# The Impact of the COVID-19 Pandemic on School Girl-Child Aged 12-18 Under URDT Programme in Mid-Western Uganda 

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#### Abstract

The purpose of the study was to examine the impact of the COVID-19 pandemic on schoolgoing girls aged 12-18 under the Uganda Rural Development and Training Program (URDT) in Midwestern Uganda. The study adopted a descriptive design within a cross-sectional research design, using quantitative approaches. 339 respondents were randomly selected from among Epicenter Managers, graduates of African Rural University (ARU), as well as staff of the URDT Programme. The study was carried out in the six districts of mid-western Uganda, which were purposively selected. Data was analyzed using SPSS, and presented using descriptive statistics whereas qualitative was analyzed using content analysis and presented using verbatim quotations. Covid-19 had an adverse impact on the provision of necessary scholastic materials to the pupils. Findings indicate that the proportion of students who suffered from flue at least twice was $62.5 \%$ before the pandemic, it increased by $16.2 \%$ to $78.7 \%$ after the lockdown, confirming that the pandemic increased, or coincided with a post-lockdown increase in, the incidence of flu among school girls.


Keywords: COVID 19, Pandemic, School Going, Girl-Child, URDT Programme

## 1. INTRODUCTION

Towards the end of 2019 , the world was shocked by the outbreak of a strain of flu in China's city of Huwan, which was reported to be the Corona virus, or COVID 19. The virus spread rapidly, and by March 11, 2020, the WHO declared it a pandemic, announcing a global lockdown that was implemented through the closure of the global airspace and sea ports. This scenario had never been witnessed since the end of World War II. All over the world, countries were advised to enforce border closures and internal movements within their countries. Public gatherings, transport systems, schools, and changes were all closed. This was intended to affect the spread of the virus and its prevalence, as it is airborne. In effect, around 463 children across the globe were unable to attend school by 2020 (UNICEF, 2022). A report by UNESCO (2021) revealed that about 244 children were unable to report to school, which included majority girls ( 11.2 million) and minority boys ( 125.5 million) across SubSaharan Africa. This report points to the fact that girl child education was highly affected in Sub-Saharan Africa compared to boys. This was a contribution to the already existing problem of gaps in girl child education in subSaharan Africa.

In Uganda, the USAID Report (2023) revealed that over 15 million students missed school almost every calendar year at all levels of education. In this aspect, a study by FAWE
reported an increased prevalence of teenage pregnancies by $22.5 \%$ among girls aged 10-24 (FAWE, 2020). In this report, 3 in 10 girls were aware of a girl in their circles who had gotten pregnant during their time out of school (FAWE, 2020). A report filed by the Daily Monitor in 2021 revealed that 3,430 teenage girls aged 14-16 got pregnant during the total lockdown in March and October 2020 in Kitgum Diocese, Northern Uganda. The same report revealed that 1,014 teenage pregnancies were reported between January and September 2020 through health centers in Kabale district. The UNFPA report (2021) revealed that around 290,219 teenage pregnancies were recorded between January and September 2021, the highest figure recorded in Uganda ever. This portrays a gross picture of how girl child education was affected during the COVID-19 lockdowns in Uganda. The effects of this are still affecting the pursuit of equality in Uganda's education system, Vision 2040, and the fulfillment of the Sustainable Development Goals.

Owing to this disturbing situation, URDT's Girls School Programme came in handy to provide education to 250 girls in rural areas in western Uganda, where most of the population lives in abject poverty and relies on subsistence farming. Operating in a patriarchal society, the URDT Programme has found an innovative approach to improving the lives of the girls as well as their families and communities. Moreover, the school uses the 2 -generations
approach, whereby students and their parents learn together, develop a shared vision for their home, analyze their current situation, apply systems thinking and team learning, plan together, and learn new skills. Alongside the national curriculum, the students get 'change agent' training to generate sustainable income, health, family cooperation, and peace at home while they study, and by design, the students that go through URDT Girls School join ARU to begin their tertiary education.

## 2. OBJECTIVE

To determine the impact of the COVID-19 pandemic on the schoolgirl-child aged between 12 and 18 years at URDT in mid-western Uganda.

## 3. METHODOLOGY

### 3.1 Research Design, Population and Sample Size

A cross-sectional survey that combined quantitative and qualitative methods for data gathering and analysis was used in the study. Through the use of both quantitative and qualitative findings, the design and methodology facilitated the collection of a substantial amount of data in just one visit. The study's overall focus was on girl children, aged 12-18 years, who were in school when the COVID-19 pandemic struck in March 2020 in the 20 districts of mid-western Uganda. A standardized questionnaire was used to recruit and interview 339 respondents, making up the sample size. Conversely, in-depth interviews were conducted with teachers and parents/guardians, district education officers, local health center or hospital staff, LCI Chairpersons, and local Police Post officers to ascertain their perspectives on the impact of COVID-19 on girl child education in URDT in mid-western Uganda. All participants were enlisted using a combination of probability and non-probability sampling procedures.

### 3.2 Questionnaire, interview, Documentary Review, Observation and measurement

A semi-structured questionnaire was used to gather data from the individual. The researcher gave the subjects the questionnaire to make sure they answered the questions consistently and clearly. Similar circumstances have seen the application of this method in Uganda (Ssekakubo, 2014). A highly flexible interview guide (Edwards \& Holland, 2013) was employed for this qualitative study, and the interviewing procedure did not precisely adhere to a predetermined format for the flow of the questions. Documentary review was used essentially because some of the data relevant to the study, such as names and numbers of schools and schoolgirlchildren, are only or mainly available in documents. Observation was adopted because some of the data necessary for the study, such as the physical appearance of schoolgirl children, was amenable to observation.

### 3.3 Data management and analysis

The Statistical Package for Social Scientists (SPSS version 24), a computer application used to personalize the data entry and analysis process, was used to code the data and establish a database. A pretested, standardized questionnaire served as the basis for the creation of the codes. Every day after data collection, the researcher checks the data for any errors, incompleteness, misclassification, improperly altered data, incorrectly completed questionnaires, and gaps in the information gathered before beginning the data entry procedure. For qualitative data, content analysis was employed to develop themes, sub-themes, and variations to give the data presentation a logical flow. The findings were summarized by getting and jotting down the frequency of responses of the respondents during the interviews on issues concerning the impact of girl child education in URDT in mid-western Uganda. Verbatim quotations were used where interesting and relevant stories were captured and presented to emphasize the actual picture as it is portrayed regarding the impact of COVID-19 on girl child education at URDT in mid-western Uganda.

### 3.4 Ethical consideration

Informed consent was obtained from each participant in a written form before enrollment in the study. They were all made aware of their rights to participate in the study. We ensured honesty and anonymity during report writing.

## 4. RESULTS AND DISCUSSION

## School attendance by in-school girls before COVID-19

Results from Table 1 indicate that before COVID-19, 35 $(85.4 \%)$ of the 41 primary school pupils who were interviewed attended school regularly, while 6 (14.6\%) did not. The same data shows that, after COVID-19, regular school attendance increased slightly to 37 ( $90.2 \%$ ) while irregular school attendance dropped slightly to 4 (9.8\%).
Regarding the 42 secondary school students in the study, the data in Table 3 indicates that, before COVID-19, 37 (88.1\%) of them attended school regularly, while 5 (11.9\%) did not. After COVID-19, the number of students who attended school regularly dropped to 28 ( $66.7 \%$ ), while that of those who did not attend regularly increased to 14 (33.3\%).

## School attendance by out-of-school girls before COVID19

Regarding the levels of school attendance among out-ofschool girls before COVID-19, our data indicates that, of the 28 pupils interviewed, 19 (67.9\%) attended school regularly, while 9 (32.1\%) did not. The same data shows that a higher percentage ( $79 \%$ ) of the 30 secondary school dropouts had been attending school regularly, while the rest ( 8 , or $21.1 \%$ ) had not.

## Weekly frequency of missing school among out-ofschool girls before COVID-19

Table 1 below indicates that while 5 ( $55.6 \%$ ) of the eight (8) former primary school girls who used to miss school before the COVID-19 pandemic did so twice a week, 2 ( $22.2 \%$ ) girls used to miss school more than thrice a week, and only one (11.1\%) each used to miss school once and thrice in a week.

Like their former primary school counterparts, four (50\%) of the seven (7) former secondary school girls who used to miss school before the pandemic did so twice a week. These were followed by two ( $25 \%$ ) who used to miss school three times a week and one ( $12.5 \%$ ) each who used to miss school once and more than three times a week.

Table 1: School attendance before COVID-19 among out-of-school, primary and secondary school girls

| Characteristic | Before COVID-19 <br> Primary <br> $(\mathbf{n = 2 8})$ <br> $\mathbf{n ( c o l ~ \% ) ~}$ | Secondary <br> $(\mathbf{n}=\mathbf{3 8})$ <br> $\mathbf{n ( c o l ~ \% ) ~}$ | Overall <br> $(\mathbf{n = 6 6})$ |
| :--- | :--- | :--- | :--- |
| Regular school attendance |  |  |  |
| Yes | $19(67.9)$ | $30(79)$ | $49(74.2)$ |
| No | $9(32.1)$ | $8(21.1)$ | $17(25.8)$ |
| Number of times missed school in a week |  |  |  |
| Once | $1(11.1)$ | $1(12.5)$ | $2(11.8)$ |
| Twice | $5(55.6)$ | $4(50)$ | $9(52.9)$ |
| Thrice | $1(11.1)$ | $2(25)$ | $3(17.7)$ |
| More than Three times | $2(22.2)$ | $1(12.5)$ | $3(17.7)$ |
| Reasons for missing school | $(\mathbf{n = 9 )}$ | $(\mathbf{n}=\mathbf{8})$ | $3(17.6)$ |
| Sickness | $3(33.3)$ | $0(0)$ | $1(5.9)$ |
| Menstrual issues | $0(0)$ | $1(11.1)$ | $11(64.7)$ |
| School fees | $5(55.6)$ | $6(75)$ | $1(5.9)$ |
| Pregnancy | $0(0)$ | $1(12.5)$ | $1(5.9)$ |
| Language barrier | $1(11.1)$ | $0(0)$ |  |

## REASONS FOR MISSING SCHOOL

## Reasons for missing school among in-school girls

Figure 1 below indicates that before COVID-19, most ( $50 \%$ ) of the primary pupils interviewed missed school because of sickness, $33.3 \%$ ) missed school because they had to babysit a sibling, and $17.7 \%$ missed school because they were doing work at home. However, after COVID-19, while sickness remained the leading cause of missing school and its dominance increased by $25 \%$ to $75 \%$, the only other cause of missing school was the inability to pay school fees, which accounted for $25 \%$ of the causes.

Interestingly, before COVID-19, primary school pupils missed school for three reasons, excluding the inability to pay school fees, but after the COVID-19 lockdown, they did so for only two reasons, including the inability to pay school fees. This would tend to suggest that the COVID-19 pandemic had financially disempowered a quarter (25\%) of the parents and guardians of primary school girls.

In the case of secondary school girls, before COVID-19, the majority ( $80 \%$ ) of them missed school because they were babysitting their siblings, while the rest (20\%) missed school due to sickness. However, after COVID-19, the proportion of those who missed school due to babysitting dropped slightly by almost $9 \%$ to $71.4 \%$, while the percentage of those who missed school increased by an almost equal percentage from $20 \%$ to $28.6 \%$.


Figure 1: Percentage distribution of the reasons for missing school before and after COVID-19

## Reasons for missing school before COVID-19 among out-of-school girls

As the data in Table 1 above shows, of the nine (9) out-ofschool former primary school pupils who used to miss school before the pandemic, five ( $55.6 \%$ ) did so due to an inability to pay school fees, three ( $33.3 \%$ ) did so because of sickness, and one (11.1\%) used to miss school due to a language barrier, in the sense that pupils fail to express themselves during lessons taught by teachers who entirely use English in delivery.

On the other hand, of the eight (8) out-of-school, former secondary school girls who used to miss school before the pandemic, six $(75 \%)$ did so due to a lack of school fees. 1 ( $12.5 \%$ ) did so due to menstrual issues, and 1 (12.25\%) missed school because they were pregnant. The main reason these girls missed school was a lack of school fees.

## Payers of Girls' School Fees

Table 2 below further indicates that, before COVID-19, the school fees of the majority ( 34 , or $82.9 \%$ ) of 41 primary school pupils interviewed were paid by parents, while 5 (12.2\%) of the pupils had their school fees paid by guardians, and $2(4.9 \%)$ had theirs paid by others who could have been relatives or other kinds of benefactors. Interestingly, this situation remained unchanged or unaffected by the COVID-19 lockdown.

As Table 2 also shows, before COVID-19, 38 (90.5\%) out of the 42 secondary school girls had their school fees paid by their parents, while 3 (7.1\%) had theirs paid by guardians, and only 1 (4.9\%) had theirs paid by an NGO.

This situation changed after the COVID-19 lockdown as the school fees of all 42 (100\%) students' school fees were paid by their parents, implying that both the guardians and the NGOs had been economically disempowered by the lockdown.

## Provision of Necessary Scholastic Materials

The data in Table 2 also indicates that, before COVID-19, most (32, or 78\%) of the 41 primary school pupils interviewed had all the necessary scholastic materials, while only $9(22 \%)$ did not. However, the number of those who had all the necessary materials slightly dropped to 29 (70.7\%), while those who did not slightly increased to 12 (29.3\%) after the COVID-19 lockdown.

The same data further indicates that, before COVID-19, most ( 26 , or $61.9 \%$ ) of the 42 secondary school girls had all the necessary requirements, while 16 (38.1\%) did not. This situation remained little changed after the COVID-19 lockdown, where 25 (59.5\%) had all the necessary materials while 17 (40.5\%) did not.

Table 2: Percentage distribution of regularity of school attendance of, payers of school fees of, and provision of scholastic materials to pupils and students before and after the COVID-19 pandemic

| Characteristic | Before COVID-19 |  | After COVID-19 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Primary $(n=41)$ <br> n(col \%) | $\begin{aligned} & \begin{array}{l} \text { Secondary } \\ (\mathrm{n}=42) \end{array} \\ & \mathrm{n}(\mathrm{col} \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Primary } \\ & (\mathrm{n}=41) \\ & \mathrm{n}(\mathrm{col} \%) \end{aligned}$ | $\begin{aligned} & \begin{array}{l} \text { Secondary } \\ (\mathrm{n}=42) \end{array} \\ & \mathrm{n}(\mathrm{col} \%) \\ & \hline \end{aligned}$ |
| Regular school attendance |  |  |  |  |
| Yes | 35(85.4) | 37(88.1) | 37(90.2) | 28(66.7) |
| No | 6(14.6) | 5(11.9) | 4(9.8) | 14(33.3) |
| Who was paying your school fees |  |  |  |  |
| Parents | 34(82.9) | 38(90.5) | 34(82.9) | 42(100) |
| Guardians | 5(12.2) | 3(7.1) | 5(12.2) | 0 (0) |
| NGO | 0 (0) | 1(2.4) | 0 (0) | 0 (0) |
| Others | 2(4.9) | 0 (0) | 2(4.9) | 0 (0) |
| Did you have all the necessary materials |  |  |  |  |
| Yes | 32(78.1) | 26(61.9) | 29(70.7) | 25(59.5) |
| No | 9(22) | 16(38.1) | 12(29.3) | 17(40.5) |

## School girls' nutritional status before and after COVID19

Regarding the nutritional status of schoolgirls before and after COVID-19, the research sought to determine the sources of food, the number of meals eaten per day, and the consumption of vegetables and fruits, as these have a bearing on pupils' and students' health.

## Sources of food

Figure 2 below shows that, before COVID-19, the majority ( $63.4 \%$ ) of the 41 pupils interviewed reported that their families got food from their own home gardens, $22 \%$ from the market and the garden, and $14.6 \%$ from the market. However, after the COVID-19 lockdown, while the percentage of those who obtained food from their own gardens remained constant, the proportion of those who obtained food from both their gardens and the market dropped slightly by $2.5 \%$, and the number of those who obtained food exclusively from the market rose by $2.5 \%$, from $14.6 \%$ to $17.1 \%$.

Results obtained from secondary school students indicate that, before COVID-19, most (59.5\%) of their families obtained food from their own gardens, $31 \%$ obtained food from both the market and their own gardens, $7.1 \%$ got food exclusively from the market, and only $2.4 \%$ obtained food exclusively from donations. As Figure 2 below shows, there was no significant change in those situations after the pandemic, as $57.4 \%$ got food from the garden, $33.3 \%$ from the market and the garden, $7.1 \%$ from the market, and $2.4 \%$ from donations.


Figure 2: Percentage distribution of sources of household food before and after COVID-19

## Number of meals taken by school girls and types of food consumed per day

Before COVID-19, most (27, or 65.9\%) of the primary school pupils had three meals a day; 12 (29.3\%) had two meals a day; $1(2.4 \%)$ had only one meal a day; and another $1(2.4 \%)$ had more than three meals a day. After the pandemic, while the number of pupils who had three meals a day dropped very slightly to 26 (63.4\%), those who had two meals a day increased slightly to 13 (31\%), and those who had only one meal a day doubled to 2 (4.8\%). No pupils had more than three meals a day after the COVID-19 lockdown.

Before COVID-19, the majority (23, or 54.8\%) of secondary school girls had three meals a day, 18 (42.9\%) had two meals a day, and only one (2.4\%) had only one meal a day. But this situation changed after the COVID-19 pandemic as the number of those who had three meals a day dropped drastically by eight to 15 (35.7\%) while those who had two meals a day increased by four to 22 (52.3\%), those who had only one meal a day quadrupled from one to four ( $9.7 \%$ ), and a fourth category of those who had more than three meals a day emerged at $2.3 \%$. The category of those who had more than three meals a day emerged at $2.3 \%$.


Figure 3: Foods children used to eat before and after COVID-19

## Vegetable consumption by schoolgirls

According to data in Table 2, most (32, or 78\%) of the primary school pupils reported that, before the COVID-19 epidemic, they were eating vegetables regularly, while nine (22\%) were not. However, after the COVID-19 lockdown, the number of those pupils who were eating vegetables regularly increased to 35 (85.4\%), while those who were not eating vegetables regularly reduced to 6 (14.6\%).

Regarding weekly consumption of vegetables, a majority ( $42.9 \%$ ) of the pupils consumed vegetables twice, $28.6 \%$ did so thrice, $14.35 \%$ ate vegetables more than thrice, and $14.3 \%$ did so only once. Therefore, a total of $43 \%$ (28.6 + 14.35) of the pupils ate vegetables at least three times a week, which is nutritionally fair and attributable to the fact that most of the vegetables consumed are home-produced.

Related data indicates that, before COVID-19, 26 (62\%) of the secondary school students were eating vegetables regularly, while 16 (38\%) were not. This situation changed slightly after the pandemic, as the number of students eating vegetables regularly dropped by three to 23 (55\%) while that of those who were not eating vegetables regularly increased by about three to 19 (45\%).

In addition, of the 23 students who eat vegetables regularly, $10(43.5 \%)$ of the secondary school students consumed vegetables twice a week, 7 (30.5\%) thrice a week, 4 $(17.3 \%)$ more than three times a week, and 2 ( $8.7 \%$ ) only once a week after COVID-19.

## Fruit consumption by school girls

Fruits are a valuable source of nutrients, and the study established that, before COVID-19, 33 ( $80.5 \%$ ) of the primary school pupils were eating fruits regularly while 8 (19.5\%) were not. As Table 3 shows, the number of pupils who were eating fruits regularly after COVID-19 reduced to 26 ( $63.4 \%$ ), while those who were not eating fruits regularly increased to 15 (36.6\%).

In addition, of the 26 pupils who eat fruits regularly, most $11(42.3 \%)$ consumed fruits twice, 8 (30.7\%) thrice, 15 $(15 \%)$ more than three times, and 12 (12\%) once in a week after COVID-19.

The situation of secondary school girls was not very different: before COVID-19, 29 (69.1\%) were eating fruits regularly, while 13 (30.9\%) were not. But this situation changed after the pandemic, as fewer than 26 ( $63.4 \%$ ) students were eating fruits regularly, while a higher number (16 or $36.6 \%$ ) than before were not.


Figure 4: Fruits children used to eat before and after COVID-19
Furthermore, most (42.3\%) of the secondary-school girls reported that they consumed fruits twice, (34.6\%) thrice, (19.2\%) more than thrice, and only (3.9\%) once a week after COVID 19.

Table 3: Percentage distribution of meals taken and vegetables and fruit consumption by learner category before and after COVID-19

| Characteristic | Before COVID-19 |  | After COVID-19 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Primary } \\ & (\mathrm{n}=41) \\ & \mathrm{n}(\mathrm{col} \%) \end{aligned}$ | Secondary $\begin{aligned} & (n=42) \\ & n(\operatorname{col} \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Primary } \\ & (\mathrm{n}=41) \\ & \mathrm{n}(\mathrm{col} \%) \end{aligned}$ | Secondary $\begin{aligned} & (\mathrm{n}=42) \\ & \mathrm{n}(\mathrm{col} \%) \end{aligned}$ |
| Number of meals <br> Taken      <br> Take      |  |  |  |  |
| One | 1(2.4) | 1(2.4) | 2(4.8) | 4(9.7) |
| Two | 12(29.3) | 18(42.9) | 13(31) | 22(52.3) |
| Three | 27(65.9) | 23(54.8) | 26(63.4) | 15(35.7) |
| More than Three | 1(2.4) | 0 (0) | 0 (0) | 1(2.3) |
| RegularityVegetableconsumption |  |  |  |  |
| Yes | 32(78\%) | 26(61.9) | 35(85.4) | 23(85.4) |
| No | 9(22) | 16(38.1) | 6(14.6) | 19(14.6) |
| Regularity of fruit consumption |  |  |  |  |
| Yes | 33(80.5) | 29(69.1) | 26(63.4) | 26(63.4) |
| No | 8(19.5) | 13(30.9) | 15(36.6) | 16(36.6) |

Health Status of School Girls before and after COVID-19
As a means of determining pupils' and students' health status, the research sought to establish the incidence of colds, flu, and coughs, access to hand-washing facilities, use of sanitizers, and sensitization to COVID-19 among the schoolgirls. Table 5 below summarizes the data collected.

## Cases of colds/flu and cough before and after COVID-19

Results in Table 4 indicate that before COVID-19, out of the 41 primary school pupils interviewed, 32 (78\%) suffered from a cold or flu, while 9 (22\%) did not. However, after the COVID-19 lockdown, the cases of cold and flu increased by three to 35 (85.4\%), leading to a
corresponding decrease in the number of non-sufferers to six (7.1\%).

Moreover, almost half (4 or 43.8\%) of the pupils indicated that, before the COVID-19 pandemic, in January and February 2020, they had suffered from cold or flu once, 8 ( $25 \%$ ) twice, 6 ( $18.8 \%$ ) thrice, and 4 ( $12.5 \%$ ) more than thrice. However, this situation can be said to have improved slightly after the pandemic, as 14 (40\%) suffered from the flu twice, $12(34.3 \%)$ and $6(17.1 \%)$ did so once and three times, respectively, and 3 ( $8.6 \%$ ) did so more than three times. In other words, the proportion of primary school pupils who had suffered from flu at least three times since the schools had reopened had dropped by $5.6 \%$ from $31.3 \%$ to $25.7 \%$.

Results also indicate that although 32 (76.2\%) of the secondary school girls had suffered from the flu before COVID-19 and 10 (23.8\%) had not, the situation worsened after the lockdown associated with the pandemic as the proportion of those who suffered from the flu increased by $16.7 \%$ to 39 ( $92.9 \%$ ). More specifically, our data also indicates that, before COVID-19, 12 (37.5\%) of the secondary school students interviewed suffered a cold or flu once, 11 (34.4\%) and 5 ( $15.6 \%$ ) did so twice and three times, respectively, and 4 ( $12.5 \%$ ) did so more than three times. The same results indicate that, after the COVID-19 lockdown, $14(33.3 \%)$ of the same respondents suffered from cold or flu once, 10 (25.6\%) and 10 (25.6\%) did so twice and three times, respectively, and 8 (20.5\%) did so more than three times. In other words, the proportion of students who suffered from flu at least twice was $62.5 \%$ before the pandemic; it increased by $16.2 \%$ to $78.7 \%$ after the lockdown, confirming that the pandemic increased, or coincided with a post-lockdown increase in, the incidence of flu among school girls.

Table 4: Distribution of cases of cold/flu by school category before and after COVID-19

| Characteristic | Before COVID-19 |  | After COVID-19 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Primary } \\ & (n=41) \\ & n(\text { col \%) } \end{aligned}$ | Secondary $\begin{aligned} & (n=42) \\ & n(\operatorname{col} \%) \end{aligned}$ | Primary $\begin{aligned} & (n=41) \\ & n(\operatorname{col} \%) \end{aligned}$ | Secondary $\begin{aligned} & (\mathrm{n}=42) \\ & \mathrm{n}(\mathrm{col} \%) \end{aligned}$ |
| Did you suffer any cold or flue |  |  |  |  |
| Yes | 32(78.1) | 32(76.2) | 35(85.4) | 39(92.9) |
| No | 9(22) | 10(23.8) | 6(14.6) | 3(7.1) |
| If yes, how many times |  |  |  |  |
| Once | 14(43.8) | 12(37.5) | 12(34.3) | 14(33.3) |
| Twice | 8(25) | 11(34.4) | 14(40) | 10(25.6) |
| Thrice | 6(18.8) | 5(15.6) | 6(17.1) | 10(25.6) |
| More than three times | 4(12.5) | 4(12.5) | 3(8.6) | 8(20.5) |

## Treatment of colds, flu, and cough

The health status of individuals partly depends on their ability to undergo treatment when they fall ill. Therefore, the study also sought to establish whether or not schoolgirls who fell ill had been treated and whether the treatment had achieved its objectives. It was established that of the 32
(78.1\%) primary school pupils who had suffered from flu before the pandemic, only one (3.1\%) had not received treatment, and the rest had undergone treatment. However, after the COVID-19 lockdown, of the slightly increased number of 35 ( $85.4 \%$ ) of pupils who suffered from flu, a disproportionately higher number ( 3 or $8.6 \%$ ) did not receive treatment.

However, while the incidence of flu among secondary school girls increased by $16.7 \%$ after the lockdown, only one of the victims was treated for the ailment both before and after the COVID-19 lockdown, implying that the rate of treatment among flu victims dropped from 3.1\% before the pandemic to $2.6 \%$ after.

## Healthcare facilities for schoolgirls

Before the COVID-19 lockdown, most (77.4\%) of the primary school pupils who suffered from cold or flu received treatment from hospitals; $9.7 \%$ were treated by herbalists; and only $3.2 \%$ received treatment from a clinic. However, after the lockdown, the number and proportion of pupils who were treated in hospitals and by herbalists increased from a total of $87.1 \%$ to $90 \%$, with most ( $9.7 \%$ ) of the increase being attributable to hospitals.

In the case of secondary school students, Figure 6 below shows that while the number and proportion of those treated in hospitals before the pandemic dropped significantly by almost $10 \%$, from $90.3 \%$ to $80.6 \%$, the proportion of those treated by herbalists increased by the same rate, from $9.7 \%$ to $19.4 \%$. No secondary school girl reported being treated in a clinic before or after the lockdown.

## Access to hand-washing facilities

Findings show that before the COVID-19 lockdown, more than three-quarters (77.1\%) of all the school girls had a hand-washing facility, while the rest (22.9\%) did not. However, the same data shows that, after the COVID-19 lockdown, there was a significant increase of $15.7 \%$ (to $92.8 \%$ ) in the number and proportion of school girls with access to a hand-washing facility, largely as a result of adherence to and enforcement of COVID-19 standard operating procedures (SOPS).

## Frequency of usage of the hand-washing facilities

Regarding the use of hand-washing facilities, before COVID-19, 59.3\% of the primary school pupils utilized a hand-washing facility four times per day, and $25 \%$ and $15.7 \%$ did so three times and twice a day, respectively. However, after the COVID-19 lockdown, there was an increase in the usage of hand-washing facilities, and 63.2\% and $26.3 \%$ of the girls used the facilities four and three times a day, respectively, while only $10.5 \%$ used them twice a day.

Regarding secondary school girls, data revealed that, before COVID-19, most (45.7\%) of them used a hand-washing
facility twice a day, followed by those who used such a facility thrice ( $25.7 \%$ ) and four times ( $25.7 \%$ ) a day, and finally those $(2.9 \%)$ who used a similar facility only once a day. However, after the COVID-19 lockdown, there was a remarkable increase in the use of hand-washing facilities, as all the students used such facilities at least twice a day, and the percentage of those using such a facility at least three times a day increased by $35.8 \%$, from $51.4 \%$ to $87.2 \%$. Not surprisingly, the proportion of students using such facilities only twice a day dropped by $32.9 \%$, from $45.7 \%$ before the pandemic to $12.8 \%$ after.

## Use of sanitizers

As the data in Table 6 below shows, before COVID-19, only $5(12.2 \%)$ of the primary school pupils used sanitizers, while most (36, or $87.8 \%$ ) did not, which is understandable given the largely rural character and relative poverty of the population in the study area. However, after the COVID-19 lockdown, the situation changed significantly, with the use of sanitizers increasing more than six fold, from 5 ( $12.2 \%$ ) to $31(73.6 \%)$, while non-users dropped correspondingly from $36(87.8 \%)$ to $10(24.4 \%)$. This dramatic increase in sanitizer usage can logically be attributed to sensitization to the effects of COVID-19 and resultant adherence to COVID-19 standard operating procedures (SOPS).

The situation was not different for secondary school girls. Before COVID-19, 36 ( $85.8 \%$ ) never used a sanitizer, and only 6 ( $14.2 \%$ ) did; but after the COVID-19 lockdown, 25 ( $59.5 \%$ ) used sanitizers, and $40.5 \%$ ) did not. Therefore, sanitizer use among secondary school girls more than quadrupled, from six girls (14.2\%) to 25 girls ( $59.5 \%$ ).

## Frequency of usage of sanitizer

As Table 5 below shows, of the 5 primary school pupils who used sanitizers before COVID-19, 1 (2.4\%) used it once, $1(2.4 \%)$ twice, and $2(4.9 \%)$ thrice, while only 1 (2.4\%) used it four times a day. This implies that, before COVID-19, the very few ( 5 or $12.2 \%$ ) primary school pupils who used sanitizers also used them very minimally.

In the case of secondary school students, all those (6 or $14.2 \%$ ) who used sanitizers before COVID-19, $14.2 \%$, did so only once a day; but after the COVID-19 lockdown, the number of sanitizer users increased dramatically to 26 (63.4\%), with over half (15) of them using sanitizers at least three times a day.

Table 5: Usage of sanitizer by primary and secondary students before and after COVID-19

| Characteristic | Before COVID-19 |  | After COVID-19 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \begin{array}{l} \text { Primary } \\ (\mathrm{n}=41) \end{array} \\ & \mathrm{n}(\mathrm{col} \%) \end{aligned}$ | Secondary $\begin{array}{\|l} (\mathrm{n}=42) \\ \mathrm{n}(\mathrm{col} \%) \\ \hline \end{array}$ | Primary $\begin{aligned} & (n=41) \\ & n(c o l ~ \%) \end{aligned}$ | Secondary $\begin{aligned} & (n=42) \\ & n(\operatorname{col} \%) \end{aligned}$ |
|  |  |  |  |  |
| Yes | 5(12.2) | 6(14.2) | 31(73.6) | 25(59.5) |
| No | 36(87.8) | 36(85.8) | 10(24.4) | 17(40.5) |
| How often did you use sanitizer |  |  |  |  |
| Once | 1(2.4) | 6(14.2) | 5(12.2) | 0 (0) |
| Twice | 1(2.4) | $0(0)$ | 6(14.6) | 18(42.0) |
| Thrice | 2(4.9) | 000) | 6(14.6) | 3(7.1) |
| Four | 1(2.4) | $0(0)$ | 9(22) | 4(9.5) |
| None | 36(87.8) | 36(85.8) | 15(36.6) | 16(40.5) |

## Sensitization on COVID-19

The more sensitized and knowledgeable people are about COVID-19, the more likely they are to avoid being infected and to recover when they are infected. Therefore, the study sought to establish whether or not the schoolgirls had been sensitized about the pandemic. Before the COVID-19 lockdown, a majority ( $56.9 \%$ ) of the primary school pupils were sensitized about COVID-19, while $43.1 \%$ were not. However, after the lockdown, a much higher percentage ( $75.6 \%$ ) had been sensitized, while the rest ( $24.4 \%$ ) were not.

Surprisingly, before the COVID-19 lockdown, a much lower proportion $(28.6 \%)$ of secondary school students than of primary school pupils were sensitized about the pandemic, while a correspondingly much higher percentage (71.4\%) were not sensitized. Why primary school pupils should have been more widely sensitized than their secondary school counterparts is difficult to explain.

In the same way, after the COVID-19 lockdown, the proportion of secondary school students sensitized about the pandemic increased dramatically by $26.2 \%$ to $54.8 \%$, giving rise to a corresponding decrease in the proportion (45.2\%) of those who were not sensitized.

## Presence of senior women teachers in schools

As the data in Table 7 below indicates, a majority (35, or $85.4 \%$ ) of the primary schools interviewed reported that, before the COVID-19 lockdown, they had a senior woman teacher at their respective schools, while only 6 (14.6\%) indicated that they did not.

The data in the same table further indicates that, before the pandemic, a majority ( 29 , or $69.1 \%$ ) of the 42 secondary school girls interviewed had a senior woman teacher, while only 13 (31\%) did not. This situation changed only slightly after the lockdown, with the number of students with a senior woman teacher increasing slightly by $2.3 \%$ to $71.4 \%$ while that without a senior woman teacher dropped correspondingly to 12 (28.6\%).

## Provision of guidance and counseling by parents

Guidance and counseling, especially by parents and teachers, play a major role in the wellbeing of young people, especially adolescent girls. Therefore, the study sought to establish whether or not the girls in the study received guidance and counseling from their parents. As Table 9 below indicates, almost all (40 or 97.6\%) of the pupils interviewed reported having received guidance and counseling from parents both before the COVID-19 pandemic and after the lockdown, while only 1 (2.4\%) did not. The same table further indicates that, of the 42 secondary school girls interviewed, most (39, or $92.9 \%$ ) reported having received guidance and counseling from parents before the pandemic, while only 3 (7.1\%) did not. Surprisingly, the number of girls who received guidance and counseling from their parents decreased slightly by two (2) to 37 ( $88.1 \%$ ), while the number of those who did not receive any guidance and counseling from their parents increased correspondingly by two (2) to five (11.9\%). Parental laxity may explain why some parents ceased guiding and counseling their daughters after the COVID-19 lockdown.

Table 6: Presence of school senior women teachers, and provision of psychosocial support to primary and secondary school girls before and after COVID-19

| Characteristic | Before COVID-19 |  | After COVID-19 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Primary $\begin{aligned} & (n=41) \\ & n(\operatorname{col} \%) \end{aligned}$ | Secondary $\begin{aligned} & (n=42) \\ & n(\operatorname{col} \%) \end{aligned}$ | Primary $\begin{aligned} & (n=41) \\ & n(\operatorname{col} \%) \end{aligned}$ | Secondary $\begin{aligned} & (n=42) \\ & n(\operatorname{col} \%) \end{aligned}$ |
| Presence of a senior woman Teacher |  |  |  |  |
| Yes | 35(85.4) | 29(69.1) | 35(85.4) | 30(71.4) |
| No | 6(14.6) | 13(31) | 6(14.6) | 12(28.6) |
| Did your parents give some guidance and counseling |  |  |  |  |
| Yes | 40(97.6) | 39(92.9) | 40(97.6) | 37(88.1) |
| No | 1(2.4) | 3(7.1) | 1(2.4) | 5(11.9) |

## DISCUSSION

Generally, therefore, the pandemic does not appear to have had a significant effect on the number of meals the pupils had per day, mainly because most of the households obtained most of their food from their own gardens. Students and pupils who ate vegetables mentioned the following types: cabbage, cassava leaves, African spinach, sukuma wiki, kale, eggplant, green pepper, carrots, and tomatoes. Those who never ate them mentioned the price being high and even the supply in the market being low. Most of the respondents who ate fruits regularly had mangoes, jackfruit, oranges, paw paws, pineapples, avocado, lemon, passion fruit, and, to a lesser extent, apples and watermelon. However, those who did not eat fruits regularly complained about the cost of these fruits and their availability in the market. Most of the respondents who were not eating vegetables regularly attributed this to the scarcity and costliness of vegetables, while one student admitted that she was not interested in vegetables.

According to the findings, COVID-19 led to an increase in the number of girls dropping out of school. The results of this study are consistent with the study carried out by USAID in 2023, whereby about 15 million learners are estimated to have missed school and approximately 30 percent are projected to likely never return to school. In addition, the quality of education declined, with many teachers opting for alternative and more profitable economic activities. The learning disruption also exacerbated other risk factors like teenage pregnancy, child marriage, and labor. Due to this disruption, progress made on education outcomes like enrollment over the last two decades has been eroded significantly, and the likely negative impact on human development in the country will linger into the future.

In challenging times, such as during a pandemic, people, especially young ones, need psychosocial support to be able to cope and survive. That is why the study was keen to find out whether schoolgirls had received such support both before and after the COVID-19 lockdown to enable them to cope with the challenges of the pandemic. It was expected that such support, mainly through counseling and guidance, would have been provided either by senior women teachers in schools or parents at home, or even both. Therefore, the study began by trying to establish whether or not all the schools in the study had senior women teachers for that purpose.

Primary school pupils who had senior women teachers before COVID-19 reported having received a wide range of advice from those teachers, including advice to maintain personal hygiene, study hard and respect elders, avoid bad groups and sexual intercourse, and manage menstruation appropriately. After the COVID-19 lockdown, the same pupils were advised to complete the education cycle, protect themselves against the pandemic by observing the standard operating procedures, help their parents with garden work, avoid early marriage, stay home and keep safe, abstain from sexual activities, obey their teachers, avoid moving about at night, report abusive men, and avoid abortion. All this was typical Ugandan advice to girls, laced with Christian Puritanism, especially the focus on abstaining from sex rather than learning to enjoy sex safely.

On their part, before the pandemic, secondary school students who had a senior woman teacher were advised to eat vegetables, be respectful, avoid crowded places, protect themselves against HIV, embrace teamwork, avoid latenight movements, and dress properly. After the COVID-19 lockdown, the same students were advised to shun gifts from men, avoid hanging around bars, avoid unnecessary movements, manage their menstruation appropriately, embrace proper time management, and eat fruits regularly. The only significant difference in the advice given to secondary school girls was the inclusion of proper time
management and eating fruits regularly; the former was attributable to the more advanced age of the girls.

## 5. CONCLUSION

It can be concluded that COVID-19 had adverse effects on schoolgirls aged 12-18 years, and it altered almost everything in the schooling setup. This led to dropping out of school, low attendance, irregularities in attendance, and an increase in the cases of colds and flu.

## RECOMMENDATIONS

In all cases, girls who have dropped out of school should be encouraged to return to school and acquire formal education and/or vocational training. This will, in the long run, mitigate the dangers of idleness and its attendant ennui.

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