



Rapid COVID-19 Vulnerability Assessment in Lusaka (Zambia)

August 2020



Executive Summary



WaterAid, working with the Ministry of Health, Lusaka City Council and other Partners, supported by Development Data, Consultancy firm based in Zambia, conducted a Rapid COVID-19 Vulnerability Assessment in Lusaka. The purpose of the assessment was to help identify hotspot areas, gaps, and targets for interventions in order to provide a clear analysis

of the situation on the ground and generate evidence to inform planning and programming as the response progresses. The vulnerability assessment focused on the physical, social, and economic vulnerabilities people face and the coping mechanisms they employ. Further the Assessment investigated knowledge, attitudes, and practices on COVID-19.

Based on the Assessment results the following key actions are recommended:

1. Increase and prioritize investment in Water, Sanitation, and Hygiene services as they are the first line of defense against COVID-19 and other waterborne diseases such as Cholera.
2. Scale up promotion of key public health behaviors in communities such as frequent hand washing, social distancing, wearing of masks in public places, keeping environments clean and referral.
3. Ensure coordinated multi-sectoral efforts in the response to the COVID-19 pandemic.

Introduction

In November 2019, an acute respiratory disease, known as COVID-19, emerged. The pathogen responsible for COVID-19, is a severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), a member of the coronavirus family (WHO, 2020). The COVID-19 disease, which originated in China, has according to WHO spread to more than 150 countries worldwide and as at 20th August, 2020 reported over 20, 000, 000 cases and more than 750, 000 deaths .

Inadvertently, an outbreak such as this one has varying and sometimes multiple impacts in different sectors and among segments in societies. Some groups who are already vulnerable are made worse off while others are negatively impacted by the outbreak. In addition, the populations most at risk are those that; depend heavily on the informal economy; live in areas prone to shocks; have inadequate access to social services including water and sanitation; have limited capacities and opportunities to cope and adapt and; limited or no access to technologies

Therefore, WaterAid, working with its partners conducted a Rapid COVID-19 Vulnerability Assessment. The assessment was conducted between June and July 2020.



WASH and COVID-19 Response

The World Bank brief on water, sanitation, and hygiene (WASH) shows that one of the most important measures in the prevention of COVID-19 infection is practicing frequent and proper hand hygiene. This means that it is imperative for the improvement of facilities to enable regular hygiene and encourage behaviour change towards sanitation and hygiene in the communities. Furthermore, WASH services must be safely managed since they play an integral part in protecting human health, particularly during the current COVID-19 pandemic. Investing in the core public WASH infrastructure is a cost-effective measure because it will ease the disease outbreak and mitigate the secondary impacts on community livelihoods and wellbeing.

The strategies most recommended to control the spread of COVID-19 include but not limited to social distancing and frequent handwashing, something which is not easy for the millions of people who live in highly dense communities with precarious or insecure housing, and poor sanitation and access to clean water (UN Secretary-General's Policy Brief, 2020). The impact of COVID-19 on children is also a concern and has far-reaching impacts than just the loss of education. The most vulnerable children are part of families in which parents have informal jobs and are not able to work from home and those children living in the streets. In socio-economically fragile settings, a lockdown policy can exacerbate health inequalities, economic and social inequalities for the longer term. The consequences need careful consideration to avoid reinforcing the vicious cycle between poverty and ill health (Mahase E, Kmiotowicz Z, 2020). Under this unprecedented challenge, governments must be mindful that strategies to address the pandemic should not further marginalize or stigmatize affected communities and vulnerable groups.

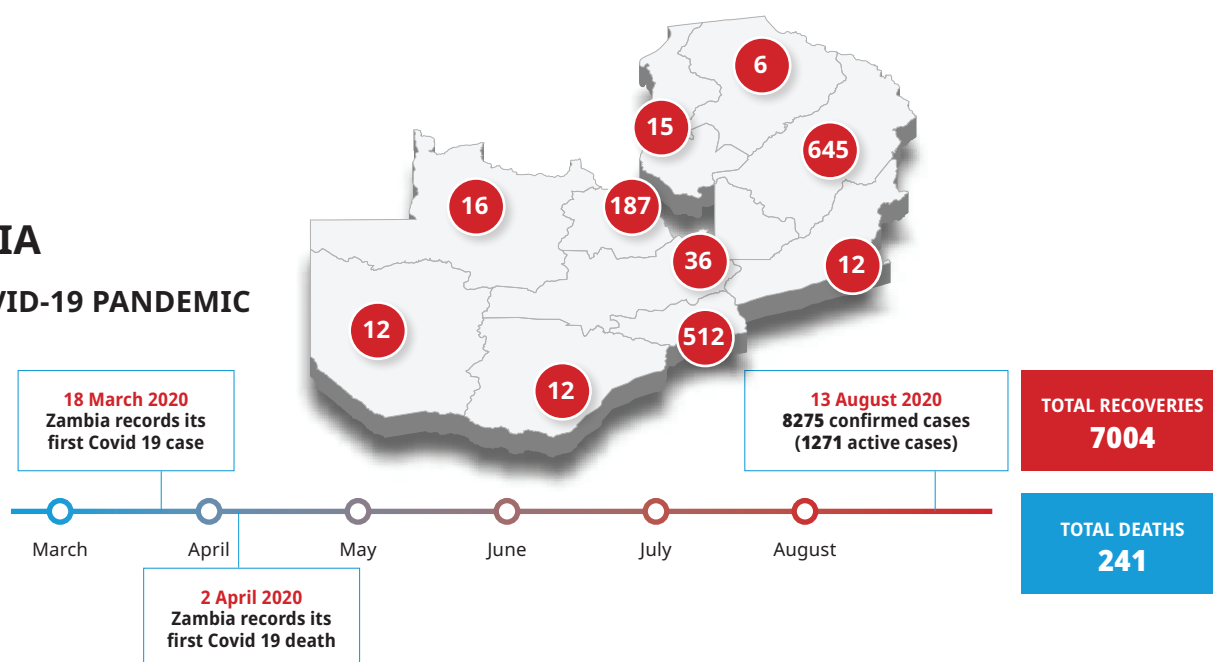
WaterAid is a global leader in WASH, hygiene promotion, and behaviour change and is a key actor in the WASH sector in Zambia. WaterAid Zambia is currently working with the Zambian government and other partners through the hygiene behaviour change Kutuba Campaign - to promote the identified key hygiene behaviours that prevent the spread of the Coronavirus building on existing WHO and Ministry of Health (MOH) guidelines. WaterAid Zambia places a strong emphasis on the need for cross-government and cross-partner coordination working on health, education, finance, and WASH in responding to such a crisis to avoid waste of resources and duplication of efforts.

COVID-19 In Zambia

Zambia has been identified as one of the top 18 risk countries in Africa that is most vulnerable to be affected by the fast-spreading virus. On 18th March 2020, the country recorded its first 2 cases and as at 20th August 2020, the country had recorded over 10, 000 cumulative cases and over 250 deaths. Confirmed cases have been identified in almost all Provinces with Muchinga recording 645 cases followed by Lusaka with 512 cases. Other provinces such as the Copperbelt, 187 and Central 36, while North-western, Luapula, Eastern, Western, Southern and Northern have recorded 16, 15, 12, 12, 11, and 6 cases, respectively. Vulnerable/risk groups include children, the elderly, immune-compromised, and others with underlying chronic conditions such as diabetes, high blood pressure are at higher risk. There is also a high risk of infection where the communities have inadequate infrastructure.

ZAMBIA

THE COVID-19 PANDEMIC



About the assessment

The purpose of the assessment was to help identify hotspot areas, gaps, and targets for interventions in order to provide a clear analysis of the situation on the ground and generate evidence to inform planning and programming as the response progresses. The vulnerability assessment focused on the physical, social, and economic vulnerabilities people face and the coping mechanisms they employ. Further the Assessment investigated knowledge, attitudes, and practices on COVID-19.

Mixed methods approach was utilised in a complementary way. For the quantitative survey, the main experimental design was cross sectional, which was statistically designed for Chaisa, Ibex Hill, Kuku and Matero locations. These locations were a mix of low- and high-density areas with reported cases of COVID 19, at the time of the survey. A total of 431 sample against a planned target of 428 (100.1%) was achieved. The qualitative research component gained an in-depth understanding of the way communities were currently responding to COVID19 pandemic and their access to WASH services during this pandemic. A total of 20 Focus Group Discussions (FGDs) were conducted in the four targeted locations in Lusaka.

Study results, conclusions, and recommendations

This assessment, intended to examine the likely impact of COVID-19 on WASH in Zambia, especially among vulnerable communities through investigating physical vulnerabilities, social vulnerabilities, economic vulnerabilities, and household coping mechanisms from the selected communities.

COVID-19 knowledge, preparedness, and response

Although 94.2% of the survey respondents were highly knowledgeable about COVID 19 with 89.3% having good understanding of hygienic practices, especially washing of hands using soap and water or alcohol -based hand rub, 85% of the respondents regarded themselves as likely to be infected with COVID-19 in the future. There is need to dig deeper into prevention and infection control among the communities.

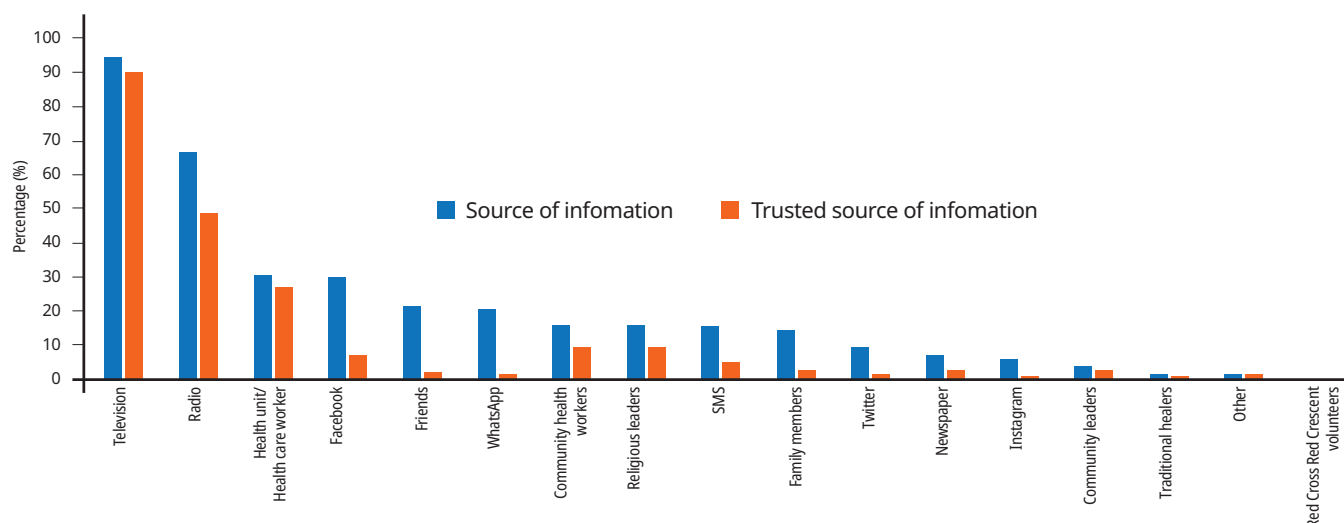
Knowledge on COVID19 transmission: 69.4% (N=288), majority, mentioned droplets from infected people and 67.5% (n=280) mentioned direct contact with infected people followed by 44.8% (n=186) who mentioned touching contaminated objects/surfaces. Analysis of data by gender did not show any significant variation.

Knowledge of symptoms of COVID-19: 91.3% (N=415) mentioned fever as the main symptoms and the was significantly reported by more women than men (94.0% vs 86.7%, $p < 0.05$). Over eighty percent of the respondents also mention coughing (87.5%) and shortness of breath and breathing difficulties (81.7%) as major symptoms of COVID19.



94.2% of the survey respondents were highly knowledgeable about COVID 19

Sources of information for COVID-19:



Of the 431 survey respondents, 96% mentioned that TV was their major source of information related to COVID-19. This is not surprising because the survey was conducted in a predominantly urban area. This resonates with 94.2% of those that stated that they knew about COVID-19 as mentioned earlier. Analysis by gender of the respondents showed that 97% of women respondents in comparison to 94% men mentioned TV.

Preventative measures-practices carried out a week before the survey

The leading measures undertaken by households to prevent COVID-19, a week preceding the survey, were washing of hands using soap and clean water (83.5%) and using of face mask (48.5%) followed by staying at home (45.5%) and use of alcohol-based sanitizers. Qualitative analysis of data from the FGDs conducted echoed the same that study participants were knowledgeable of preventive measures against COVID 19. This knowledge permeated almost across all respondents in the FGDs.

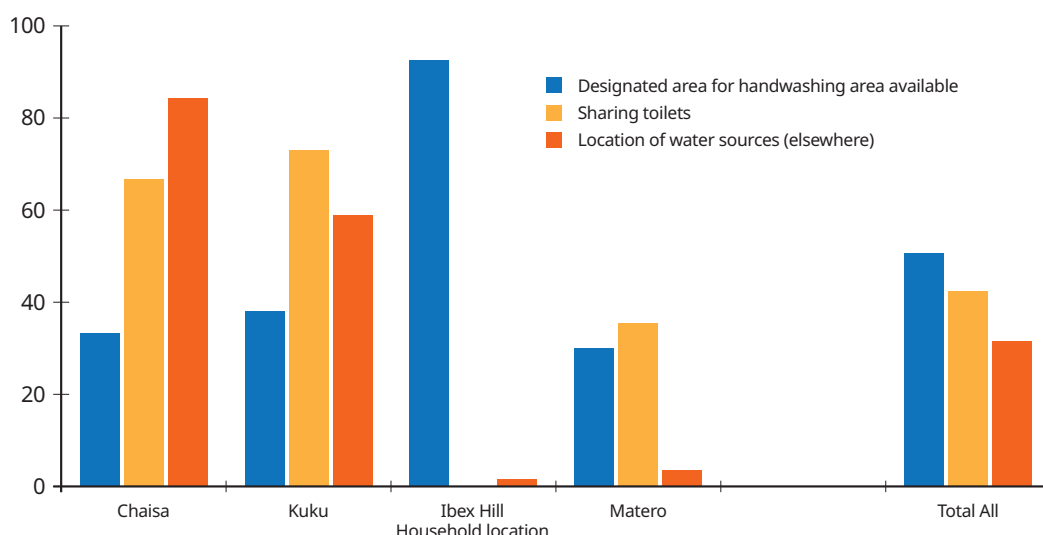
Physical Vulnerability

Alongside social distancing, case isolation and contact tracing, regular handwashing with water and soap is recognized as one of the most important measures to prevent transmission of COVID-19 .

Our assessment revealed that close to a third (31.6%) of households were likely to face a potential barrier to contain COVID-19 as their water sources for

drinking were located outside their premises; Adhering to social distancing was a challenge to 21% of the surveyed households who were fetching water outside their dwelling or premises. 99.3% of the respondents were using improved sanitation facilities based on the WHO standards despite 42.5% households sharing their toilets with other families. 49.3% of the household visited did not have a designated area for hand washing at their homes despite household possessing positive understanding on households' adhering to critical hand washing. The results reveal a gap between knowledge and practice. This is a common gap which can be seen between knowledge and practiced behaviours especially when convenient hand washing facilities are not in place.

Persons living with disabilities are facing challenges in accessing WASH services; Of the 46 persons living with disability interviewed, half (50%) faced difficulty in getting water for drinking (39.1% some difficulty and 10.9% a lot of difficulty). 26.1% were able to collect their own water while 54.3% indicated sometimes they face difficulties to collect their own water. Slightly above a quarter (26.1%, n=12) of the respondents need assistance to get to the toilet.



31.6%

Household's water sources are located outside their dwellings or yards



65.9%

Are purchasing water from water points



21%

Are not able to adhere to social distancing when fetching water outside their premises



78.7%

Having adequate water for drinking and other use

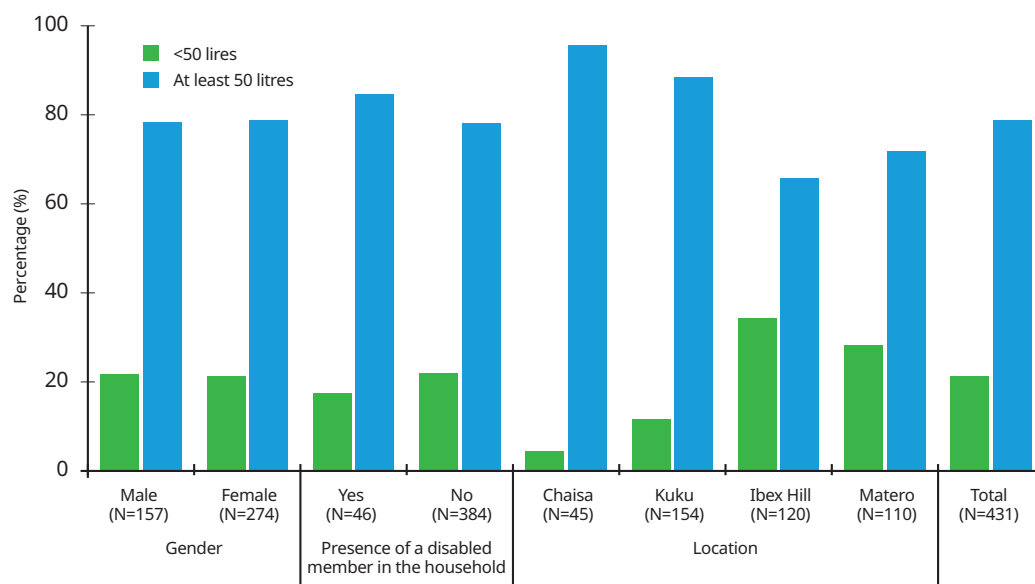


62.6%

Had increased amount of water for use due to COVID-19

Household Water Facilities

Based on the WHO definition of water adequacy mentioned earlier, more than three quarters (78.7%) had adequate water per person while the remaining 21.3% did not have adequate water person.



Social Vulnerability

The following groups emerged as the most vulnerable groups in the surveyed areas: (1) women and girls, (2) people living with disabilities, (3) older people and others with serious medical conditions (e.g., HIV/AIDS, TB), (4) children, and (5) Orphans. About half (50.8%) of the households in the surveyed locations especially in Chaisa, Kuku and Matero were generally to be considered somewhat vulnerable as a result of unemployment, reliant on public taps with little adherence to social distancing which is a potential barrier to contain COVID-19 disease.

A study conducted by UNAIDS in 2011 highlighted that about 60% of women in Africa have experienced some form of abuse, particularly sexual and physical violence. As the COVID-19 pandemic deepens economic and social stress coupled with restricted movement and social isolation measures, gender-based violence was reported to be on the increase. Interviews with Kuku women and men, has it that, many women are being forced to 'lockdown' at home with their abusers and at the same time services to support survivors are being disrupted or made inaccessible.



“When the husband is not bringing food home, we get upset so the fights become a lot we would think he is doing it on purpose” - FGD Chaisa Women.

“As for me we never stop fighting because my husband wasn't leaving any money anymore. He used to work for bars that are now closed. So, as you are pressuring him when there is nothing to eat, we never stop fighting” - FGD Matero Girls

“They (government) should reopen the companies and other businesses to also reduce fights in homes” - FGD Chaisa Boys



“In the markets people are still not maintaining social distance and masking. You will find that they have got the masks but unfortunately, they are not putting them on. They feel they don't have to, they're not affected, so it's quite key that you continuously take out the information so people can understand why it's important for them to do what they're being asked to do”. - **KII Lusaka City Council**

Services largely affected by COVID-19 includes WASH and Education. 88.7% of the parents were willing for their children to go back to school although 49.4% of the parents were not confident that WASH status at schools is good. Provision of adequate water, sanitation and hygiene services ensures that schools provide a safe and clean environment and do not become a hub for the transmission of COVID-19, especially as schools are reopened following lockdowns in many countries . According to the JMP 2020 report reveals that globally nearly one in three schools (31 per cent) lacked basic drinking water services (affecting nearly 600 million children) and over one third (37 per cent) lacked basic sanitation services (affecting nearly 700 million children). Two in five schools (43 per cent) lacked basic hygiene services, affecting more than 800 million children around the world. In Least Developed countries, 49 per cent of all schools have no handwashing facility at all.

In all the FGDs conducted, it was echoed that for schools to open, all appropriate measures must be put in place to avoid putting pupils at risk of COVID-19. It was further explained that if any school children were exposed to COVID 19 while at school, it would put several other people at risk especially teachers and parents. All adult focus group discussions expressed scepticism on the ability of school children to practice social distancing.

FGDs with girls from Chaisa and Matero women indicated that they know about the educational programs on TV although not every child has access to these programs. Furthermore, some children were said to be slow learners hence there was little time for them to grasp the concepts and take note. It was noted from the group discussion with men from Ibex Hill that online learning is not for everyone as other children have connectivity challenges and this was juxtaposed to mostly the rural folk.



Economic Vulnerability

Most of the workers in the informal workers, as expected, were largely affected by COVID19 pandemic; 62.9% (105) of the respondents (86.9% of formally employed and 38.6% of informally employed) mentioned going to work despite COVID-19 pandemic. The variation between formally employed and informally employed was statistically significant ($p < 0.001$). More than seven tens (72.5%, $n=121$) indicated that their income was affected by the COVID-19 pandemic. A significantly higher proportion of the self-employed group (96.4%, $n=80$) was largely affected than the formally employed group (48.8%, $n=41$, $p < 0.01$). The spread of COVID-19 has already had a large negative impact on Labour supply and earnings of workers in many countries and Zambia is not an exception.

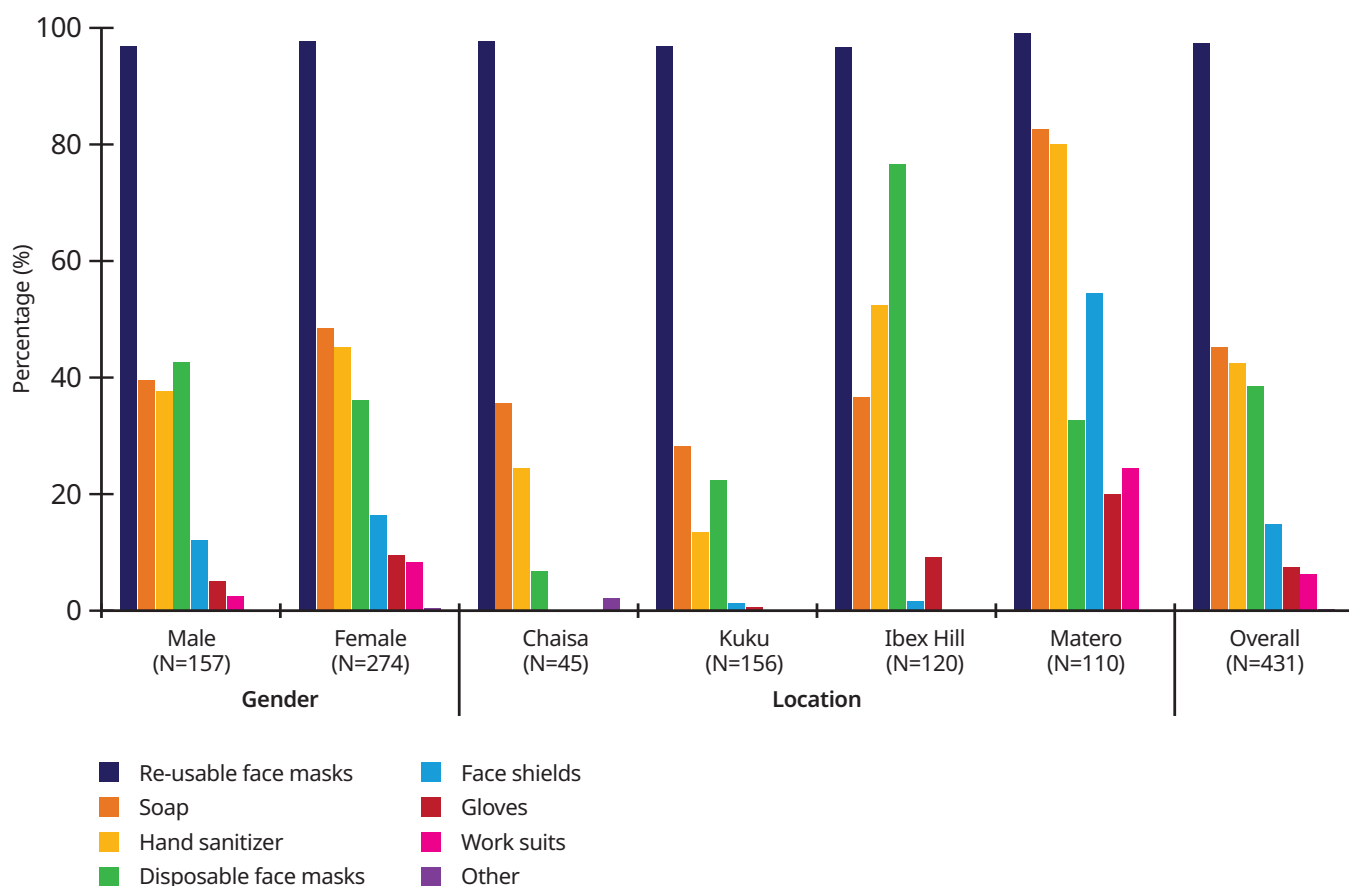
Less than a fifth (18.8%) of the households mentioned being able to cope or adapt with lockdown situation. The biggest barrier to food stocking was said to be money. Respondents expressed that they did not have money to stock up food.

Accessibility and affordability of PPE

The household surveys revealed that the main PPE materials used by people in their communities were re-usable facemasks (97.4%) followed by Soap (45.2%) and Cloth (48.3%) and Hand sanitiser (42.5%). Analysis by gender shows little variation in terms of the types of masks used. However, analysis by locations shows that although use of re-usable face masks was predominant in all location, more than three quarters (76.7%) in Ibex Hills were also using disposable face masks. A women FGDS in Chaisa expressed that the cloth masks were the most used because they were affordable and cost effective.

According to the FGD respondents, the key question during the pandemic had been whether it was necessary to wear a face mask since this had become a symbol of our changed lives under coronavirus. Still, months after the pandemic began to spread, many respondents highlighted that they had remained unsure about whether a mask was essential to keep them safe. Some of the respondents postulated that

Accessibility and affordability of PPE





face masks were not their favourite because they had given them a hard time in breathing as stated in an FGD with Matero women, “personally, I have breathing problems when I wear that mask, I feel suffocated that’s why I don’t wear them”.

Practices, Attitudes on use of PPEs

While this pandemic has the potential to fracture societies, it is the resilience; solidarity, strength, and ingenuity of communities that will help overcome this crisis. According to the FGDs conducted in Chaisa, responses from the girls, boys and women has it that, since there was no cure for COVID-19 yet, it was therefore important to frequently wash hands with soap and water. However, if soap and water were not available, it was better to use a hand sanitizer that contained at least 60% alcohol. Sadly, it emerged from FGDs that some people were now drinking kachasu, a local brew simply because it was said to have a high alcohol percentage. This issue emerged from the discussions in with boys from Kuku and Chaisa. “They say when you drink kachasu it can burn the virus because it burns”

A total of 23 community observations were carried out most of them were churches (8), Schools (8), markets (5), orphanages (1) and shopping mall (1). A proportion of (43.5%, N=23) on the observed areas, people were found to be practicing social distancing, most of these were in schools and churches. At the markets, not everyone was found to be practicing social distancing. It was noted that some students at schools were not wearing on masks. In some of the shops, customers were still allowed to enter without masks.

Community management of PPE

Management of PPEs is important in the prevention of the spread of diseases. Gains made on prevention can easily be eroded by infections as a result of poor handling of PPEs. The study interviewed respondents to establish their understanding of how PPEs are disposed. The respondents had varied responses on what was the practice of face mask disposal. The household survey revealed that most respondents threw their used masks in household pits (42.5%), followed by those who washed for reuse (27.4%) and burning (20.2%).

Adequacy of Safety for Essential Workers

According to ILO, protecting workers is more challenging than usual, particularly regarding workers in nonstandard forms of employment and in the informal economy. Many such workers, a large majority of whom are women, lack adequate labour and social protection. Some organisations, such as Lusaka City Council and the Ministry of Health, Zambia Police are providing PPE for their frontline employees. More than three quarters (78.1%, n=57) of the formally employed respondents are given PPE by their employers while most of the self-employed (96.9%, n=31) are providing from themselves. The survey also asked about the COVID-19 preventative measures at workplaces.

Of the 105 respondents going to work, 97.1% of both formally employed (98.6%, n=72) and self-employed (93.8%, n=30) reported using protective and preventive equipment at their workplaces.

Conclusions and Recommendations

Key Conclusions

More than 85% of the respondents understood hygienic practices, especially washing of hands using soap and water or alcohol-based hand rub, but there still exist gaps on other preventative measures such as social distancing and lockdown. Most households could not afford to buy soap/sanitizers, water containers, and household water treatment options and hand washing items. There is need to influence government and private sector to intervene.

Although 85% of the respondents regarded themselves as likely to be infected with COVID19 in the future and almost everyone, including school children, are vulnerable to the disease, 88.7% of the parents were willing for their children to go back to school. COVID-19 preventative measures at schools is critical. There is need to have a detailed wash school related survey to capture all WASH related issues to manage and contain COVID-19. In addition, it is critical to interrogate the gap between the knowledge and practices and attitudes the correctly understands the drive behind the communities.

More than 85%
of the respondents
understood
hygienic practices

88.7% of the
parents were
willing for their
children to go back
to school.

Recommendations

1. **Increase investment in Water, Sanitation, and Hygiene services which are the first line of defense against COVID-19 and other waterborne diseases such as Cholera in Zambia.**

The government should increase investments in WASH as the most cost effective way of addressing the COVID-19 pandemic. The WHO has guided that improving WASH is the first line of defence in all global efforts to fight COVID-19 given the rising demands for WASH services. Scaling up investment in WASH will avert future pandemics. Government must act and ensure universal sustainable WASH services and prioritise the poorest and most marginalised, recognising WASH as a first line of defence against future health crises.



2. Scale up promotion of key public health behaviors in communities such as frequent hand washing, social distancing, wearing of masks in public places, keeping environments clean and referral.

Good water, sanitation and hygiene practices, in particular handwashing with soap and clean water, must be strictly applied and maintained, as they constitute an important additional barrier to the transmission of COVID-19 and the transmission of infectious diseases in general (WHO, 2002). Handwashing facilities should be easy to use for all, including people living with a disability and children. It is crucial that the provision of hand washing facilities go hand in hand with behaviour change programming as this will consequently lead to the promotion and uptake of the services. When behaviour change is strengthened, it will enable an environment that ensures sustainability of the facilities and their usage is promoted. These facilities should also be very visible and that no additional time should be taken to get to the handwashing place.

As part of a new hand hygiene campaign, WHO recommends that universal access to hand hygiene facilities should be provided in front of all public buildings and transport hubs - such as markets, shops, places of worship, schools and train or bus stations. (53) In addition, functioning handwashing facilities with water and soap should be available within 5m of all toilets, both public and private.

3. Coordinated multi-sectoral efforts needed to address the COVID-19 pandemic

A priority action plan and stakeholder management plan to be developed and shared with the various stakeholders to avoid duplication of efforts and ensure all districts, communities are covered. A government led, collaborative and multi-stakeholder involvement leads to more effective and sustainable solutions. All stakeholders must recognise and commit to prioritising access to clean water and decent toilets as a basic human right, and must intensify efforts to ensure the provision of these services at this most critical time when they have proven to be crucial in the fight against the COVID-19 pandemic. Now, more than ever, there is need for partnerships, collaboration, and urgent action to build resilient water, sanitation, and hygiene systems.

4. Scale up the Assessment to cover Rural Areas

A scale-up study to cover a nationwide coverage is essential for broadening the effectiveness of COVID-19 readiness response.

Limitations of the Assessment

- Rapid assessment only in Lusaka (urban setting)
- Limited time to cover the whole country
- Comparing slums and low residential areas



Acknowledgments

Our special gratitude goes to Water Aid leadership and management for the valuable guidance and support they gave the Development Data team in undertaking the COVID 19 Vulnerability Assessment. In addition, their constant readiness to attend to and clear any queries the Team occasionally had during the entire process. Without the cooperation and willingness of the Ministry of Health, Lusaka City Council, Ministry of Water Development, Sanitation and Environmental Protection and other community institutions to assist in every possible way and provide information, this assessment would not have been completed on time.

Finally, we extend our heartfelt gratitude to the Health Facility staff and Zambia Police for providing the information through completion of the questionnaires.

References/more information

1. The COVID-19 response: Getting gender equality right for a better future for women at work , ILO policy brief, 11 May
2. <https://covid19.who.int/>, Aug 2020
3. <https://www.moh.gov.zm/>, July 2020
4. https://www.un.org/waterforlifedecade/pdf/human_right_to_water_and_sanitation_media_brief.pdf
5. <https://www.znbc.co.zm/news/znbc-opens-education-channel-on-top-star>
6. <https://data.unicef.org/topic/water-and-sanitation/covid-19/>
7. WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene
8. World Health Organization. Interim recommendations on obligatory hand hygiene against transmission of COVID19. Geneva: World Health Organization; 2020. Available from:
9. <https://www.who.int/publications/m/item/interimrecommendations-on-obligatory-hand-hygiene-againsttransmission-of-covid-19> 54. Ashraf S, Nizame FA, Isl



WaterAid is an international non-for-profit, determined to make clean water, decent toilets and good hygiene normal for everyone, everywhere within a generation. Only by tackling these three essentials in ways that last can people change their lives for good. WaterAid has been operational in Zambia since 1981 and has reached 3 million people. WaterAid Zambia currently operates in Lusaka, Monze, Kazungula, Mwense, Samfya and Mwandia Districts.

Plot No. 21A, Middleway, Kabulonga | wateraid.com
Tel: +260 211 267 557 Tel/Fax: +260 211 267 363

Let's make a lasting difference

