Malawi CTAP II
Vaccine Equity and Distribution Draft Report

cTAP COVID-19 TRANSPARENCY & ACCOUNTABILITY IN AFRICA | Positivo | Follow The Money

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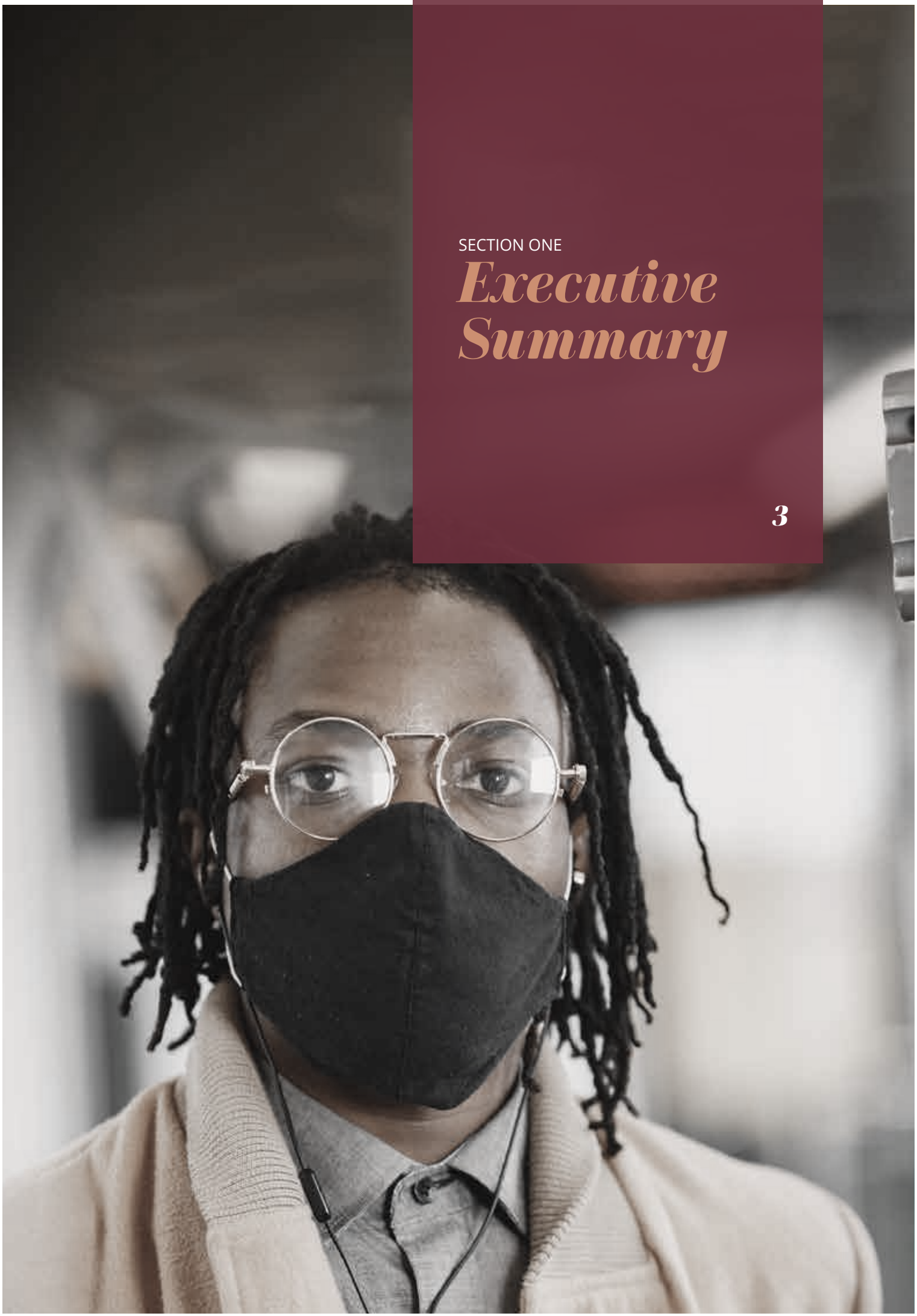
Table of Contents



SECTION ONE

Executive Summary

The COVID-19 Transparency and Accountability in Africa Project (CTAP) was commissioned as a civil society-led effort to bolster citizen engagement and promote change in the ways that CTAP II Vaccine Equity and Distribution governments use public resources, and increase the capacity of governments to meet people's needs. CTAP is a collaboration between BudgIT, Connected Development (CODE), Global Integrity, as well as partners in 7 African countries: Cameroon, Ghana, Kenya, Liberia, Malawi, Nigeria, and Sierra Leone. Under CTAP phase I (2020 - 2021), these partners used a combination of approaches to generate information on how COVID-19 funds were used by governments and leveraged that information to advocate and collaborate with governments to bring about change. In CTAP phase II, these partners worked with diverse stakeholders including government and communities to institute mechanisms for health sector accountability, foster effective & sector's best practices in focal countries.

The second phase of the project amongst its interventions sought to interrogate the dynamics of vaccine distribution and the challenge of vaccine equity in Malawi. Also, the research investigated issues of vaccine evolution, vaccine hesitancy, current vaccination levels, distribution, adequacy and emerging issues. These were considered critical, as Malawi/African region has its own local norms and attitudes, regarding the virus and vaccines. Of underlying concern were feasible advocacy strategies and interventions that created the circumstances or environment leading to a tangible increase in vaccine equity.

Summary of Key Findings

The study established at least ten major findings:

1. The study discovered that COVID-19 vaccination in Malawi began on 11 March 2021. The turnout for vaccination in metropolitan areas was high, while in rural areas it is low. Community engagement efforts to boost the turn out are well under way like training heath workers to visit and inoculate people in villages. Some community members including some health workers were putting up a resistance against the COVID 19 vaccination.

2. There was vaccine hesitancy due to misinformation, disinformation, and lack of general knowledge about the COVID-19 vaccines. Malawi also faced vaccine supply chain challenges, including a delay in vaccine supply, which resulted in COVID-19 vaccine stockout at the peak of the third wave.

3. Access to the COVID-19 vaccines in Malawi was a huge challenge, clearly exposing the gaps in equitable access to life-saving interventions. COVID-19 has highlighted the inequities existing in the delivery of health services; the rich still have higher access to quality health services than the poor. With the global call for Universal Health Coverage, equity is paramount. No one should be left behind due to their socioeconomic status.

4. The Ministry of Health with support from partners such as GAVI, UNICEF, the World Bank and WHO, made great efforts to increase the access to vaccine uptake through expanding vaccination sites, ensuring effective use of available stocks, pacing delivery of new vaccine stocks, mobilizing communities and addressing doubts and misinformation, training health workers, and providing additional support for low-performing districts to increase vaccine uptake.

5. The study ascertained discovered several ways for achieving COVID-19 vaccine equity. For instance, the development and licensing of vaccines, mass production of the vaccines, pricing them so that they are globally affordable, allocating them to be available where and when they are needed, and deploying them to local communities.
An effective global approach to achieving vaccine equity must address challenges in the dimensions of vaccine production, allocation, affordability, and deployment.

6. Priority groups for COVID-19 vaccination in Malawi were as follows: First, all health workers in both public and private facilities, comprising 3% of the population. Second, social workers such as the police, soldiers, and prison warders, who according to theirnwork, are always in direct contact with groups of people and mostly difficult to keep social distance. These comprised 2.4% of the population. Third, the elderly who are above 60 years since older people are at an increased risk of developing severe illness and even death due to ageing and potential underlying conditions. Fourth, mentally ill and People Living with Disabilities (PLWDs) as they can hardly understand and follow the COVID-19 preventive measures despite not falling into any of the categories.

7. One of the major enablers for COVID-19 vaccine equity in Malawi was the example set out by the political, religious, and traditional leaders who were the first to be vaccinated. Therefore, after the citizens saw that the president, the vice president, traditional leaders and religious leaders from various faiths in the country had been vaccinated, they were encouraged to get vaccinated as well.

8. It was found out that the health surveillance assistants (HSAs) created a COVID-19 vaccination demand in their respective catchment areas by conducting village COVID-19 orientation meetings at the community level. Simultaneously, some of the HSAs volunteered to be vaccinated during these village orientation meetings to demonstrate to the people that they should not fear anything concerning the COVID-19 vaccine. It was further reported that as a result of this initiative many people got vaccinated.

9. Women from LMICs had unequal access to COVID-19 vaccines. While the reasons for the inequality vary from country to country, in Malawi the findings suggest the inequality may be influenced by a lack of trust in the vaccines. The study found that women were less likely to trust the COVID-19 vaccine out of fears about fertility. In one Malawian district, researchers found that women were four times less likely to trust the vaccine (10%) compared to men (40%) due to fears regarding fertility and population control.

10. Several reasons influenced vaccine hesitancy in Malawi. For instance, fear of side effects, religious leaders who claimed that COVID-19 vaccination is the mark of the beast, the myth that COVID-19 vaccines are being administered in order to lower African women's fertility rates; thereby, reducing population growth, the spread of false and misleading information on social media, misperceptions of the jab's efficacy and safety, and limited access to COVID-19 vaccines.

Recommendations

The study makes the following recommendations; specifically, calling upon the government of Malawi and Civil Society Organizations (CSOs) to action. The study recommends that:

1. Vaccination should be allocated in line with the equal respect principle, requiring that the interests of all individuals and groups, including marginalized communities i.e. refugees and migrants, are treated with equal consideration. While the supply of vaccine is limited, countries should set up prioritization plans which considers the vulnerabilities, risks, and needs of groups who, because of underlying societal, geographic, or biomedical factors, are at risk of experiencing greater burdens from the COVID-19 pandemic. Such groups include the elderly, PLWDs, refugees, IDPs, asylum-seekers, populations in conflict setting or those affected by humanitarian emergencies, low-income migrant workers, and vulnerable migrants in irregular situations.

2. The government should engage the Civil Society, religious and traditional leaders to develop people-centered country prioritization plans to guarantee in-country equity in vaccine access and availability to all citizens including

hard to reach populations. Plans must include demand generation to drive vaccine uptake.

3. Vaccine manufacturers should increase their commitment to COVAX to guarantee access to vaccines of the most vulnerable populations and communities, including refugees and displaced people. NGOs experienced in vaccination programs for refugees should be consulted, so that the process of vaccination is safeguarded, especially with the technical aspects of vaccines.

4. Development partners, civil society/NGOs should advocate for global vaccine solidarity by supporting policy reforms and engagements to promote vaccine equity for the achievement of herd immunity, leaving no one behind.

5. The study discovered the following ways for countering vaccine hesitancy: Understanding the specific concerns of local communities is critical to countering misinformation and incorporating local knowledge into vaccine rollouts, establishing participatory engagement and open debates, including with minorities and other marginalized communities, prior to, or at least very early on in the vaccine roll- out, taking time to understand the social media landscape and its complexities, and using trusted celebrities and (e.g. musicians, sports stars, even social media influencers) and community champions (e.g. faith leaders, traditional leaders) to endorse vaccines.

SECTION ONE

Vaccine Equity And Distribution Research In Malawi

1.1 BACKGROUND

African governments' response to COVID-19 was characterized by instances of mismanagement, waste, and blatant corruption. Issues such as unlawful procurement, political use of monetary and other relief, and the diversion of funds have led many communities to deal with the hardship of the pandemic in economic and social isolation. This has further affected citizens' trust in government, perpetuated social divisions, and increased inequality, putting nations in a weak position to encourage economic recovery. To address this, the COVID-19 Transparency and Accountability in Africa Project (CTAP) was commissioned as a civil society-led effort to bolster citizen engagement and promote change in the ways that governments use public resources and increase the capacity of governments to meet people's needs.

CTAP is a collaboration between BudgIT, Connected Development (CODE), and Global Integrity, as well as partners in 7 African countries: Cameroon, Ghana, Kenya, Liberia, Malawi, Nigeria, and Sierra Leone. Under CTAP phase I (2020–2021), these partners used a combination of approaches to generate information on how COVID-19 funds were used by governments and leveraged that information to advocate and collaborate with governments to bring about change. In CTAP phase II, these partners will collaborate with diverse stakeholders, including governments and communities, to implement mechanisms for health sector accountability, foster the effective and equitable distribution of the COVID-19 vaccine, and mount effective advocacies that mainstream health sector best practices in focal countries.

1.2 PURPOSE OF THE RESEARCH

Building on the achievements of CTAP phase I, the second phase of the project, amongst its interventions, seeks to interrogate the dynamics of vaccine distribution and the challenge of vaccine equity in Malawi. Also, to be investigated are issues of vaccine evolution, vaccine hesitancy, current vaccination levels, distribution, adequacy, and emerging issues. These issues are deemed crucial as Malawi and the African region have their local customs and attitudes regarding the virus and vaccines. Of underlying concern are feasible advocacy strategies and interventions that can create the circumstances or environment that led to a tangible increase in vaccine equity.

1.2.1 OBJECTIVES

In line with the purpose of the research, there are six specific objectives to be achieved. These are:

1. To assess the COVID-19 Country Context in Malawi.
2. To examine pathways of access to vaccines in the Country, as well as distribution dynamics and level of vaccination.
3. To interrogate the phenomenon of vaccine equity-priorities, measurement, enablers, and other elements, taking into consideration gender equity and PLWDs.
4. To examine the challenge of vaccine hesitancy via an analysis of the country's context and drivers.
5. To analyze epistemic communities and responses to vaccine equity issues; incorporates citizen narratives and case studies.
6. To develop advocacy points and recommendations for equity and counter-hesitancy.

1.3 METHODOLOGY

This section of the inception report presents a detailed research methodology that will be used in the research study.

1.3.1 RESEARCH DESIGN

The research design for this study will be comprised of both desk research (literature review) and field research (empirical approach). The desk research will be aimed at collecting data from secondary sources, field research will

collect information from primary sources through interviews and Focus Group Discussions (FGDs).

The research will further employ a mixed design approach comprising qualitative and quantitative research methods.

1.3.2 DATA COLLECTION METHODS

The following data collection methods will be used: literature review[1], key informant interviews[2], and Focus Group Discussion (FGDs)[3].

1.3.2.1 LITERATURE REVIEW

The study will review literature pertaining to the topic "Vaccine Equity and Distribution Research in Malawi." A literature review will be applied to all six of the research objectives.

1.3.2.2 KEY INFORMANT INTERVIEWS

Semi-structured interviews and/or meetings will be held with people with a senior management roles in the health sector in Malawi. Respondents will include members from the following committees: Officials from the Ministry of Health, the Presidential Task Force on Coronavirus, the Public Health Emergency Operations Centre on COVID-19 (EOC), the Department of Disaster Management Affairs, Traditional Authorities, Religious Leaders, etc.

Key informant interviews will be used to collect data for objectives 2–5 of the research.

1.3.2.3 FOCUS GROUP DISCUSSIONS

The study will conduct a total of five FGDs in the following districts: Zomba, Blantyre, Phalombe, Machinga, and Lilongwe.

FGDs will be conducted to gather data for objectives 1-6 of the research.

1.3.3 SETTING OF THE STUDY

The study will be conducted in five districts: Zomba, Blantyre, Phalombe, Machinga, and Lilongwe.

1.3.4 SAMPLE SIZE

The sample size for the study will be 60. 10 officials from the Ministry of Health, the Presidential Task Force on Coronavirus, the Public Health Emergency Operations Centre on COVID-19 (EOC), etc., will participate in the study. Their interview will focus on objectives 1-6 of the research.

Twenty healthcare workers who are administering COVID-19 vaccinations in various health facilities will also participate in the study. Their interview will focus on objectives 2–6 of the research.

1.3.5 DATA ANALYSIS

The data for the study will be analyzed using both qualitative and quantitative techniques. Qualitative data will be analyzed by using a thematic analysis approach, while quantitative data will be analyzed using SPSS.

1.3.6 ETHICAL CONSIDERATIONS

Four ethical considerations will be adopted when conducting this research study: protection from harm; right to privacy; professional conduct; and informed consent.[4] In the context of the COVID-19 pandemic, the study will adopt ethical considerations that will enhance COVID-19 prevention both for the researchers and participants.[5]

1.4 LITERATURE REVIEW

This section of the inception report presents a literature review pertinent to the topic "Vaccine equity and distribution research in Malawi."

1.4.1 SITUATION OVERVIEW OF COVID-19 IN MALAWI

Malawi, a sub-Saharan African country, has not been spared from the impact of the COVID-19 pandemic. (2020:71) argues that the Malawian health sector, which battles the epidemic, is already challenged by inadequate funding, insufficient staffing, dilapidated infrastructure,

1. Knopf, J. W. (2006). Doing a literature review. PS: Political Science & Politics, 39(1), 127-132.
2. Taylor, G. A., & Blake, B. J. (2015). Key informant interviews and focus groups., Nursing research using data analysis: Qualitative designs and methods in nursing, 153-165.
3. Wong, L. P. (2008). Focus group discussion: a tool for health and medical research. Singapore Med J, 49(3), 256-60.
4. Leedy, P. D., & Ormrod, J. E. (2001). Practical research: Planning and research. Upper Saddle.
5. https://www.idrc.ca/en/research-ethics-practices-during-covid-19, (Accessed 20 March 2022)

and a lack of essential medicines and equipment. Together with a high poverty level and poor health literacy, all these posed further challenges towards effective containment. Aggravating the already tense situation, health personnel went on strike for two weeks, forcing the government to employ more personnel, provide enough personal protective equipment, and increase hazard allowances. Inadequacy of equipment adds to the grim picture as the country has a total of only 25 intensive care units (ICU) and 7 functioning ventilators. Mhango (2021:1) reports that Malawi's decrepit healthcare system rendered frontline health personnel incapable of mounting an adequate response to critically ill COVID-19 patients who required ventilation during the surge of patients during the peak of the epidemic, as was experienced from January to February 2021. This led one of the nurses at a Covid-19 Isolation Centre in Lilongwe to cry out loudly: *"Malawi can't breathe." "Lord, please hear our cries and heal our land."*

Paul Msoma, a patient who died of COVID-19-related illnesses posted an SOS message on his Facebook page as he was on his deathbed gasping for oxygen to breathe at the Kamuzu Central Hospital (KCH). His cry for help deeply moved Malawians of goodwill to start a fund-raising initiative to complement government efforts in containing the pandemic.[6] He lamented as follows:

I am in the hospital, diagnosed with COVID-19 positive. The hospital staff are so wonderful, and I can see the pain in their eyes. Yes, they have oxygen cylinders but, in my case, they can't connect me to the much-needed oxygen because the whole KCH has no oxygen flowmeter. My situation is getting worse and I desperately need oxygen. Is there anyone who can urgently help out there? Please! help by donating this very gadget.[7]

The Malawi COVID-19 Incidence and Resource Management Report by CTAP also unearthed a lack of capacity and resources to fight the pandemic and also made the general public lose trust in the health system that some resorted to not seeking medical assistance when they had COVID-19-like symptoms. The lack of test kits took its toll in December and January 2021 and saw testing only being done on severe cases that showed the likelihood of developing COVID-19. *One Blantyre resident had this to say:*
I have been feeling all the symptoms of COVID-19, and thrice I have been sent back from the testing centre, they always say it is less likely that I could have the virus because I haven't been in contact with anyone who could have it. Imagine! It doesn't make sense. They told me that they don't have enough testing kits, so they are prioritizing those with severe symptoms."

The former President of Malawi, Peter Mutharika, declared a COVID-19 national disaster on March 20, 2020, even before any COVID-19 cases were reported in the country. He instituted a COVID-19 Taskforce Committee to oversee the pandemic and set aside funds amounting to $20 million to mitigate its impact. Some of the preventative measures include the closure of schools and universities on the 23rd of March 2020. Authorities also banned public gatherings of more than 100 people, and this applied to weddings, funerals, religious congregations, rallies, and government meetings. Security forces were deployed to enforce these restrictions.[9]

President Peter Mutharika confirmed the country's first three cases of coronavirus disease (COVID-19) on April 2, 2020. According to Mutharika, the cases involved a resident of Lilongwe who had travelled to India, one of their relatives, and their maid.[10]

On April 14th, 2020, President Peter Mutharika announced a 21-day nationwide lockdown aimed at preventing, containing, and managing the further spread of COVID-19. He made the announcement together with the then Minister of Health, Jappie Mhango, who was also the chairperson of the Presidential Task Force for COVID-19. At the time of the announcement of the lockdown measures, statistics showed that Malawi had registered 16 confirmed cases and two deaths due to COVID-19.[11]

The lockdown measures were met with fierce criticism from traders, religious communities, civil society organizations, and the general

6. https://www.nyasatimes.com/kenanis-covid-19-initiative-appeals-for-tax-waiver-on-items-to-be-bought/, (19.1.2021).
7. https://www.facebook.com/paul.msoma, (18.1.2021).
8. CTAP Covid-19 Incidence and Resource Management Report
9. Chilora, S., (2020). Peter Mutharika declares COVID-19 a national disaster. The Times Group Malawi.
10. Kaponda, C. (2020). No COVID-19 lockdown still threatens livelihoods and trade in Malawi. Africa at LSE.
11. Beloved Kaunga, S. (2020). How have Malawi's courts affected the country's epidemic response? Africa at LSE.

public. Consequently, numerous protests were held throughout the country against the lockdown measures. Protesters accused President Peter Mutharika of failing to consider the well-being of ordinary poor Malawians. The demonstrators demanded upkeep money from the government to survive the lockdown period.[12]

The Human Rights Defenders Coalition (HRDC) obtained a court injunction on April 17th, 2020, restraining the government from implementing the lockdown measures. According to Gift Trapence, chairperson of the HRDC, he said that they had obtained the injunction because of the government's failure to announce any measures to cushion the poor during the lockdown.[13]

On August 10th, 2020, the new administration led by Malawi's President, Rev. Dr Lazarus Chakwera, imposed new COVID-19 restrictions. Among other things, the government restricted public gatherings, including religious meetings, to ten people.[14]

As of April 13th, 2022, the coronavirus statistics for Malawi were: 85, 707 coronavirus cases, 2, 628 deaths, and 81, 660 recoveries.[15]

Despite the reduction in the number of new cases observed in Malawi over the past few weeks, the state of national disaster, which was declared on January 12, 2021, is still in place as the government is mindful to prevent a third wave, which is possible if the preventive measures are not observed.[16]

1.4.2 AVAILABILITY OF COVID-19 VACCINES IN MALAWI

The introduction of the COVID-19 vaccine was one of the preventive measures adopted by Malawi to prevent and control the COVID-19 pandemic. This aligned with the comprehensive Multi-Year Plan (cMYP) for 2017–2021, which outlined the priorities of the immunization program and which included new vaccine introductions. Globally the introduction aligned with the Global Vaccine Action Plan (GVAP) goal number 4 *"Develop and Introduce new and improved vaccines and technologies"*. The country was approved to participate in the COVAX facility arrangement, which is working to ensure equitable distribution and access to COVID-19 vaccines regardless of economic status among the countries across the globe. The facility will work to procure and distribute vaccines targeting 20% of the total population with other support launched in the Technical Assistance plan and the Cold Chain Equipment support. It is expected that countries will work to provide for operational costs as well as look for more resources to procure more doses of Carter for the remaining 80% of the populace. Malawi is engaging other potential donors to provide support with the procurement of more vaccines and funding the operational costs.[17]

On March 5, 2021, Malawi received 360,000 doses of the COVID-19 vaccine shipped via the COVAX Facility, a partnership between CEPI, Gavi, UNICEF, and WHO. This was a historic step to ensure equitable distribution of COVID-19 vaccines globally in what will be the largest vaccine procurement and supply operation in history. The delivery is part of the first wave of arrivals in Africa and the first tranche of allocations for Malawi, which will continue in the coming months and years through the COVAX Facility.[18]

Since the first shipments, the country has now received a total of 4,469,720 million COVID-19 vaccine doses; 55% (2,459,820 doses) of these from COVAX, 16% (706,800 doses) from the African Vaccine Acquisition Trust (AVATT), and 29% (1,303,100 doses) from bilateral deals and donations. Starting with one vaccine type – AstraZeneca – Malawi is now offering COVID-19 vaccination with three vaccines: AstraZeneca, Janssen, and Pfizer.[19]

In February 2022, the Government of Japan has decided to provide approximately 280 thousand doses of COVID-19 vaccines manufactured in Japan, through the COVAX facility, to Malawi as part of assistance by Japan to contribute to the prevention of the spread of COVID-19 in Malawi. These vaccines were airlifted from Japan to Malawi on February 24th, 2022.[20]

12. *Ibid.*
13. *Chiuta, W., (2020). No Corona Virus lockdown in Malawi as court maintains injunction. Nyasa Times.*
14. *Kaponda, C. (2020). No COVID-19 lockdown still threatens livelihoods and trade in Malawi. Africa at LSE.*
15. *https://www.worldometers.info/coronavirus/country/malawi/(Accessed 13 April 2022).*
16. *https://www.unicef.org/media/96431/file/Malawi-COVID-19-SitRep-14-April-2021.pdf (Accessed 13 April 2022).*
17. *https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/2021_final_pdf-covid_19_vaccine_deployment_for_malawi_2.pdf, (Accessed 25 April 2022).*
18. *https://www.unicef.org/malawi/press-releases/malawi-receives-first-shipment-covid-19-vaccines-covax, (Accessed 14 March 2020).*
19. *Ibid.*
20. *https://reliefweb.int/report/malawi/provision-covid-19-vaccines-republic-malawi-through-covax-facility, (Accessed 25 April 2022).*

On May 19, 2021, Malawi burned nearly 20,000 doses of the AstraZeneca coronavirus vaccine after slow uptake led to their expiration. The move was intended to reassure sceptical citizens that they would not receive expired shots and to comply with government policy that forbids the use of expired health commodities.[21]

In July 2021, Malawi ran out of COVID-19 vaccine doses as Malawians nationwide had been queuing in their thousands to get vaccinated amid a spike in cases. But most vaccination centres were closed due to vaccine shortages.[22]

1.4.3 THE MALAWI COVID-19 VACCINE DEPLOYMENT PLAN

Malawi's goal of the COVID-19 vaccine deployment and vaccination plan was to contribute to the reduction of COVID-19 morbidity and mortality in Malawi through an efficient and effective vaccination program.[23]

In line with the goal of the Malawi COVID-19 vaccine deployment plan, the following nine objectives were developed:

1. to facilitate the timely availability of COVID-19 vaccines in Malawi without compromising proper regulatory decision-making.
2. To establish effective planning, monitoring, and evaluation of COVID-19 vaccine introduction readiness and deployment.
3. To identify and prioritize target populations for COVID-19
4. to ensure available and efficient vaccination delivery strategies that ensure equity in COVID-19 vaccine access and protect the vulnerable.
5. to procure and provide adequate quantities of COVID-19 vaccine and injection materials of the right quality at the right time to all delivery points.
6. To create demand for the COVID-19 vaccine through effective communication and community engagement to increase
7. acceptance and uptake for equitable vaccine access.
   To provide a clear plan for vaccine safety and monitoring of adverse events following vaccination, and to help to build and sustain public confidence in COVID-19 vaccination and immunization in general.
8. To establish a monitoring and evaluation system to measure the performance of COVID-19 vaccination, including Post Introduction Evaluation (PIE).
9. To stand in as a tool that Identifies and mobilizes resources for the rolling out of COVID-19 vaccination.[24]

The COVID-19 vaccine deployment was planned and coordinated under the Ministry of Health's new vaccine introduction structures. The structures include the Expanded Program on Immunization (EPI) Sub Technical Working Group (EPI-TWG), the National Task Force (NTF), the Malawi Immunization Technical Advisory Group (MAITAG), and the District Task Force at the subnational level. The country will mobilize funds and identify funding mechanisms to support the roll-out of the vaccine at national and subnational levels. The Ministry of Finance, MoH and partners will ensure the availability of resources with support from the Presidential Taskforce and the office of the COVID-19 coordinator at the Office of the President and Cabinet (OPC).[25]

The government developed a comprehensive communication, social mobilization, and risk communication plan to increase knowledge and positive attitudes, and ultimately demand the COVID-19 Vaccine. This was coupled with community engagement so that misinformation could be corrected and myths dispelled. The target groups have been segmented to ensure that no group is left without information that facilitates informed choice for equity and access. The country shall use multiple channels of communication, including interpersonal communication (Face to-Face Orientation, interactive SMSs, and community dialogues), mass media (radio/TV programs & spots), and community mobilization (Theatre for

21. *https://www.voanews.com/a/africa_malawi-burns-expired-covid-19-vaccine-amid-concerns-low-uptake/6205989.html, (Accessed 14 March 2022).*
22. *https://www.aa.com.tr/en/africa/malawi-runs-out-of-covid-19-vaccines-again/2321442, (Accessed 14 April 2022).*
23. *https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/2021_final_pdf-covid_19_vaccine_deployment_for_malawi_2.pdf, (Accessed 14 April 2022).*
24. *Ibid.*

Development).[26]

According to Chitipa District Health Office spokesperson Sam Chirwa, the COVID-19 vaccination efforts included the use of static clinics (health facilities), outreach clinics, which are integrated with routine childhood immunizations, door-to-door vaccination campaigns in villages as well as in urban locations, and an *"express vaccination initiative"* in mobile markets and trading centres.[27]

The WHO reported that 1,955,495 million doses of the COVID-19 vaccine had been administered by March 11th, 2022. Moreover, an estimated 4.4% of the total population has been fully vaccinated.[28]

1.4.4 COVID-19 VACCINE DISTRIBUTION IN MALAWI

Vaccine cold boxes and carriers are used to maintain cold chains during distribution. Freeze tags are placed in the vaccine box/carriers to enable vaccine handlers to detect if vaccines are exposed to freezing so that necessary steps are taken to ensure that only potent vaccines are provided to beneficiaries. The COVID-19 vaccine has no Vaccine Vial Monitors (VVM) to check vaccine potency, hence prudence in temperature monitoring.

The Malawi Expanded Program on Immunization (EPI), through the Global Alliance for Vaccines and Immunizations (GAVI) Health System and Immunization Strengthening (HSIS) grant, procured seven vaccine transportation trucks. The trucks are positioned at National Vaccine Stores (NVS) and the regional stores, and they help with the distribution of vaccines and injection materials from the NVS to the regional stores. Through the same grant, each district was provided with vehicles to assist with vaccine collection and distribution.

Vaccines and injection materials are transported using the trucks that the country, with support from GAVI, procured for the transportation of vaccines and injection materials. Vaccines are loaded into cold boxes for transportation to different tier levels. The cold boxes are conditioned properly to ensure that recommended conditions are maintained during the transportation of the vaccines. Freeze tags are put in the cold boxes to assist the officers in detecting if the vaccines were exposed to freezing during transportation.

COVID-19 vaccines shall be transported in cold boxes. Freeze indicators will also be placed in the cold boxes to ensure that the vaccine is effective and sufficient quantities are available. The National Vaccine Stores (NVS) and the regional stores have already prepared space for storing the COVID-19 vaccine. The same shall also be prepared at District Vaccine Store (DVS).

1.4.5 THE CHALLENGES OF ROLLING OUT COVID-19 VACCINES IN MALAWI

COVID-19 vaccination in Malawi began on March 11, 2021. As of April 6, 2021, 164,733 people had been vaccinated. The target groups include health workers (20 per cent), social workers (48 per cent), the elderly above 60 (10 per cent), people with comorbidities (11 per cent), and other groups (12.8 per cent). Malawi aimed to immunize 3.8 million people by the end of 2021. The turnout for vaccination in metropolitan areas is high, while in rural areas it is low. Community engagement efforts to boost the turnout are well underway, like training health workers to visit and inoculate people in villages. Some community members, including some health workers, were putting up resistance against the COVID-19 vaccination.[29]

The inadequate demand for COVID-19 vaccination is unlikely to represent the key bottleneck to reaching high COVID-19 vaccine coverage in sub-Saharan Africa. Nonetheless, to turn intent into effective demand, targeted information, sensitization, and engagement campaigns bolstering confidence in the safety of approved vaccines and reducing concerns about side effects will be crucial to safeguarding the swift progression of vaccine rollout in one of the world's poorest regions.[30]

For three reasons, the target of vaccinating 60% of the population by December 2022 remains a challenge. First, is vaccine hesitancy, which is

25. *https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/2021_final_pdf-covid_19_vaccine_deployment_for_malawi_2.pdf, (Accessed 14 April 2022).*
26. *Ibid.*
27. *https://times.mw/inequity-ruled-out-as-malawi-sweats-to-vaccinate-people/, (Accessed 25 April 2022).*
28. *https://www.afro.who.int/countries/malawi/news/malawi-marks-one-year-covid-19-vaccination-828-080-people-receive-full-dose, (Accessed 25 April 2022).*
29. *Ibid.*
30. *Kanyanda, S., Markhof, Y., Wollburg, P., & Zezza, A. (2021). Acceptance of COVID-19 vaccines in sub-Saharan Africa: evidence from six national phone surveys. BMJ Open, 11(12), e055159.*

mainly driven by misinformation, including the myth that vaccines will lead to infertility. Second, is the limited quantities of vaccines. Third, slow uptake by the eligible population due to misinformation.[31]

According to a World Health Organization social listening survey, there was vaccine hesitancy due to misinformation, disinformation, and a lack of general knowledge about the COVID-19 vaccines. Malawi also faced vaccine supply chain challenges, including a delay in vaccine supply, which resulted in a COVID-19 vaccine stockout at the peak of the third wave—this setback was a missed opportunity to increase the number of vaccinated populations. Malawi also experienced health system pressures to deliver multiple vaccine types, some with very short shelf-lives, while ensuring that health workers have trained on each vaccine specificities and that vaccines were delivered within their lifetime.[32]

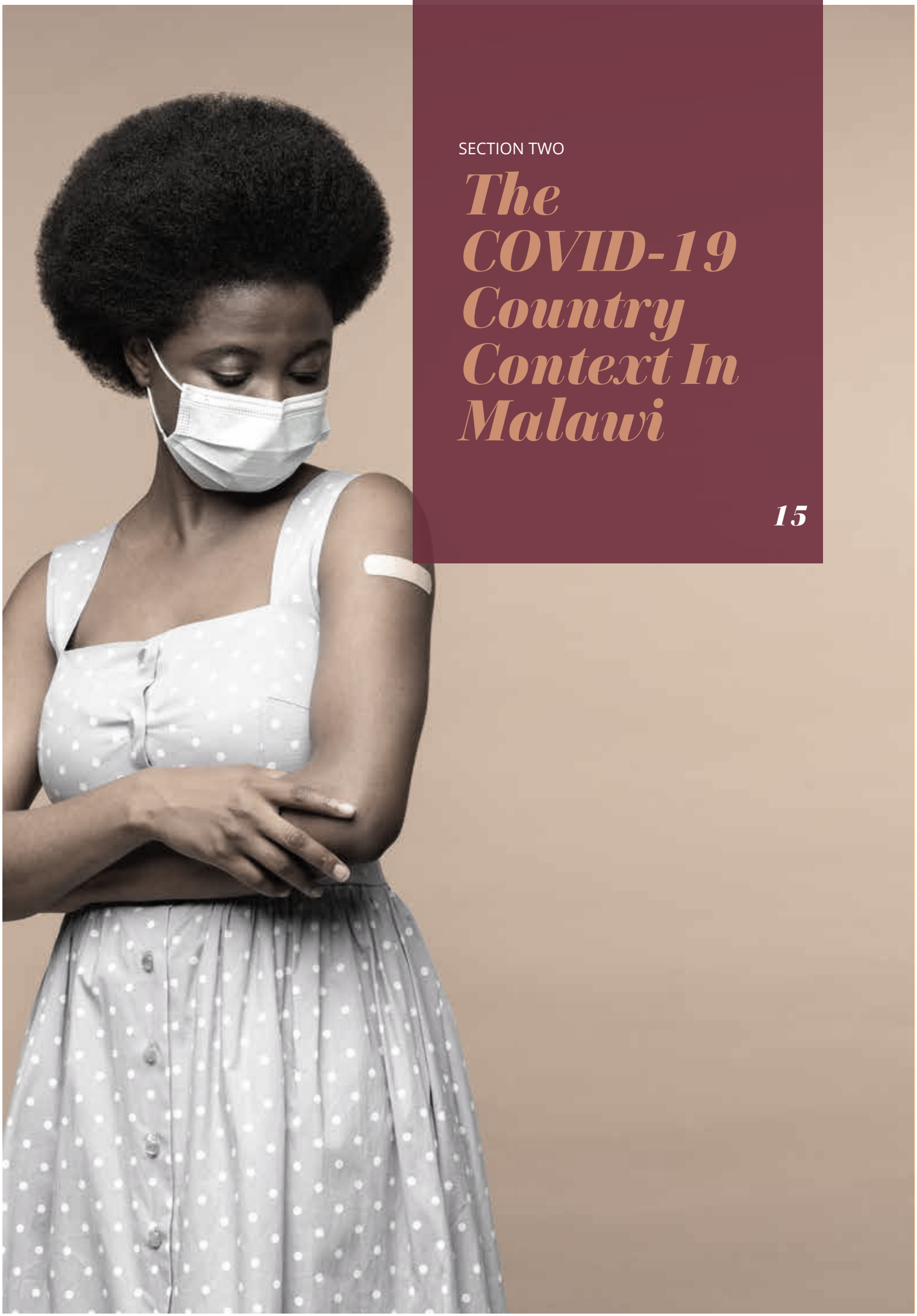
According to Amref Health Africa, we should recognize the inequalities exacerbated by the distribution of vaccines globally and the disadvantages that low- and middle-income countries (LMICs) such as Malawi are likely to face. Equitable access to the COVID-19 vaccine is far-fetched unless issues of availability, accessibility, and affordability are addressed. A global pandemic is global, requiring a global approach to guarantee that the COVID-19 pandemic is no longer a global threat. It is our global responsibility to ensure COVID-19 vaccines reach the arms of everyone, irrespective of their race, religion, geography, gender, socioeconomic status, etc.[33]

Access to the COVID-19 vaccines in LMICs has been a huge challenge, clearly exposing the gaps in equitable access to life-saving interventions. COVID-19 has highlighted the inequities existing in the delivery of health services, the rich still have greater access to quality health services than the poor. With the global call for universal health coverage, equity is paramount. No one should be left behind due to their socioeconomic status.[34]

CONCLUSION

In conclusion, the vaccine equity and distribution research in Malawi build on the achievements of CTAP phase I. The second phase of the project, amongst its interventions, seeks to interrogate the dynamics of vaccine distribution and the challenge of vaccine equity in Malawi. Also, to be investigated are issues of vaccine evolution, vaccine hesitancy, current vaccination levels, distribution, adequacy, and emerging issues. These are considered critical, as Malawi and the African region have their local norms and attitudes regarding the virus and vaccines. **Of underlying concern are feasible advocacy strategies and interventions that can create the circumstances or environment that lead to a tangible increase in vaccine equity.**

31. https://www.worldbank.org/en/news/feature/2021/10/19/rolling-out-covid-19-vaccines-in-malawi-amid-hesitancy-and-supply-challenges, (Accessed 14 April 2022).
32. https://www.afro.who.int/countries/malawi/news/malawi-marks-one-year-covid-19-vaccination-828-080-people-receive-full-dose, (Accessed 14 April 2022).
33. https://amref.org/position-statements/amref-health-africa-global-statement-on-covid-19-tools-including-vaccine-equity/, (Accessed 14 April 2022).
34. Likaka, A., Damte, T., & Albuquerque, J. (2021). State of quality in the COVID era including ongoing initiatives and priorities for improving quality in the future. IJQHC Communications, 1(1), lyab013.



SECTION TWO

The COVID-19 Country Context In Malawi

2.1 THE COVID-19 SITUATION IN MALAWI

The first outbreak of a novel coronavirus (SARS-CoV-2) was reported in Wuhan, Hubei province, mainland China in December 2019.[35] The World Health Organization (WHO) named this etiological agent *"Coronavirus Disease 2019"* (COVID-19) on February 11th, 2020. On March 11, 2020, Dr Tedros Adhanom Ghebreyesus, General Director of the WHO, declared COVID-19 a pandemic.[36]

On March 20, 2020, former president Peter Mutharika declared a state of disaster in the country and ordered preventive measures to mitigate its severity. The first three COVID-19 cases were detected on April 2, 2020, in Lilongwe, Malawi.[37]

Malawi has battled three waves of the COVID-19 pandemic. The first wave of the COVID-19 epidemic in the country started on April 22nd, 2020, and ended at the end of September 2020. The second wave of the COVID-19 epidemic started on December 12th, 2020 when surveillance detected the unusual increase of newly confirmed cases and alerted the EOC. Unfortunately, the invasion of the later proven mutated SARS-CoV-2 variant (B.1.351) caused a surge of incident cases, severe/critical patients, and mortalities. Since then, the SARS-CoV-2 Delta variant (B.1.617.2) has been identified in Malawi. This variant was responsible for a severe epidemic in India and other parts of the world. The third wave of the COVID-19 pandemic started on June 30th, 2021 and continues to the present.

2.2 THE NATIONAL COVID-19 PREPAREDNESS AND RESPONSE PLAN

In March 2020, the government launched a master plan, the National COVID-19 Preparedness and Response Plan, which came into effect in March and finished in June 2020. This multi-sectorial plan was aimed at curbing the spread of COVID-19 in the country and guided the preparedness and readiness for a timely, consistent, and coordinated response to the ongoing COVID-19 pandemic, thereby reducing morbidity and mortality in the country. The plan was developed through the cluster system approach led by the Ministry of Disaster Management Affairs and Public Events and the Ministry of Health. There were 10 operational clusters in the plan, namely: health, inter-cluster coordination, protection and social support, water, sanitation and hygiene (WaSH), education, food security, and transport and logistics. The following three ad hoc clusters were included: the Communication Cluster, the Economic Empowerment Cluster, and the Enforcement Cluster. The Government of Malawi (GoM), through the Ministry of Disaster Management Affairs and Public Events, was responsible for the overall coordination, while the Ministry of Health was the technical lead for the implementation of the plan.

The National COVID-19 Preparedness and Response Plan included the following components: reorientation and training of personnel who work in high-risk environments; securing funding to procure and distribute needed personal protective equipment; medicine supply; investigation; and case management. As part of this plan, screening and monitoring at borders and all points of entry were increased, as well as quarantine or self-quarantine (due to limited quarantine facilities) for 14 days for all individuals arriving from COVID-19 high-risk nations.

Health education and information sharing were ramped up at the community level through the distribution of posters and leaflets and the broadcasting of jingles. The Ministry of Health created awareness and promoted preventive measures including hand and respiratory hygiene and physical distancing, while the Ministry of Science, Education, and Technology suspended classes indefinitely in schools and institutions of higher learning. The government developed an application to track COVID-19 patients and ensure compliance with the guidelines. Information on COVID-19 was accessible through a national toll-free line and on social media. The Malawi Prison Services and Juvenile Centres released prisoners with minor

35. *Wu, D., T. Wu, Q. Liu, and Z. Yang. 2020. "The SARS-CoV-2 outbreak: what we know." International Journal of Infectious Diseases 94:44-48*
36. *Ferrer, R. 2020. "COVID-19 Pandemic: the greatest challenge in the history of critical care." Medicine Intensiva 44(6):323-324.*
37. *Mawerenga, J. (2021). Rethinking ecclesiology and the COVID-19 pandemic in Malawi. African Theological Journal for Church and Society, 2(2), 58-87.*

offences and those who had served a moderate period of their punishment in prison to decongest the country's prisons to reduce the spread of the virus. These prisoners were presented to the Minister of Homeland Security for monitoring.

The Malawi government further launched two more National COVID-19 Preparedness and Response Plans. In July 2020, the government launched the second National COVID-19 Preparedness and Response Plan, which was implemented from July 2020 to December 2020. In June 2021, the government launched the third National COVID-19 Preparedness and Response Plan, which was implemented in July 2021 and is expected to finish in June 2022.

2.3 MISMANAGEMENT OF COVID-19 FUNDS IN MALAWI

The implementation of the National COVID-19 Preparedness and Response Plan was crippled by gross corruption and mismanagement of funds. A report by the National Audit Office (NAO) revealed incidences of un-procedural procurement, irregular allowances, improper accounting, and wasteful expenditure without any appropriate budget.[38]

The NAO report revealed that upwards of 720 million Kwacha (approximately $915, 000) was spent irregularly or was unaccounted for. 494 million Kwacha were involved in inappropriate procurement procedures, 80 million Kwacha were spent on illegal allowances, 83 million Kwacha were involved in problems in accounting, and 12 million Kwacha simply vanished and could not be traced.[39]

The NAO report further indicated that the Ministry of Labour used over 1.4 million Kwacha of the COVID funds, including paying allowances amounting to KK614,00, to finance former labour minister, Ken Kandodo's trip to South Africa.[40]

The NAO report also revealed that at the Department of Disaster Management (DODMA), 11.7 million kwacha was cashed out by accounts personnel but was not deposited back into the department's bank account. Over 3 million Kwacha was paid to non-existent employees or ghost workers.[41]

The NAO report also faulted the education cluster, which had used over 6 million kwacha to purchase personal protective equipment at inflated prices.[42]

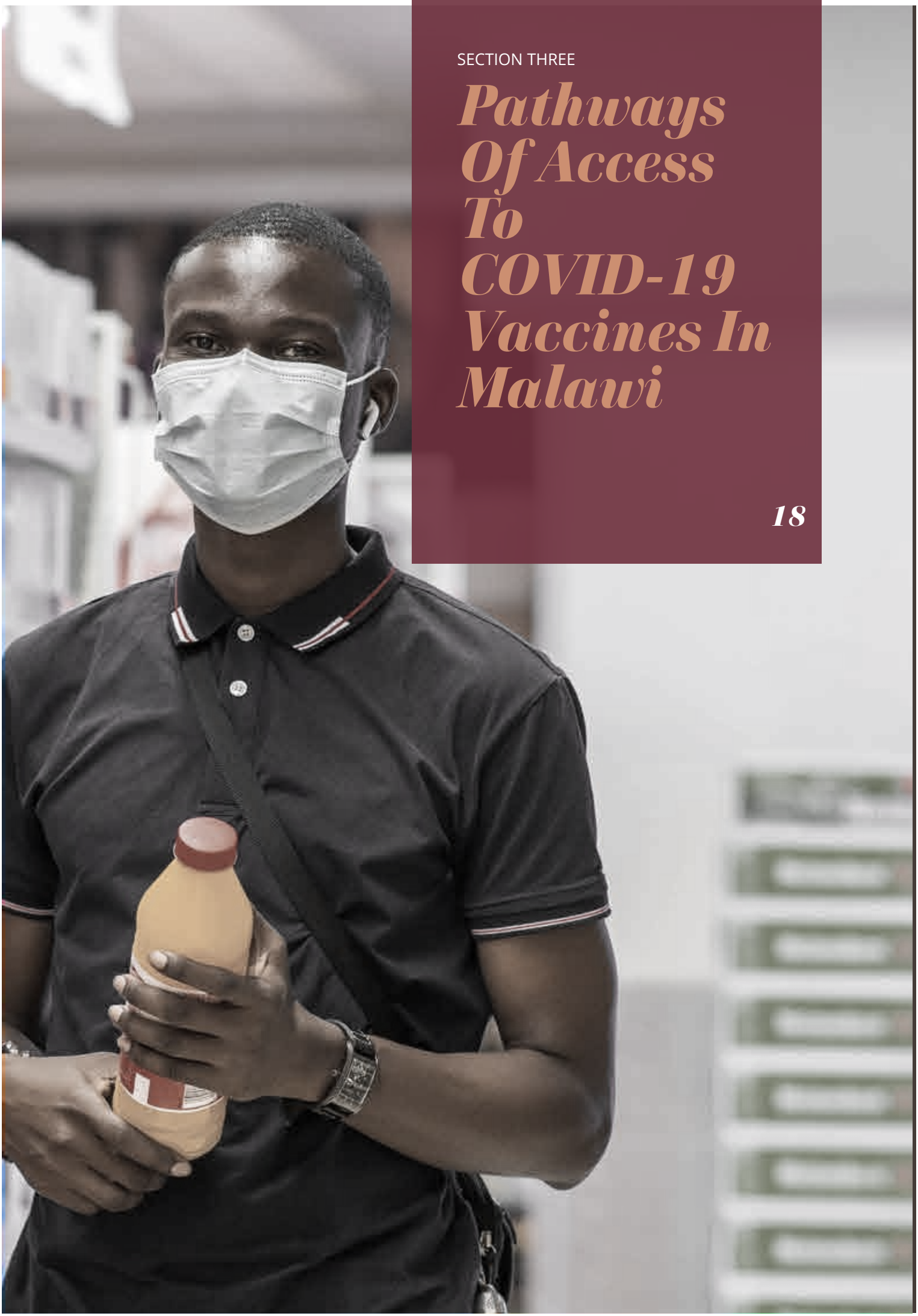
2.4 COVID-19 CASE TRENDS IN MALAWI

As of April 28th, 2022, Malawi has registered six new COVID-19 cases, 105 new recoveries, and one death. The new cases are locally transmitted; five from Blantyre and one from Lilongwe.[43]

Cumulatively, Malawi has recorded 85,767 cases, including 2,634 deaths (the case fatality rate is at 3.07%). Of these cases, 2,833 are imported infections and 82,934 are locally transmitted. Cumulatively, 82,066 cases have now recovered (a recovery rate of 95.68%), and 277 were lost to follow-up. This brings the total number of active cases to 790. In the past 24 hours, there were no new admissions and one new discharge from the treatment units. Two active cases are currently hospitalized, and both are in Blantyre.[44]

On testing, in the past 24 hours, 451 COVID-19 tests were conducted. Of these, 386 tests were through the RT-PCR test while the rest were through the SARS-CoV-2 Antigen Rapid Diagnostic test. The positive cases out of the total number of cases tested (past 24 hours) translate to a positivity rate of 1.33%, and the weekly positivity rate (seven-day moving average) is at 0.8%. Cumulatively, 573,536 tests have been conducted in the country so far. [45]

38. Kateta, M. W. (2021). Malawi audit confirms extensive mismanagement of COVID-19 funds. Devex, available at https://www. devex. com/news/Malawi-audit-confirms-extensive-mismanagement-of-covid-19-funds-99766 (Accessed 29 April 2022).
39. Ibid.
40. Ibid.
41. Ibid.
42. Ibid.
43. https://www.facebook.com/malawimoh, (Accessed 29 April 2022).
44. Ibid.
45. Ibid.



SECTION THREE

Pathways Of Access To COVID-19 Vaccines In Malawi

3.1 ACCESS TO COVID-19 VACCINES IN MALAWI

The COVID-19 Vaccines Global Access (COVAX) Facility shipped 360,000 doses of the Oxford-AstraZeneca vaccine, 360,000 bundled syringes, and 3,625 safety boxes for safe disposal of syringes for COVID-19 vaccination, which arrived in Malawi on March 5th, 2021. The arrival of the COVID-19 vaccines marked a milestone for Malawi in the fight against the COVID-19 pandemic, which has claimed over 2,634 lives and created a heavy burden on health facilities.[46]

The COVAX Facility is co-led by Gavi, the Vaccine Alliance, the World Health Organization (WHO), and the Coalition for Epidemic Preparedness Innovations (CEPI), working in partnership with UNICEF as well as the World Bank, civil society organizations, manufacturers, and others. COVAX is part of the Access to COVID-19 Tools (ACT) Accelerator, a ground-breaking global collaboration to accelerate development, production, and equitable access to COVID-19 tests, treatments, and vaccines.[47]

Khumbize Kandodo Chiponda, Malawi's Minister of Health, said that "The COVID-19 vaccine came at the right time as it will be used as an added tool to the strategies that the Ministry of Health has put in place to reduce and stop the spread of COVID-19 in our country." *The COVID-19 vaccine will be rolled out to help reduce deaths, the risk of hospitalization, and severe diseases from COVID-19. I would like to request those that are eligible to receive the vaccine in the first phase to ensure that they utilize this opportunity and get vaccinated.*[48]"

For the Malawian government, no one is safe until everyone is safe. Therefore, the government prioritized the vaccinations of political, traditional, and religious leaders as a way of encouraging their communities to get vaccinated.[49]

On March 11, 2021, Malawi rolled out the first phase of a nationwide COVID-19 vaccination campaign. President Lazarus Chakwera was the first to receive the jab in Zomba. He described the COVID-19 vaccination program as a major milestone for Malawi as it joined the global community in fighting the pandemic.[50] He said that "We must take this vaccine to ensure that everyone is protected from COVID-19." *We must take this vaccine to protect health workers who risk their lives to care for COVID-19 patients. We must take this vaccine to protect teachers from infection so that they can continue the work of educating tomorrow's leaders.*[51]"

The Ministry of Health, with support from partners such as GAVI, UNICEF, the World Bank, and WHO, has made great efforts to increase access to vaccine uptake through: expanding vaccination sites; ensuring effective use of available stocks; pacing delivery of new vaccine stocks; mobilizing communities and addressing doubts and misinformation; training health workers; and providing additional support for low-performing districts to increase vaccine uptake.[52] Unfortunately, COVID-19 vaccination ended on June 26, 2021, when the country ran out of vaccine doses. The stocks ran out just as vaccine uptake started to improve, a trend that has been observed since the commencement of the second dose, administered simultaneously with the first dose.[53]

In early 2021, the Ministry of Health embarked on a mini door-to-door vaccination drive, taking the vaccines to the people to boost coverage in certain areas. Following the successful implementation of the mini-campaign, the ministry of health launched a 60-day COVID-19 "vaccine express" campaign across the country in February 2022. The campaign involved taking the vaccine to where people are, in their homes, including the markets, workplaces, and places of worship.[54]

Christopher Msiyambiri of Medramu Village, Traditional Authority Mulilima in Chikhwawa

46. *https://www.unicef.org/malawi/press-releases/malawi-receives-first-shipment-covid-19-vaccines-covax, (Accessed 5 May 2022).*
47. *Ibid.*
48. *Ibid.*
49. *Kayode, O. R., Obidiro, O. P., Lawrence, U. S., Oyetola, A. B., Hasan, M. M., Olajide, A., ... & Aderonke, O. M. (2022). Obstacles and Policy Measures Toward COVID-19 Vaccination: Creating a Road Map for Malawi. Saudi Pharmaceutical Journal.*
50. *https://www.gavi.org/vaccineswork/path-normalcy-covid-19-vaccine-roll-out-malawi, (Accessed 5 May 2022).*
51. *https://www.aa.com.tr/en/africa/malawi-starts-nationwide-covid-19-vaccination-drive/2172626, (Accessed 5 May 2022).*
52. *https://www.afro.who.int/countries/malawi/news/malawi-marks-one-year-covid-19-vaccination-828-080-people-receive-full-dose, (Accessed 5 May 2022).*
53. *https://www.unicef.org/malawi/reports/unicef-malawi-covid-19-situation-report-30-june, (Accessed 6 May 2022).*
54. *https://www.gavi.org/vaccineswork/malawi-60-day-covid-19-vaccine-express-drive, (Accessed 5 May 2022).*
55. *Ibid.*

district, received the AstraZeneca vaccine and commented that: "I wouldn't have received the vaccine if not for this initiative." Health facilities are very far from here. I hope our district health office continues with this initiative in order to reach many people, because we have common problems.[55]"

3.2 DISTRIBUTION DYNAMICS OF COVID-19 VACCINES IN MALAWI

The distribution of COVID-19 vaccines in Malawi was supported by various partners. For instance, the government of Japan provided US $725,000 (about 574 million kwacha) to the government of Malawi in its COVID-19 vaccination efforts by improving cold chain capabilities through enhanced infrastructure, equipment, transportation, and training for healthcare staff. Cold chain capabilities are essential for storing and transporting vaccines at the required temperatures if they are to remain effective. Thus, the Japanese donation ensured the equitable access and swift distribution of vaccines in Malawi.[56]

Rudolf Schwenk, UNICEF Malawi Representative, argued that procuring vaccines is only half the job. Without proper storage and transport systems, it is impossible to get vaccines to the people and communities who need them. This support from the government of Japan will help in the safe distribution of COVID-19 vaccines across the country and ensure continuity of routine immunization services for children beyond COVID-19.[57]

At least three ways through USAID's Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project also played a crucial role in adapting the public health supply chain to swiftly and effectively distribute the COVID-19 vaccines in Malawi.[58]

First, the GHSC-PSM project supported COVID-19 commodity management in Malawi. This included the following:

1. USAID supported the Ministry of Health (MOH) to respond to the COVID-19 pandemic with technical assistance and COVID-19 commodity support.
2. Collaborated with other partners to leverage existing resources: e.g., GAVI vehicles, MOH and District Health Office (DHO) stores and personnel, and USAID running costs for delivery of COVID-19 vaccines and ancillary supplies.
3. The GHSC-PSM project managed a parallel supply chain system for procurement, warehousing and distribution of USG-donated commodities, using third-party logistics provider (3PL) to improve commodity security in Malawi.
4. To respond to COVID-19, the GHSC-PSM quickly modified its contract with the 3PL to accommodate storage and distribution of COVID-19 commodities (PPE, medicines and lab supplies) to the last mile.[59]

Second, supporting the COVID-19 vaccine roll out in Malawi. This included the following:

1. GHSC-PSM in Malawi received $500,000 from USAID to support the MOH with technical assistance, commodity warehousing, and distribution of COVID-19 vaccines.
2. GHSC-PSM supported MOH through its Expanded Program on Immunization (EPI) to successfully implement the national vaccine deployment plan (NVDP) in 28 districts.[60]

Third, the GHSC-PSM project supported the implementation of the vaccine deployment plan in Malawi. This included the following:

1. Coordinating the logistics subcommittee. This was done through information and data gathering, regular meetings, updates, and presentations to decision makers.
2. Warehousing and distribution of vaccines to all 28 districts; within the first two weeks of vaccine arrival, 428,407 vaccines were administered.

56. *https://reliefweb.int/report/malawi/japan-supports-safe-distribution-covid-19-vaccines-malawi-through-partnership-unicef, (Accessed 5 May 2022).*
57. *Ibid.*
58. *USAID GHSC-PSM project in Malawi COVID-19 vaccine support_GHSCS 2021.pdf, (Accessed 6 May 2022).*
59. *Ibid.*
60. *Ibid.*

3. Redistribution from low-uptake to high-demand districts to address stock imbalances and minimize wastage through expiry.

4. Designing guidelines for reverse logistics, i.e., vaccine waste management, to facilitate decentralized incineration of vaccine waste.

5. Enhancing MOH capacity in vaccine commodity management in three ways First, by designing, printing, and distributing data tools for vaccine tracking. Second, by configuring the OpenLMIS (an existing electronic health commodity tracking system) for vaccine tracking, reporting, and ordering. Third, by training 66 MOH/EPI staff in vaccine tracking, reporting, and ordering.[61]

Four key challenges were identified in the COVID-19 vaccine distribution initiatives in Malawi. These are:

1. Low vaccine uptake; product shelf life is limited; and there is little visibility into the remaining shelf life of incoming vaccines.

2. Inadequate internal coordination and unavailability of key MOH staff due to competing priorities.

3. Lack of visibility on shelf life and unavailability of real-time stock and consumption data from districts led to vaccine wastage through expiry (19,000 doses, 3.7%).

4. Vaccine data tracking is hampered by low availability and poor data quality.[62]

The COVID-19 vaccination exercise in Malawi offered five key lessons and solutions. These are:

1. Redistribution was essential in minimizing wastage due to expiry.

2. Demand creation (e.g., through vaccination campaigns) could have been useful to avoid wastage due to expiry of short-dated vaccines.

3. Significant efficiency is gained by leveraging existing resources.

4. Joint planning and information sharing among the key partners was essential to avoid duplication and fill gaps.

5. Existing OpenLMIS was an opportunity for vaccine visibility with wide geographic coverage, a robust support mechanism, and sustainability.[63]

Although Malawi aimed to vaccinate nearly 11 million of its 18.147 million population, as of May 5, 2022, only 2,054,585[64] doses of COVID-19 vaccine had been administered, with 909,000 people fully vaccinated, representing 4.8% of the population.

61. *Ibid.*
62. *Ibid.*
63. *Ibid.*
64. *https://graphics.reuters.com/world-coronavirus-tracker-and-maps/countries-and-territories/malawi/, (Accessed 6 May 2022).*

SECTION FOUR

The Phenomenon Of COVID-19 Vaccine Equity In Malawi

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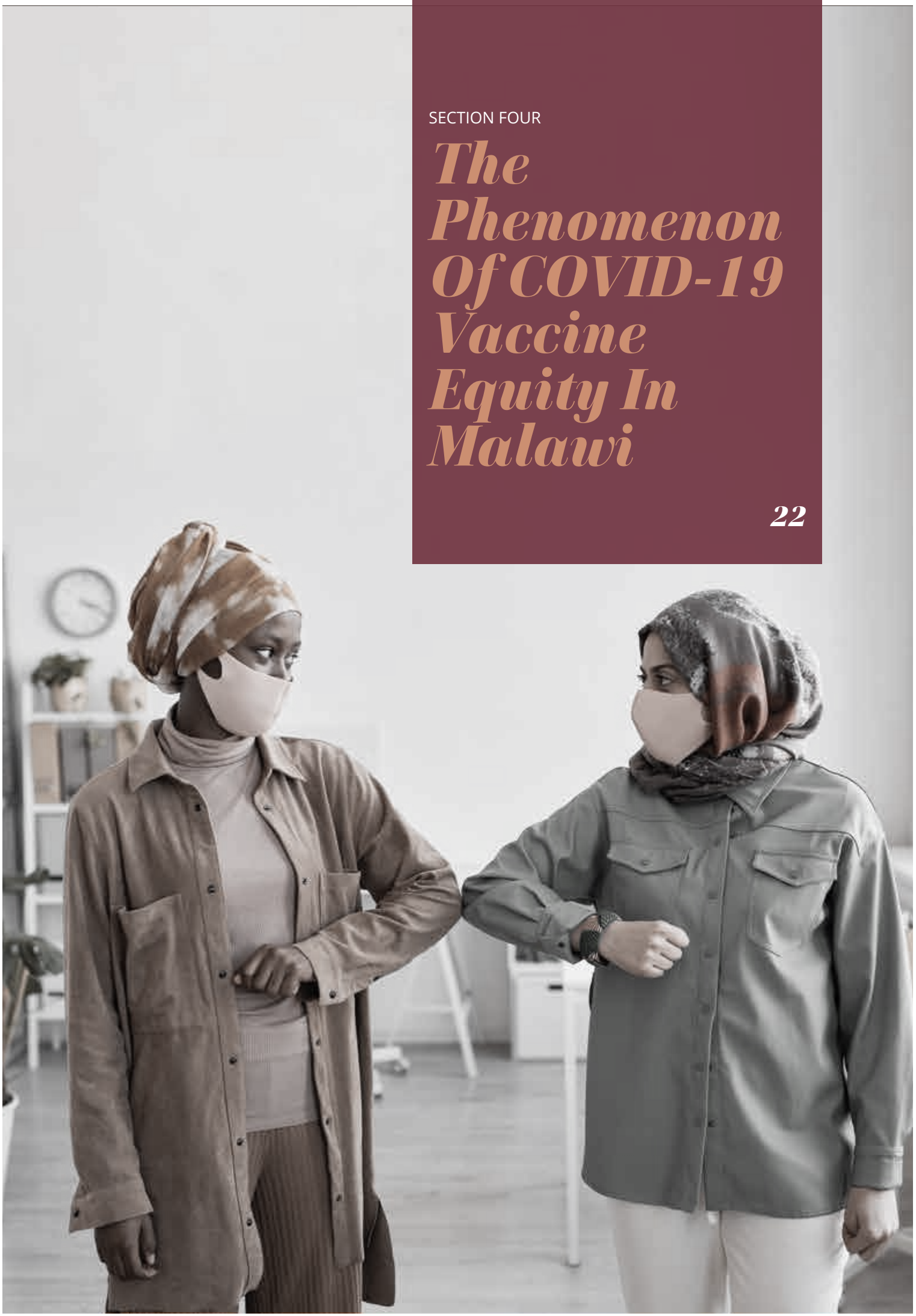


This section of the report highlights some common obstacles reported at different stages of the COVID-19 vaccine procurement and distribution processes in Malawi.

4.1 GLOBAL CHALLENGES IN EQUITABLE ACCESS TO COVID-19 VACCINES

As vaccines are rolled out globally, many Southern African countries, including Malawi, which is among the low-and middle-income countries (LMICs), face various challenges that limit access to equitable, timely, and adequate access to COVID-19 vaccines.

The country was among the first to receive COVAX deliveries in early March 2021, receiving a donation of 360,000 AZ/SII doses out of the 1,260,000 allocated to it by the end of the first half of 2021 to vaccinate 20% of its population.[65] This left almost three-quarters of the allocated quantities to still be delivered within a mere three months, which seemed unlikely after COVAX announced AZ/SII delivery delays at the end of March 2021.[66] While the deliveries and start of the rollout marked a crucial step, the doses received did not allow for the inoculation of even one per cent of the population.[67] The World Bank had predicted that vaccination would not "reach a significant portion of the population until at least mid-2022." [68]

Although multiple effective vaccines were developed at a remarkable pace, numerous barriers to global vaccination efforts have left 47% of the world's population unvaccinated or only partially vaccinated to date, with huge disparities between countries in the proportion of fully vaccinated individuals ranging from 0% to 95%.[69]

The inequity of access to vaccines has posed a significant barrier to vaccination in low-and middle-income countries (LMICs), despite calls for action to achieve equitable production and distribution of COVID vaccines from the UN,[70] WHO,[71] and the UN Development Programme.[72] Despite various calls from public health experts advocating for the benefits of vaccine equity throughout the pandemic, global vaccination rates remain woefully unequal. As of February 1, 2022, approximately 183 COVID-19 vaccine doses had been administered per 100 people in high-income countries, compared to just 14 doses per 100 people in LMICs.[73] The COVID-19 Vaccines Global Access (COVAX) initiative was launched in April 2020 to address this imbalance through accelerated development, production, and equitable distribution of vaccines. Yet, by December 30, 2021, only seven African countries had achieved their target vaccination rate of 40%.[74] Therefore, this leaves us with the question of how COVID-19 vaccine inequity can be tackled and what can be done to overcome barriers to vaccination.

The UN Secretary-General has described the distribution of COVID-19 vaccines as "wildly uneven and unfair."[75] He further noted that the universal need for vaccines lays bare the inequality in healthcare access between wealthy and lower-income countries, with an even greater disparity for particularly vulnerable communities within conflict-affected and fragile states. Countries with the resources to fund vaccine development have been able to secure large numbers of vaccines for themselves while leaving a small supply of vaccines for others.[76]

COVID-19 vaccine inequity can also be attributed to the limited production capacity that was heightened by a dramatic upsurge of cases in India. The major supplier of the most widely available vaccine for COVAX, the Oxford-AstraZeneca vaccine, is the Serum Institute of India. However, since March 2021, India has stopped the exportation of COVID-19 vaccines because of the need to use doses, already vastly insufficient, for the vaccination of Indian citizens. This sudden block to vaccine exportation has resulted in the interruption of vaccine delivery to many low-income countries. With predictions that the Serum Institute of India will struggle to upscale vaccine production to

65. *COVAX vaccine roll-out Malawi, available at: https://www.gavi.org/covax-vaccine-roll-out/Malawi.(Accessed 6 May 2022).*
66. *WHO Press Statement, "COVAX updates participants on delivery delays for vaccines from Serum Institute of India (SII) and AstraZeneca" (25 March 2021).*
67. *https://www.icj.org/wp-content/uploads/2021/05/Africa-The-Unvaccinated-Publications-Reports-2021-ENG.pdf*
68. *https://www.worldbank.org/en/country/malawi/overview, (Accessed 6 May 2022)*
69. *Understanding Vaccination Progress by Country—Johns Hopkins Coronavirus Resource Center. https://coronavirus.jhu.edu/vaccines/international, (Accessed 8 May 2022).*
70. *https://medglobal.org/vaccine-equity/, (Accessed 8 May 2022).*
71. *World Health Organisation. Vaccine Equity Declaration. 2021 Jan https://www.who.int/campaigns/vaccine-equity/vaccine-equity-declaration, (Accessed 8 May 2022).*
72. *United Nations Development Programme. Support to Vaccine Equity; Beyond Recovery: Towards 2030. 2021 Jun https://www.undp.org/publications/support-vaccine-equity-beyond-recovery-towards-2030, (Accessed 8 May 2022).*
73. *PLOS Medicine Editors. (2022). Vaccine equity: A fundamental imperative in the fight against COVID-19. PLoS Medicine, 19(2), e1003948.*
74. *World Health Organisation. WHO Coronavirus (COVID-19) Dashboard, https://covid19.who.int/, (Accessed 8 May 2022).*
75. *https://medglobal.org/vaccine-equity/, (Accessed 8 May 2022).*
76. *Ibid.*

meet the needs of the Indian population, it is unclear where COVAX will get its supply of COVID-19 vaccines. One possibility is that countries that have already made substantial progress in vaccinating their populations could share surplus vaccine doses with other countries.[77]

To deconstruct the COVID-19 vaccine inequity problem, we must first consider what a country needs to successfully vaccinate its population. First, a reliable supply of vaccines is imperative. The COVID Global Accountability Platform (COVID GAP) reported that in November 2021, just 20% of the doses pledged by G7 countries had been shipped to LMICs, and this is further complicated by reports that are indicating that some vaccines are arriving close to their expiration dates, practically rendering them unusable.[78] Equally essential to vaccine rollout are health infrastructure, trained medical personnel, appropriate vaccine storage facilities, accessible vaccination sites, health literacy, and public willingness to take vaccines.[79]

COVID-19 vaccine inequity has also been exacerbated by a limited supply of vital equipment such as syringes, which risks derailing vaccination efforts[80] with shortfalls of between one and two billion syringes projected by the end of 2022.[81] Health activists have collaborated to publish open letters to governments in high-income countries, advocating for increased financial and operational support and a temporary waiver of intellectual property rules to expand the capacity for the manufacturing of the COVID-19 vaccine by the LMICs themselves.[82] In this regard, the World Trade Organisation (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) was targeted to vary the minimum standards for regulation of different forms of intellectual property applicable to WTO member nations. In May 2021, delegations from WTO members representing multiple LMICs issued a communication proposing a waiver from certain provisions of the TRIPS agreement[83] to facilitate "the prevention, containment, and treatment of COVID-19." However, vaccine developers objected to the waiver proposal, arguing that manufacturing capacity, not intellectual property, is the real bottleneck in scaling up vaccine supply.[84]

4.2 COVID-19 VACCINE EQUITY IN MALAWI

Having presented the global challenges of equitable access to the COVID-19 vaccine, we now proceed to make a presentation on COVID-19 equity in Malawi.

Vaccine equity means ensuring that everyone in the world has equal access to vaccines.[85] The importance of vaccine equity has been emphasized by researchers and public health experts during the COVID-19 pandemic[86] but is relevant to other illnesses and vaccines as well.

4.2.1 PATTERNS OF VACCINE INEQUALITY'

Patterns of vaccine equity are reflected in the world's socio-economic disparities. The wealthy generally have better access to vaccines than the poor, both between and within countries.[87] Within countries, there may be lower rates of vaccination in racial and ethnic minority groups, in rural areas, in older adults, and among those living with disabilities or chronic conditions in rural communities. Some countries have programs to redress this inequality.[88] Political, economic, social, and diplomatic factors can limit vaccine availability in some countries.[89]

4.2.2 FACTORS DETERMINING VACCINE EQUITY

Several factors have been suggested as a way of achieving COVID-19 vaccine equity. For instance, vaccine development and licensing; vaccine mass production; vaccine pricing so that they are globally affordable; vaccine allocation so that

77. https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(21)00275-9/fulltext
78. Yamey, G., Garcia, P., Hassan, F., Mao, W., McDade, K. K., Pai, M., ... & Udayakumar, K. (2022). It is not too late to achieve global covid-19 vaccine equity. bmj, 376.
79. PLOS Medicine Editors. (2022). Vaccine equity: A fundamental imperative in the fight against COVID-19. PLoS Medicine, 19(2), e1003948.
80. de Bengy Puyvallée, A., & Storeng, K. T. (2022). COVAX, vaccine donations and the politics of global vaccine inequity. Globalization and Health, 18(1), 1-14.
81. Temple-Perry K. Does the world have the tools to inoculate billions? Program for Appropriate Technology in Health, 2021 Oct, https://www.path.org/articles/does-world-have-tools-inoculate-billions/, (Accessed 8 May 2022).
82. https://www.globaljustice.org.uk/wp-content/uploads/2022/01/Letter-to-the-Prime-Minister-from-the-scientific-community.pdf, (Accessed 8 May 2022).
83. https://www.twn.my/title2/intellectual_property/trips_waiver_proposal.htm, (Accessed 8 May 2022).
84. Diseases, T. L. I. (2021). The rocky road to universal COVID-19 vaccination. The Lancet. Infectious Diseases.
85. Yamey, G., Garcia, P., Hassan, F., Mao, W., McDade, K. K., Pai, M., ... & Udayakumar, K. (2022). It is not too late to achieve global covid-19 vaccine equity. bmj, 376.
86. Ye, Y., Zhang, Q., Wei, X., Cao, Z., Yuan, H. Y., & Zeng, D. D. (2022). Equitable access to COVID-19 vaccines makes a life-saving difference to all countries. Nature human behaviour, 6(2), 207-216.
87. https://data.undp.org/vaccine-equity/, (Accessed 9 May 2022).
88. https://www.cdc.gov/vaccines/health-equity/index.html, (Accessed 9 May 2022).
89. https://data.undp.org/vaccine-equity/, (Accessed 9 May 2022).
90. Forman, R., Shah, S., Jeurissen, P., Jit, M., & Mossialos, E. (2021). COVID-19 vaccine challenges: What have we learned so far and what remains to be done? Health Policy, 125(5), 553-567.
91. Wouters, O. J., Shadlen, K. C., Salcher-Konrad, M., Pollard, A. J., Larson, H. J., Teerawattananon, Y., & Jit, M. (2021). Challenges in ensuring global access to COVID-19 vaccines: production, affordability, allocation,

they are available where and when they are needed; and vaccine deployment to local communities.[90] An effective global approach to achieving vaccine equity must address challenges in the dimensions of vaccine production, allocation, affordability, and deployment.[91]

Vaccine equality is dependent on an adequate supply of inexpensive vaccines for global usage. Ideally, a vaccine that is suitable for global use will be based on established technology; will have multiple available suppliers of the materials and equipment needed for production; be appropriate to the regions where it is to be produced or deployed, in terms of scalability of production and storage conditions; and be supported by a local infrastructure for its production, delivery, and regulation.[92]

Global COVID-19 vaccination data reveals two significant findings regarding vaccine equity. First, COVID-19 vaccination rates have consistently been much lower for lower-income groups than for middle-and higher-income groups. Second, COVID-19 vaccination rates are higher in urban settings than in rural settings.[93] In an underdeveloped country such as Malawi, vaccination rates are under 4.8% nationally. Because of persistent vaccine inequity, many countries continue to not have access to free or affordable COVID-19 vaccinations.[94]

In September 2021, it was predicted that enough vaccinations would have been produced to vaccinate everyone on the earth by January 2022. However, due to vaccine hoarding, booster shots, a lack of funding for vaccination infrastructure, and other types of inequity, it is anticipated that many nations will continue to have low vaccination coverage.[95]

On August 4, 2021, the United Nations called for a moratorium on booster doses in high-income countries so that low-income countries can be vaccinated.[96] The WHO repeated the criticism against booster shots on the 18th of August 2021, saying "we're planning to hand out extra life jackets to people who already have them while we're leaving other people to drown without a single life jacket."[97] This led UNICEF to support a "Donate Doses Now" campaign.[98]

4.2.3 PRIORITY GROUPS FOR COVID-19 VACCINATION IN MALAWI

In the first phase, the COVAX Facility targeted 20% of the country's population, which is 3,779688.[99] The following groups were targeted: First, all health workers in both public and private facilities, comprising 3% of the population. Second, social workers such as the police, soldiers, and prison warders, who, according to their work, are always in direct contact with groups of people and find it most difficult to keep social distance. These comprised 2.4% of the population. Third, the elderly who are over 60 years old are at an increased risk of developing severe illness and even death due to ageing and potential underlying conditions. Fourth, despite not falling into any of the categories, the mentally ill and people living with disabilities (PLWDs) cannot easily understand and follow the COVID-19 preventive measures.

4.2.4 MEASUREMENT OF COVID-19 VACCINATION IN MALAWI

As of May 7th, 2022, the Ministry of Health's statistics on COVID-19 vaccination indicated that 1,205, 496 people had been vaccinated with dose 1, while 4,388 people had been vaccinated with the booster dose, and 1,120, 521 people were fully vaccinated.[100]

On March 11th, 2022, Malawi marked one year of COVID-19 vaccination and 828, 080 people had been fully vaccinated.[101]

4.2.5 ENABLERS OF COVID-19 VACCINE EQUITY IN MALAWI

Participants in a Focus Group Discussion at Jali in the Zomba district reported that one of the major enablers for COVID-19 vaccine equity in Malawi was the example set out by the political,

92. *Muzaka, V. (2021). Vaccinating the world against Covid-19.*
93. *https://ourworldindata.org/coronavirus, (Accessed 9 May 2022).*
94. *Tolbert, J., Orgera, K., Garfield, R., Kates, J., & Artiga, S. (2021). Vaccination is local: COVID-19 vaccination rates vary by county and key characteristics. KFF.*
95. *Stein, F. (2021). Risky business: COVAX and the financialization of global vaccine equity. Globalization and Health, 17(1), 1-11.*
96. *Diseases, T. L. I. (2021). COVID-19 vaccine equity and booster doses. The Lancet. Infectious Diseases, 21(9), 1193.*
97. *https://www.who.int/publications/m/item/covid-19-virtual-press-conference-transcript---18-august-2021, (Accessed 9 May 2022).*
98. *https://www.unicef.org/coronavirus/g20-africa-equity-open-letter, (Accessed 9 May 2022).*
99. *https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/2021_final_pdf-covid_19_vaccine_deployment_for_malawi_2.pdf, (Accessed 14 April 2022).*
100. *https://www.facebook.com/photo?fbid=308902881421992&set=pcb.308902911421989, (Accessed 8 May 2022).*
101. *https://www.afro.who.int/countries/malawi/news/malawi-marks-one-year-covid-19-vaccination-828-080-people-receive-full-dose, (Accessed 8 May 2022).*
102. *Focus Group Discussion at Jali, Zomba, 2 May 2022.*
103. *Ibid.*

secondary audiences of the characteristics and public health value of the new intervention; addressing questions, concerns, and information gaps; reinforcing routine vaccination and continued use of existing COVID-19 control practices; and addressing misconceptions, rumours, and issues in a timely and appropriate manner.[104]

The communication strategy targeted specific barriers to COVID-19 immunization and early health-seeking behaviour and aimed at overcoming these barriers by a clear and concise response to queries on the vaccine, pieces of training and orientation to media and stakeholders that would increase target populations seeking COVID-19 vaccine immunization.[105] Thus, the implementation of this communication strategy facilitated vaccine equity in Malawi. Participants in a Focus Group Discussion at Ngabu in the Chikhwawa district explained that the health surveillance assistants (HSAs) created a COVID-19 vaccination demand in their respective catchment areas by conducting village COVID-19 orientation meetings at the community level. Simultaneously, some of the HSAs volunteered to be vaccinated during these village orientation meetings to demonstrate to the people that they should not fear anything concerning the COVID-19 vaccine. It was further reported that as a result of this initiative, many people got vaccinated.[106]

Through the COVID-19 Express Vaccination Exercise, chiefs and health workers collaborated to bring COVID-19 vaccines to the last mile in Malawi. The COVID-19 express vaccination exercise was supported by UNICEF in partnership with the Ministry of Health and Kamuzu College of Health Sciences. It proved to be effective in bringing vaccines closer to people who would otherwise be unable to make the trip to hospitals. It took the vaccines to shopping malls, busy markets, workplaces, schools, prayer houses, and other accessible spots. This enabled the healthcare workers to administer thousands of doses before expiry.[107]

Simeon Chizimba, the District Immunization Coordinator, opined that the Zomba District Health Office (DHO) had trained four village chiefs in the vicinity of each health centre to expand access to vaccines. The community leaders work closely with health surveillance assistants (HSAs) in their localities to rally people to get vaccinated when the COVID-19 express vaccination van arrives. “If they get 20 people, the HSA phones us and we send two vials." "Each vial contains vaccine doses for 10 people, so we don’t waste any,” explained Chizimba.[108]

Chief Chibibi reported that there is no reason for a dose to expire while people are dying from the vaccine-preventable condition. No one has been confirmed to have died from COVID-19 in my area, but two succumbed to strange coughs and breathing difficulties similar to the coronavirus disease. Maybe a timely vaccine would have saved them.[109]

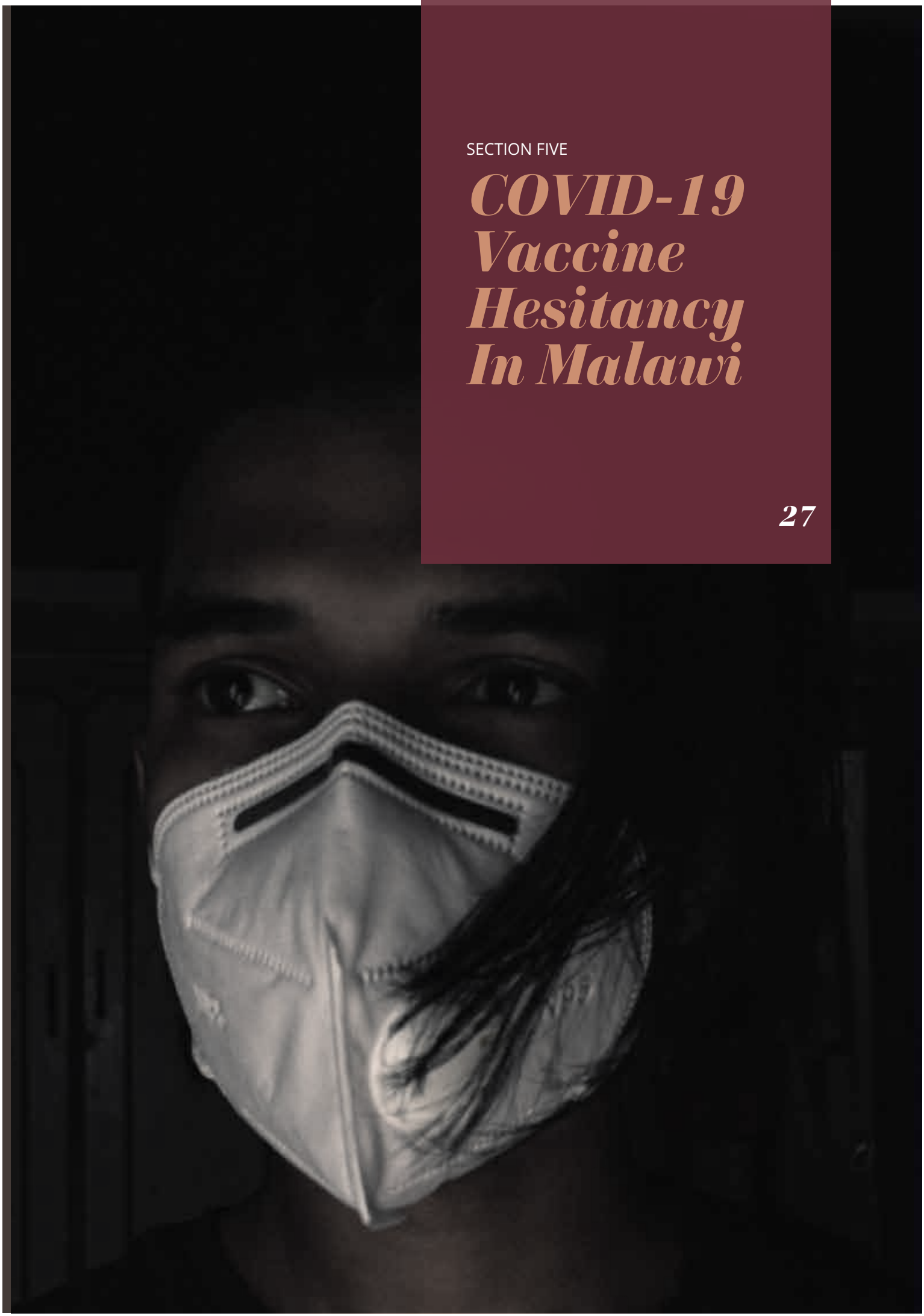
A study by CARE International revealed that women from LMICs had unequal access to COVID-19 vaccines. While the reasons for the inequality vary from country to country, in Malawi, the findings suggest that inequality may be influenced by a lack of trust in vaccines. The study found that women were less likely to trust the COVID-19 vaccine because of fears about fertility. In one Malawian district, researchers found that women were four times less likely to trust the vaccine (10%) compared to men (40%) due to fears regarding fertility and population control.[110]

104. *https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/covid-19_vaccine_socmob_risk_com_plan-draft_9_march_2021_-_master_clean_v5.pdf, (Accessed 8 May 2022).*
105. *Ibid.*
106. *Focus Group Discussion at Ngabu, Chikhwawa, 1 May 2022.*
107. *https://www.unicef.org/malawi/stories/chiefs-health-workers-collaborate-bring-covid-19-vaccines-last-mile-unicef-support, (Accessed 8 May 2022).*
108. *Ibid.*
109. *Ibid.*
110. *https://www.careevaluations.org/wp-content/uploads/Gender-gaps-in-vaccines-October-2021.pdf, (Accessed 8 May 2022).*

SECTION FIVE

COVID-19 Vaccine Hesitancy In Malawi

27



According to the World Health Organization (WHO), vaccine hesitancy refers to a "delay in acceptance or refusal of vaccines despite the availability of vaccine services." Vaccine hesitancy is complex and context-specific, varying across time, place, and vaccines. It is influenced by factors such as complacency, convenience, and confidence."[111]

COVID-19 vaccination hesitancy in Malawi is influenced by several factors, which were uncovered by the study. First, study participants reported that they shied away from the COVID-19 vaccination for fear of side effects. Rumours circulated that anyone who received a vaccine would have his or her body transformed into something resembling a snake. Others said that the COVID-19 vaccine is very powerful and it makes one either unconscious or develop some mental-related illnesses. Still, others said that the COVID-19 vaccine is a way of achieving population control since there is a high rate of population growth in Malawi. Therefore, anyone who has been vaccinated will die within two years of vaccination.[112]

Second, COVID-19 vaccine hesitancy in Malawi was influenced by religious reasons, which claim that COVID-19 and its vaccine are from the devil and his underworld. Moreover, the COVID-19 vaccine was identified with the biblical eschatological figure of 666, which is recorded in Revelation 13:8. To compound the issue, anyone who had been vaccinated was given a certificate and their details were entered into an electronic database. Therefore, the majority of religious bigots resisted vaccinations because of fear of acquiring the mark of the beast (666), which would prevent them from entering heaven.[113]

Third, COVID-19 vaccine hesitancy in Malawi was influenced by the myth that COVID-19 vaccines are being administered to lower African women's fertility rates, thereby reducing population growth. Patience Mgoli Mwale, CARE Malawi's health specialist, said the hesitancy stems from the belief that they will be coerced into receiving contraceptives instead of the COVID-19 vaccination. This assumption was based on the fact that the most common and assessed contraceptives are injectables, such as Depo-Provera and Sayana Press.[114]

Migowi added that this adds to the myth currently circulating that COVID-19 shots are a method of sterilizing women and that by receiving the vaccine, women may be forced to engage in an unwelcome method of contraception that could result in the loss of their fertility.[115]

Fourth, COVID-19 vaccine hesitancy in Malawi was influenced by hearing negative information about the COVID-19 vaccine from a variety of sources. Social relationships and social media were the most popular sources of bad information regarding the COVID-19 vaccination. Of particular note, over three-quarters of respondents had encountered negative information via messaging apps. This information regarding specific social media sources disseminating false information about vaccines might direct the placement of factual vaccine information. This is especially important considering the correlation between negative information exposure and vaccination motivation, especially in terms of whether or not the respondent would encourage loved ones to get vaccinated. Interestingly, exposure to negative information was not associated with HCWs' willingness or motivation to be vaccinated, potentially suggesting that while HCWs' occupation and education may 'insulate' them from the influence of negative information on their vaccination attitudes, negative information may still shape how they feel about the importance of vaccination for others.[116]

Fifth, COVID-19 vaccine reluctance in Malawi was driven by erroneous views of the vaccine's efficacy and safety.[117] Study participants wondered why, during the previous vaccines against polio, measles, etc., people were only receiving one jab, but for COVID-19, one has to receive two doses and a booster.[118]

111. https://www.who.int/, (Accessed 9 May 2022).
112. Focus Group Discussion at Jali in Zomba district, 2 May 2022.
113. Ibid.
114. https://www.devex.com/news/are-myths-about-infertility-fueling-vaccine-hesitancy-in-malawi-102194, (Accessed 8 May 2022).
115. Ibid.
116. Moucheraud, C., Phiri, K., Whitehead, H. S., Songo, J., Lungu, E., Chikuse, E., ... & Hoffman, R. M. (2022). Uptake of the COVID-19 vaccine among healthcare workers in Malawi. International Health.
117. https://www.voanews.com/a/africa_malawi-fears-its-covid-vaccines-will-expire-due-hesitancy/6219387.html
118. Focus Group Discussion at Jali in Zomba district, 2 May 2022.

Sixth, COVID-19 vaccine hesitancy in Malawi was influenced by limited access to COVID-19 vaccines. At the start of the COVID-19 vaccination exercise, there were a few vaccination sites as both demand and supply were still ramping up. As a result, some people had to travel long distances to reach vaccination facilities, which negatively impacted vaccination uptake and equal access. Moreover, most vaccination sites were located in urban areas, but few were in rural locations.[119]

COVID-19 vaccine hesitancy eventually led to the burning of expired vaccines in Malawi. In April 2021, the government announced that it would have to destroy thousands of expired COVID-19 AZ vaccine doses after the country had been unable to administer 16 400 of 102 000 doses received from the African Union three weeks before their expiration date. The sluggish inoculation process and the resulting waste of vaccine doses were reportedly caused at least in part by vaccine hesitancy. However, evidence also suggests that the little progress made was partly due to a general lack of country readiness and public health infrastructure.[120]

On May 18th, 2021, Health Minister Khumbize Kandodo Chiponda said that Malawi had destroyed nearly 17,000 doses of the AstraZeneca vaccine that had expired in mid-April 2021. Kandodo said the African Union batch had "two weeks of shelf life, and unfortunately, in those two weeks, we were not able to absorb everything, mostly due to the propaganda against the AstraZeneca vaccine."[121]

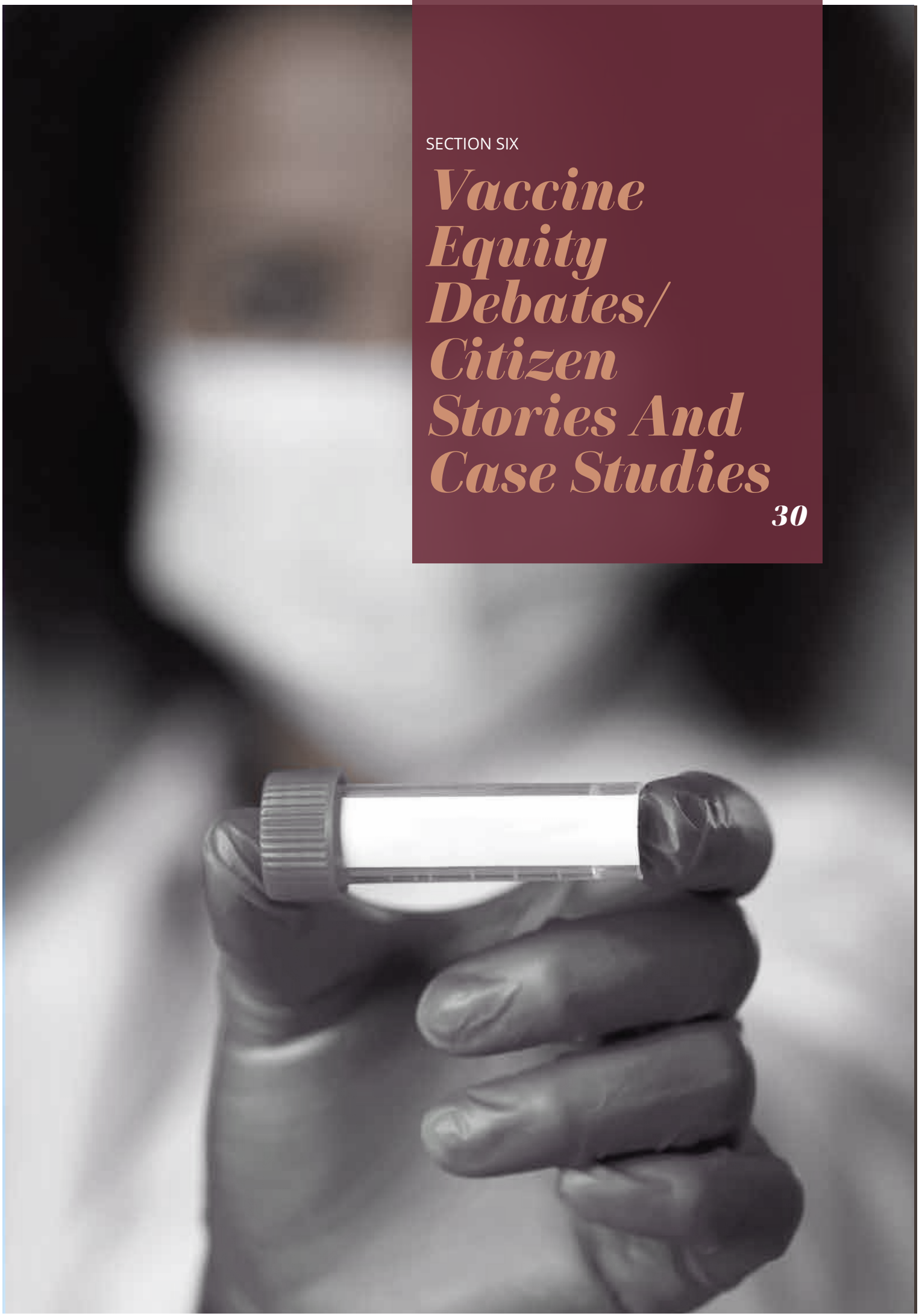
After determining that myths and misinformation were the major contributors to vaccine hesitancy in Malawi, UNICEF collaborated with the Public Affairs Committee (PAC), an inter-religious group representing Malawi's faith groups, to implement Faith and Positive Change for Children (FPCC) Initiatives to address COVID-19 vaccine hesitancy. The initiative provided a platform for religious leaders and actors to play an active and impactful role in the COVID-19 response.[122]

Sophie Nthenda, PAC's deputy director, said that at the start of the pandemic, religious leaders were not at the forefront in helping spread awareness messages on COVID-19. By involving them, we wanted to address issues having to do with rituals and misinformation, as some religious leaders were blamed for not encouraging people to get vaccinated.[123]

A UNICEF Communication for Development Specialist explained that faith leaders in Malawi play an influential role in both the political and social spheres and have a broad following in the country. Their presence in local communities, combined with their capacity to deliver critical services, allows them to mobilize grassroots support, earn the trust of vulnerable groups, and influence cultural norms. This can help us make progress against the pandemic and regain normalcy in the country, particularly as vaccination rates rise.[124]

Chiefs were also engaged in the fight against COVID-19 vaccine myths that were responsible for vaccine hesitancy in Malawi. For instance, Chief Chimlango, who oversees 17 villages in western Malawi, was at the forefront of the efforts to deconstruct COVID-19 vaccine myths. While national COVID-19 vaccine uptake across Malawi was only 7% in December 2021, in Chief Chimlango's area it was at 57% due to the chief's engagement with his subjects.[125]

119. Ibid.
120. https://africa.cgtn.com/2021/04/14/malawi-to-destroy-16000-expired-covid-vaccines/, (Accessed 6 May 2022).
121. https://www.africanews.com/2021/05/19/malawi-burns-17-000-expired-astrazeneca-vaccines/, (Accessed 8 May 2022).
122. https://www.unicef.org/malawi/stories/tackling-covid-19-vaccine-misinformation-through-faith-leaders, (Accessed 8 May 2022).
123. Ibid.
124. Ibid.
125. https://www.savethechildren.net/news/malawi-chief-fighting-vaccine-myths-new-variant-spreads, (Accessed 8 May 2022).



SECTION SIX

Vaccine Equity Debates/ Citizen Stories And Case Studies

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This section of the study presents the findings of vaccine equity debates and the stories collected from citizens in rural, semi-rural, and urban settings in five districts in Malawi. The 40 study participants consisted of community and religious leaders, health surveillance assistants, environmental health officers, and clinicians that were assigned to supervise the administration and distribution, including planning and executing demand creation activities for the COVID-19 vaccines.

Acceptance Rates in Rural Areas in Malawi

Acceptance rates in rural areas of Malawi were found to be generally very low, with at least 3 out of 7 people willing to be vaccinated. There is minimal evidence of systematic differences in vaccine hesitancy by gender or age, but there are pockets of hesitancy in metropolitan areas, among those with higher levels of education, and in wealthy households. Safety concerns about the vaccine in general and its side effects emerge as the primary reservations toward a COVID-19 vaccine across countries.

Personal Reasons

"I wouldn't want to get vaccinated. We have been having pandemics like HIV and other diseases like malaria, which have killed and are continuing to kill a lot of people here in Africa. Up to now, there are no vaccines made and tested that we know of. Why out of sadness COVID-19 came, and within a short period, they are telling us that there is a vaccine. I think there is a lot that they are not telling us." Said, a local traditional leader in Phalombe. And another traditional leader put weight on the assertions, *"We read on social media that there is a conspiracy to wipe out the black race, and every person who gets vaccinated will die within 3 months. Later, they changed that to 1 year. Now we hear that they will die after 2 years. We are eagerly waiting to see."* remarked a Chikwawa community leader.

The unsystematic rollout of the Campaign

Despite the ministry of health's knowledge of the unwillingness of the people to take up the vaccines, there were no interventions put in place to engage the people or conduct community awareness campaigns to create demand for the vaccines. Initially, the country prioritized the health service providers, top government officials, the police, and other key public service providers to be the first to receive the vaccines. The public learned of the hesitancy of that priority group to uptake the vaccines and that confirmed their suspicions, misinformation, and myths that were rife, particularly being propagated by the church and community leaders.

"We watched on TV the president and vice president receiving the vaccine at a public rally; most people, including myself, assumed he (the president) had received a different vaccination elsewhere and that the one we will be given will be different as well." *This was confirmed when I asked the Health Surveillance Assistance in my area whether he had gotten vaccinated or not, and he told me he hadn't been vaccinated and he is not going to be vaccinated. We all asked ourselves that "If the health care worker is afraid of vaccines, how much more are those of us who don't know much."*

The health surveillance assistance also felt sidelined in the whole exercise of administering the vaccine. We are the ones that stay with the people in the villages. We are the ones that administer all kinds of vaccines in the villages. We are well-trusted by the people we serve because we have built very strong relationships based on trust. But when the COVID-19 vaccine was rolling out, the government chose to train the nurses instead of us. Initially, they wanted the nurses to administer the vaccination. We had no answers to the questions that people were asking us about the safety of the vaccines. We were then asked to tell them about our opinions. Most people became very suspicious and decided not to take the vaccine.

Vaccine Safety Concerns

Stakeholders discussed how beliefs about vaccine inefficacy and adverse events following vaccination increase vaccine hesitancy in the public. Concerns about vaccine efficacy emanate from the speed at which COVID-19 vaccines have been developed, which has raised questions

about adherence to standard vaccine production processes, particularly in the trial and accreditation phase. A respondent explained that "People didn't believe that it was a real vaccine, looking at the unavailability of its development, clinical trials, and real data on efficacy." Instead, they chose to believe what was being speculated on social media, hence the rejection. "

In addition, a religious pastor added that "there have been diseases like ebola, HIV, and malaria that have killed so many people in the past. Vaccines for such diseases are still being developed. Why did COVID vaccines take only a very short period to be developed?" There is something fishy going on."

Additionally, other respondents during the focus group discussion in Phalombe believed that the fear of adverse events following vaccination, including vomiting, headaches, and body pains, was associated with people delaying or rejecting a vaccination. Another respondent said, "There were a lot of sceptics who watched to see which side effects people who go and take it to have. They concluded that the vaccine was not safe for human beings. Their belief was confirmed when the country registered several notable deaths after taking the second dose." Because of this and many other myths and perceptions, people who were sceptical about getting vaccinated chose not to be vaccinated. "

Vaccination Service-Related Barriers

90% of the respondents identified vaccination fatigue and the direct and indirect cost of vaccination to consumers as vaccine uptake barriers. Vaccination fatigue may apply if vaccines are administered in multiple doses plus future boosters, implying that consumers may be required to visit vaccination sites more than once to complete the vaccination. A respondent explained the issue of fatigue: "Some, I think, just get tired because the vaccines are now so many that they come after one year and they eventually give up even though there are second doses that they need to take." Even taking the second dose, we also hear that one will need to keep taking booster jabs.

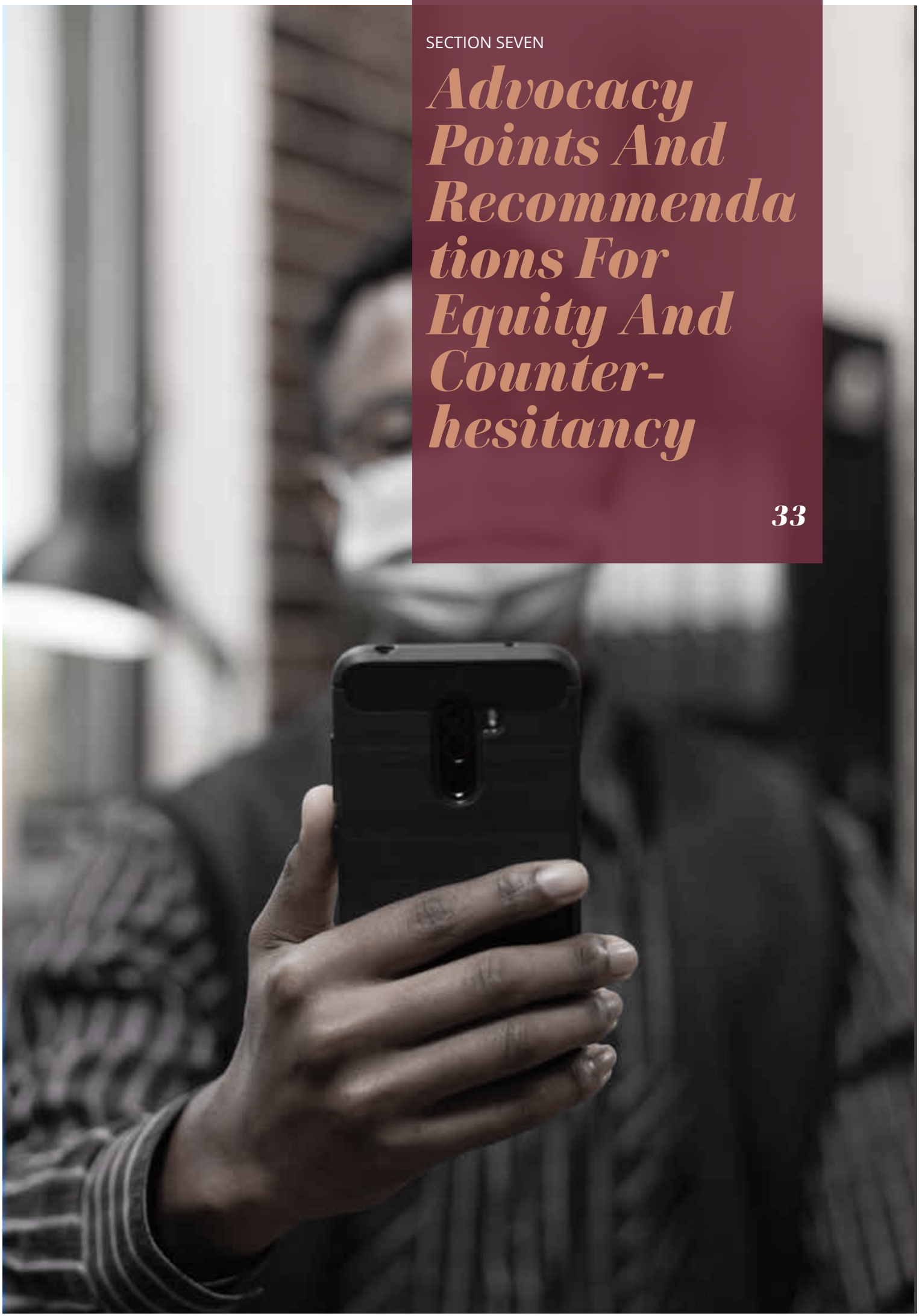
Social/and Culture-Related Barriers

Stakeholders said that complacency and group resistance are associated with vaccine rejection. Complacency describes a sense of non-existence of the COVID-19 virus and a belief in being insusceptible to infection. Participants mentioned this perception is common among less affected social groups like the youth "because COVID-19 has not threatened them so much." Even when infected, they are asymptomatic and unaware, and there hasn't been a single recorded death of a youth from COVID-19.

Stakeholders in all 5 districts said that some population groups believe COVID-19 is a disease of the wealthy and specific religious groups. A participant in Blantyre reported social group resistance among some tribal and religious groups: "If we talk to some rural people, they will still say that this is not a disease for everyone; rather, it is a disease for wealthy people, urban people, and even though initially there was a perception that it was a disease that only affected non-believers." If people think in this way, then we might have to face great challenges in rural areas, where the uptake of wrong information is fast and widespread." So said a local leader in Zomba Jali.

Religious Barriers

92.3% of the respondents mentioned religion as the biggest barrier to vaccine uptake. Most people were advised by their pastors, reverends, and church leaders that COVID-19 does not exist and that if they pray, they will not be attacked, let alone become ill and die. They were also told that the vaccine's purpose was to introduce the 666 mark of the beast as prophesied in the bible's book of revelation. "We were told that if we are real Christians, and we believe we shouldn't fear COVID-19, and we shouldn't even get tested, that the letters COVID-19 stand for 666."



SECTION SEVEN

Advocacy Points And Recommendations For Equity And Counter-hesitancy

Advocacy Points And Recommendations For Equity And Counter-Hesitancy

The COVID-19 pandemic has taught us that the global vaccination response must prioritize equity and access. Based on feedback from our vaccine equity and distribution research in Malawi, we provide the following essential recommendations and advocacy points to various stakeholders:

VACCINE EQUITY

1. Access to vaccination is part of the human right to health. The availability of and access to vaccines, medicines, health technologies, and therapies is an essential dimension of the right to health, which engages the government's responsibility.

2. Access to vaccination for all is part of the Immunization Agenda 2030 (IA2030). Ensuring healthy lives and promoting the well-being of all people is essential to sustainable development discourse. Sustainable Development Goal 3 aims to achieve universal health coverage, which means that everyone has access to safe, effective, quality, and affordable essential medicines and vaccines. Leaving no one behind is the goal's guiding principle.

3. Vaccination should be distributed following the equal respect principle, which requires that the interests of all individuals and groups, including marginalized communities such as refugees and migrants, be addressed equally. While the supply of vaccines is limited, countries should set up prioritization plans that take into account the vulnerabilities, risks, and needs of groups that are more likely to be affected by the COVID-19 pandemic because of social, geographical, or medical factors. Some of these groups are the elderly, people with disabilities, refugees, internally displaced persons (IDPs), asylum-seekers, populations in conflict settings or those affected by humanitarian emergencies, low-income migrant workers, and vulnerable migrants in irregular situations.

4. No one is safe until everybody is safe. As the virus does not discriminate, responses can not leave anyone behind. The benefits of the currently approved vaccines by WHO should reach all populations irrespective of nationality, gender, religion, race, language, legal status, location, or income level. Any successful implementation of the COVID-19 vaccination program requires the inclusion of all persons following the equality principle.

GOVERNMENTS AND POLICY-MAKERS

1. All governments should ensure that COVID-19 vaccines are distributed for free.

2. Increase investments in health research and development (R & D), particularly in the area of capacity strengthening of health researchers, innovators, and institutions by ring-fencing R & D in budget allocations and supporting the creation of manufacturing hubs under the leadership of Africa CDC.

3. Provides an enabling policy and legal environment to harmonize and improve the efficiency of regulatory reviews and approvals of health technologies and medical products across Africa.

4. Engage Civil Society to develop people-centred country prioritization plans to guarantee in-country equity in vaccine access and availability to all citizens, including hard-to-reach populations. Plans must include demand generation to drive vaccine uptake.

5. Support calls, led by India and South Africa, for a temporary waiver of intellectual property rights of pharmaceutical companies for COVID-19 technologies and commodities.

6. Vaccine rollouts should begin with health workers and those people at greatest risk of COVID-19. It is critical to prioritize the most affected communities.

7. The principle of health equity should guide decision-making. Essential workers and the most affected communities, including the elderly, PLWDs, refugees, and internally displaced people themselves, when applicable, should be involved in the strategic planning of vaccine programs.

VACCINE MANUFACTURERS/PHARMACEUTICAL CORPORATIONS

1. Increase availability of vaccines to low- and middle-income countries at affordable, subsidized costs.

2. Consider waivers or subsidies of intellectual property protections for COVID-19 technologies.

3. Vaccine manufacturers should increase their commitment to COVAX to guarantee access to vaccines for the most vulnerable populations and communities, including refugees and displaced people. NGOs with experience in vaccination programs for refugees should be consulted so that the process of vaccination is safeguarded, especially with the technical aspects of vaccines.

UN AND COVAX FACILITY:

1. **COVAX, and particularly the humanitarian buffer and AMC branch, are critical in addressing equity of the vaccine distribution. However, COVAX does not address equity in the phase 1 distribution at the country level, specifically for special populations like refugees and displaced persons, which constitute over 80 million individuals globally. Healthcare systems for refugees and displaced persons are already scarce and fragile, and outbreaks in these communities have dire consequences for the health, social, and economic situation of the individuals and their families. A 'fair priority model', as presented by Emmanuel et al.,**[126] which prioritizes vulnerable populations, should be incorporated into COVAX agreements, at least for the initial vaccine distributions. This is a cost-effective approach as it could help to prevent the 'aggregate economic damage' ensued by an uncontrolled outbreak in refugee and displaced communities.

2. Global collaboration by the humanitarian, social justice, and public sectors should further push the proposal set by the World Trade Organization (WTO) to waive the intellectual property on COVID-19 vaccines.

MIDDLE AND UPPER-INCOME COUNTRIES:

1. Countries should increase contributions to the COVAX facility and share doses with COVAX in parallel with their national vaccine rollouts.

2. Countries should prioritize supplying COVAX over new bilateral deals.

FINANCING INSTITUTIONS (FUNDING FACILITIES, FOUNDATIONS, PHILANTHROPISTS

1. Ring fence financing for Africa's vaccine manufacturing.

2. Consider implementing holistic financing models that include R & D, manufacturing, and building the capacity for health systems to deliver quality vaccination services.

DEVELOPMENT PARTNERS, NGOs/ CIVIL SOCIETY

1. Advocate for global vaccine solidarity by supporting policy reforms and engagements to promote vaccine equity and achieve herd immunity without leaving anyone behind.

2. Dispel myths and misconceptions that are fueling vaccine scepticism.

126. *Emanuel, E. J., Persad, G., Kern, A., Buchanan, A., Fabre, C., Halliday, D., ... & Richardson, H. S. (2020). An ethical framework for global vaccine allocation. Science, 369(6509), 1309-1312.*

3. Support calls, led by India and South Africa, for waiver of intellectual property protections for COVID-19 technologies and commodities.

COUNTERING COVID-19 HESITANCY

1. Surveys and Focus Groups Discussions should be conducted with populations where there is particular resistance to COVID-19 vaccination campaigns. Understanding the specific concerns of local communities is critical to countering misinformation and incorporating local knowledge into vaccine rollouts.

2. Present facts to create demand and advocate for COVID-19 vaccine acceptance and uptake by (1) providing information about the vaccines (i.e., how does it work? What do they contain? How were they developed? (2) advising on where to find immunization services and (3) branding or creating special signage for COVID-19 vaccination service points.

3. Engage in a public dialogue, using empathetic listening and responding to people's concerns. Appeal to empathy and altruism.

4. Establish participatory engagement and open debates, including with minorities and other marginalized communities, before, or at least very early on in, the vaccine roll-out.

5. Do not avoid questions of "uncertainty" (in the face of an evolving pandemic and ongoing research situations), including the issue of side effects.

6. Also, avoid politicizing the debate. Listen to concerns and respond with facts or at least the latest understanding.

7. Be transparent, sharing data on trial protocols and results in easily accessible formats.

8. Provide up-to-date information on any adverse reactions, including a breakdown of data by age group, gender, etc. There should be clear communication protocols for communicating with the public about adverse events.

9. Establish surveillance systems, ideally run by independent bodies, to keep track of adverse medical events which may be caused, or perceived to be caused, by vaccines.

10. Establish clear communication protocols for communicating with the public about adverse events. Establish qualitative research programs to monitor vaccine confidence and hesitancy and provide a contextual understanding of the root causes, features, and trajectories of hesitancy. Data analyzed and presented by such programs can help inform strategy and policy as well as adapt messaging to changing situations.

11. Adjust vaccine roll-out plans based on people's feedback and concerns.

12. Continuously monitor roll-out and potential emerging and evolving causes of hesitancy (including through negative social media commentary) and appropriately adapt roll-out methodologies and messaging, taking into account concerns of minorities or marginalized communities that may differ from those of the mainstream.

13. Address vaccine hesitancy among healthcare workers. Ensure that they have the confidence to communicate effectively about COVID-19 vaccines and to convince those who are hesitant.

14. Caution should be taken if considering deploying the military to vaccinate people. In some countries, this may contribute to mistrust and hesitancy.

119. *Ibid.*
120. *https://africa.cgtn.com/2021/04/14/malawi-to-destroy-16000-expired-covid-vaccines/, (Accessed 6 May 2022).*
121. *https://www.africanews.com/2021/05/19/malawi-burns-17-000-expired-astrazeneca-vaccines/, (Accessed 8 May 2022).*
122. *https://www.unicef.org/malawi/stories/tackling-covid-19-vaccine-misinformation-through-faith-leaders, (Accessed 8 May 2022).*
123. *Ibid.*
124. *Ibid.*
125. *https://www.savethechildren.net/news/malawi-chief-fighting-vaccine-myths-new-variant-spreads, (Accessed 8 May 2022).*

15. Ensure that messaging is jargon-free and accessible to all. Messages should be targeted to specific audiences, taking their concerns into account—hence the need for early dialogue.

16. Take time to understand the social media landscape and its complexities. For example, misinformation can be identified by the following characteristics: (1) distrust of science and selective use of expert authority; (2) distrust in pharmaceutical companies and government; (3) the provision of simplistic explanations; (4) the use of emotion and anecdotes to influence rational decision-making; and (5) the formation of information bubbles and echo chambers.

17. Trusted celebrities (e.g. musicians, sports stars, even social media influencers) and community champions (e.g. faith leaders, traditional leaders) can be leveraged to endorse vaccines. Identify such individuals and work with them to develop their understanding of the issues and suitable messaging.

119. *Ibid.*
120. *https://africa.cgtn.com/2021/04/14/malawi-to-destroy-16000-expired-covid-vaccines/, (Accessed 6 May 2022).*
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123. *Ibid.*
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SECTION SEVEN

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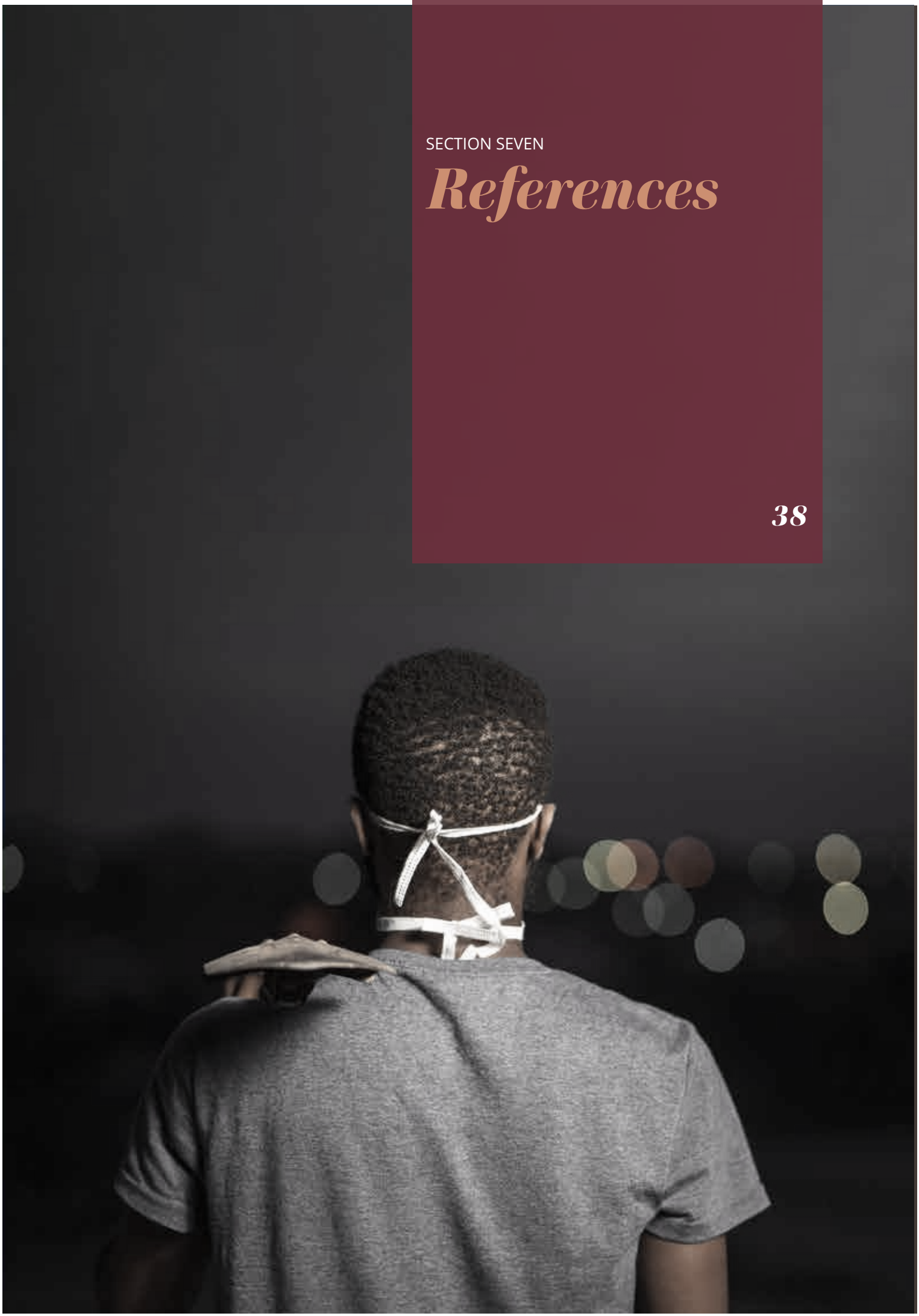

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Annex 1: Action Plan

TASK	ALLOCATED DAYS
Inception report and data collection tools development	3 days 15 April,2022
Planning field work including training enumerators	1 day 19th April, 2022
Field data collection/Desk review and analysis	4 days 23nd April, 2022
Field data entry and analysis	1 day 25th April, 2022
Comprehensive report on vaccine equity and distribution (DRAFT)	4 days 29th April, 2022
Present findings to CTAP team	1 day TBD
Submission of final version of published report on vaccine equity and distribution	2 days TBD
Total	13 Days [15th April 2022 to 6th May 2022]

Annex 2

Consent Form

Research Project Tittle: **Vaccine Equity and Distribution Research**

This consent form is for participants in a research study entitled "Vaccine Equity and Distribution Research."

NAME OF PRINCIPAL INVESTIGATORS: Dr. Jones Mawerenga
NAME OF SPONSOR: Follow the Money Malawi CTAP Project

This Informed Consent Form has two parts:
• Information Sheet (to share information about the study with you)
• Certificate of Consent (for signatures if you choose to participate)

Part I: Information Sheet
Introduction

I am Dr. Jones Mawerenga, and we are conducting research on a topic entitled "Vaccine Equity and Distribution Research." We are going to give you information and invite you to be part of this research.

Purpose of the Research
The purpose of this research is to interrogate the dynamics of vaccine distribution and the challenge of vaccine equity in Malawi.

Type of Research Intervention
This research will involve your participation through responding to a questionnaire, which will take approximately 20 minutes.

Participant Selection
You are being invited to take part in this research because we feel that your experience as a program implementer, partner, or stakeholder in health systems and programming can contribute much to our understanding and knowledge of vaccine equity and distribution in Malawi.

Voluntary Participation
Your participation in this research is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate, all the services you receive from and provide in public health systems, and your community role or job will continue and nothing will change.

Also, note that the choice that you make will have no bearing on your job or on any work-related evaluations or reports. You may change your mind later and stop participating, even if you agreed earlier.

Procedures
We are asking you to help us learn more about vaccine equity and distribution in Malawi. We are inviting you to take part in this research project. If you accept, you will be asked to participate in the following ways: an interview, focus group discussion, online survey, or workshop.

Duration
The research takes place over a period of two weeks in total. During this time, you will participate in some of our research activities like an interview, focus group discussion, online survey, or workshop, and each of these activities will last for about 30 minutes to 3 hours each, depending on the activity.

Risks
Please note that since the topic involves service provision and political decisions, there are some risks associated with it. In the worst scenario, it might generate misgivings by concerned parties, but whatever you are going to share will not be shared with anyone. However, be assured that the principal investigators of this study have successfully conducted similar studies in Malawi and no harm has been reported so far.

Benefits
Your participation is likely to help us find out more about vaccine equity and distribution in Malawi. The findings will inform programming aimed at improving on gaps that will be identified for the benefit of service beneficiaries.

Reimbursements
You will not be provided any incentive to take part in the research. However, we will give you refreshments and cover your travel expenses (if applicable).

Confidentiality
The research being done in the community may draw attention, and if you participate, you may be asked questions by other people in the community. We will not be sharing information about you with anyone outside of the research team. The information that we collect from this research project will be kept private. Any information about you will have a number on it instead of your name. Only the researchers will know what your number is, and we will lock that information up with a lock and key. It will not be shared with or given to anyone except the research sponsors, but they will not be able to identify who gave that particular data.

Sharing the Results
Nothing that you tell us today will be shared with anybody outside the research team, and nothing will be attributed to you by name. The knowledge that we get from this research will be shared with study participants as well as other stakeholders at a meeting that you will be invited to attend. Then we will publish the results so that other interested parties may learn from them.

Right to Refuse or Withdraw
You do not have to take part in this research if you do not wish to do so, and choosing to participate will not affect your job or job-related evaluations in any way. You are free to withdraw from the [discussion/interview] at any time without your job being affected. I will give you an opportunity at the end of the interview/discussion to review your remarks, and you can ask to modify or remove portions of those if you do not agree with my notes or if I did not understand you correctly.

Who to Contact?
If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact any of the following:
Primary Point of Contact: Rodger Kumalire Phiri
Phone Number: +265 999 263 850
Email: rodger.phiri@gmail.com

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it, and any questions I have been asked have been answered to my satisfaction. I voluntarily consent to be a participant in this study.
Print Name of Participant:_____
Signature of Participant:_____
Date:_____
Day/month/year

Statement by the researcher/person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability, made sure that the participant understands that the following will be done:

1. The participant is expected to respond to our questions.
2. We will document or record the responses.
3. We will take the responses for data analysis and they will form part of the study findings.

I confirm that the participant was given an opportunity to ask questions about the study, and that all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent and that the consent has been given freely and voluntarily.
A copy of this ICF has been provided to the participant.
Print Name of Researcher/person taking the consent:_____
Signature of Researcher /person taking the consent:_____
Date:_____
Day/month/year

HEALTH CARE WORKERS TOOL

CTAP/Follow the Money Malawi
Vaccine Equity and Distribution in Malawi Research

	PLEASE ENSURE THIS BOX IS FILLED IN
Participant ID	
INTRODUCTION	Hello, as part of the Covid-19 vaccine equity and distribution in Malawi Research you are about to begin, we would like to understand more about you and your work. Over the entire research, you will be completing surveys this survey questionnaire. The purpose of this research is to interrogate the dynamics of vaccine distribution and the challenge of vaccine equity in Malawi.
District	
Cluster	
Full Name of Research Assistant	
Date	
Sex (circle)	Male / Female / Other
Age in years	
Profession	Please circle the response which closest describes your job: ■ Community Health Officer ■ Nurse ■ VCT Counsellor ■ ART Officer ■ Clinician ■ Clinical Administrator ■ Health Surveillance Assistant ■ Other healthcare professional ■ CSO/NGO Worker or Volunteer
INSTRUCTIONS	Please complete the survey as honestly and accurately as possible. The results of this study will be used to inform future interventions targeting health vaccine equity and distribution in Malawi. If you have a question please don't hesitate to ask at any point of the research. The survey should take you about 25 minutes to complete. Please complete the survey independently and without speaking to anyone else. Remember, your responses will remain private and will never be attributable to you.

Q# - Question	Answer (circle)	Skip Rule
PART 1: For each question, please CIRCLE your response in the 'Answer' column		
Q01 Do you give your consent to participate in this study?	Yes..... 1 No 2	If NO STOP
Q02 What is the highest level of education you have completed?		

1. Everyone who came to access COVID-19 vaccines was able to get a jab	1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree Please explain on your answer...
2. We had enough storage facilities for the vaccines at all times for any given quantities	1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree Please explain on your answer...
3. I was adequately oriented and was able to provide enough information to people coming to access the vaccines	1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree Please explain on your answer...
4. Everyone including people with disabilities, the elderly, minority groups had equal access of the vaccines	1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree Please explain on your answer...
5. There was no interference by authorities in terms of prioritisation, equal distribution and equity	1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree Please explain on your answer...
6. Vaccine distribution barriers and challenges to access were dealt with prompt	1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree Please explain on your answer...
7. Communities were well aware of the availability of the vaccines in their local clinics whenever stock has arrived	1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree Please explain on your answer...
8. If I can do the exercise again, there is nothing I can change	1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree Please explain on your answer...

COMMUNITY/SCO LEADERS TOOL

CTAP/Follow the Money Malawi
Country Specific Health Sector Accountability Research

	PLEASE ENSURE THIS BOX IS FILLED IN
Participant ID	
INTRODUCTION	Hello, as part of the Vaccine Equity and Distribution Research you are about to begin, we would like to understand more about you and your work. Over the entire research, you will be completing surveys this survey questionnaire. The purpose of this research is to interrogate the dynamics of vaccine distribution and the challenge of vaccine equity in Malawi.
District	
Village	
Full Name of Research Assistant	
Date	
Sex (circle)	Male / Female / Other
Age in years	
Profession	Please circle the response which closest describes your job: ■ Local Chief ■ VDC Committee member ■ Health Management Committee member ■ Community Policing Member ■ Religious Leader ■ Civil Servant ■ Social Worker ■ Human rights activist ■ CSO/NGO Worker or Volunteer
INSTRUCTIONS	Please complete the survey as honestly and accurately as possible. The results of this study will be used to inform future interventions on vaccine equity and distribution in Malawi. If you have a question please don't hesitate to ask at any point of the research. The survey should take you about 25 minutes to complete. Please complete the survey independently and without speaking to anyone else. Remember, your responses will remain private and will never be attributable to you.

Q# - Question	Answer (circle)	Skip Rule
PART 1: For each question, please CIRCLE your response in the 'Answer' column		
Q01 Do you give your consent to participate in this study?	Yes..... 1 No 2	If NO STOP
Q02 What is the highest level of education you have completed?		
1. Everyone who was eligible for vaccination received the jab (S)	1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree Please explain on your answer...	
2. Communities were given adequate information about the vaccines and all areas of doubts, anxieties and misinformation were addressed	1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree Please explain on your answer...	
3. Possibilities were put in place for people with disabilities, the elderly and the minority groups to access the vaccines easily	1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree Please explain on your answer...	
4. Vaccine was readily available for every other person anytime, at every other health facility	1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree Please explain on your answer...	
5. The medical personnel and the district health office involved all the stakeholders and coordinated well during the vaccination campaign	1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree Please explain on your answer...	
6. If I could change anything about how the vaccine distribution and equity accessibility was handled, I could not change anything	1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree Please explain on your answer...	

COMMUNITY/SCO LEADERS FGD TOOL/Health Care Workers

Focus Group Discussion Questions Community Leaders
PART A,

1. How would you describe the Covid-19 vaccine equity and distribution in your area?
2. What were some of the hindrances that affected the accessibility or willingness to get a jab?
3. Could you describe the public awareness campaigns about the vaccine as adequate?
4. What was your role in the whole process?
   a. Do you think you achieved it?
   b. If not, what could you have done better?
5. If you were the district health officer in-charge of the vaccine campaign, what is it that you could have done differently?
6. Do you think people living with disabilities, the elderly and minority groups were adequately reached during the campaign?
7. What of the myths and misinformation did you encounter and to what extent did it have an effect on the vaccination campaign?
8. Who were the major stakeholders who affected positively or negatively the uptake of the vaccines?