor quality foods. In the worst case, the situation forced children to go out on the streets for begging and other menial activities and this will, in turn, increases their vulnerability to the virus. Therefore, using the available resources through the existing channels, such as food banks and urban safety net program, and encouraging innovative ideas, including the ‘Each One Feed One’ initiative, would help vulnerable children and families survive during this pandemic.

CRediT authorship contribution statement

Tefera Darge Delbiso: Conceptualization, Methodology, Formal analysis, Investigation, Writing – original draft, Writing – review & editing. Messay Gebremariam Kotecho: Conceptualization, Methodology, Formal analysis, Investigation, Writing – original draft. Fekadu Mulugeta Asfaw: Methodology, Formal analysis, Investigation, Writing – original draft, All authors read and approved the final version of the manuscript.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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