Chapter 13 The Complexities of Public Health Communication on COVID-19 Vaccination in the Social Media Era: Implications on Zimbabwe's Health System



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Abstract Social media platforms intend to engage the public in an interactive manner. They are often used as a mechanism by the public to share current information and engage in multi-way conversations and interactions. This chapter defines and discusses social media engagements on COVID-19 vaccination. It examines different chats on selected WhatsApp groups about the COVID-19 vaccination pros and cons and deliberates on the latent risks, benefits, and challenges of embracing the social media platform such as WhatsApp on public health communication. It also investigates how social media platforms have the potential to promote or undermine public health communication campaigns on the COVID-19 vaccination drive and consequently Zimbabwe's health system. The period under study was from March 2020–December 2021. Virtual ethnography was undertaken of messages from two WhatsApp groups. Group 1 consisted of 257 participants, while group two consisted of 34. The researcher is also a member of these groups and thus was a participant observer. It emerged from the findings that negative religious discourse, lack of trust in government or fear of political manipulation, suspicion of commercial gain and vaccine safety are the some of the complexities behind vaccine hesitancy. These have been amplified by social media and thus social media has the potential to derail or hamper efforts to curb the spread of the virus. The Government of Zimbabwe needs to step up public health messages and awareness campaigns so that these messages do not drown in the infodemic or sea of misinformation and disinformation. Tapping into social media can thus reverse complacency and vaccine hesitancy. It can provide a rich research ground for health communication specialists. Social media can also be used to gauge public opinion on the issue of vaccination. The questions and issues surrounding the pandemic can be used as indicators on how to

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redirect messages to the public. Social media has emerged as a networked public space in which due to the anonymity offered, important matters can be discussed without fear and ignoring this space can be detrimental to any government during this pandemic.

Keywords COVID-19 · Vaccination · Social media · Public health · Communication campaign

13.1 Introduction

The role of the media in the coronavirus 2 (SARS-CoV-2) COVID-19 global health crisis has been put under a microscope; concerns being raised particularly about social media. In the past media platforms were mainly composed of traditional sources such as radio, television, and newspaper. Running public health campaigns was relatively easy as messages would be carried on such platforms. The coming of the Internet ushered in convergent and multiple platforms. The proliferation of social media platforms further complicated the communication landscape. According to the World Health Organization (WHO), it has become an 'infodemic' as there is an overabundance of information and mostly misleading information on the virus and social media can amplify these harmful messages (www.who.int). The lack of a cure to the novel corona virus resulted in all sorts of cures being suggested, some of them detrimental to human health. Thus, the Ministry of Health and Child Care (MOHCC) in conjunction with the World Health Organization and other partners in the health sector sat out to try and educate the public on COVID-19. Public Campaigns centred around non-pharmaceutical interventions (NPIs) with the public being encouraged to observe certain norms such as avoid public gatherings, stay at home, sanitise, wear face masks and practice social distancing to curb the spread of the virus. Besides the above measures they also encouraged vaccination. Vaccination was welcomed by most but also met with resistance.

Zimbabwe received the first consignment of the Sinopharm vaccine from China on 15 February 2021 amid mixed reactions from the public. The goal was to reach herd immunity of 60%, which is ten million people vaccinated by the end of 2021 (www.xinhuanet.com, 2021). Public health campaigns were mounted in the media to encourage Zimbabweans to get their 'jab'. Public health communication has had to contend with obstacles such as vaccine hesitancy. Vaccine hesitancy and or vaccination misinformation has the potential to reverse the gains the Zimbabwe health system has made. A report from the World Health Organization (WHO) in 2019 lists vaccine hesitancy is one of the top ten threats to global health, 'Vaccine hesitancy – the reluctance or refusal to vaccinate despite the availability of vaccines- threatens to reverse progress made in tackling vaccine-preventable diseases' (www.who.int, 2020). This has been witnessed before in outbreaks of Ebola in 2014 and the Zika virus in 2016 (Singh et al., 2020). Although the reasons for this are complex, a report from the Centre for Countering Digital hate in 2020 (www.conterhate.co.uk, 2020) uncovered that social media has given mileage to the 'anti-vax' movement which in turn contributed to vaccine hesitancy. Among some of the reasons for vaccine hesitancy is lack of transparency by governments in the procurement and distribution of these vaccines (Maketo & Mutizwa, 2021), Religiosity/religious practices (Obi-Ani et al., 2020; Dzinamarira et al., 2021), vaccine safety (Mcbee et al., 2021). It is these complexities raised or amplified by social media that could hamper the vaccination drive.

To explain how social media has become an area of concern would require looking at the situation, context or environment that resulted as a result of the COVID-19 pandemic. Globally a number of countries imposed various levels of lockdowns which resulted in restricted movement of people in accordance with WHO guidelines. On 20 March 2020, a total lockdown was first announced in Zimbabwe, and this was subsequently extended on 19 April 2020 for another 14 days. The lockdown saw the country introducing measures that included the banning of all social gatherings with only funerals exempted but limited to less than 50 people (www. herald.co.zw, 2020). This was only the beginning because in January 2021, Zimbabwe experienced a second wave of COVID-19 infections and in July 2021, a third wave. These lockdowns necessitated a major shift to online platforms of communication particularly the use of social media. What made these platforms appealing when physical interaction was discouraged during the lockdown periods include the following:

- · Availability and access to high-speed Internet and mobile technology
- Content was more decentralised and less hierarchical, multiple production and distribution points
- · Relatively high frequency of content exposure
- Usually directly accessible to the public free of charge
- Message typically came out very quickly, sometimes instantaneously (Chibita & Ugangu, 2017 p. 235)

Social media sites also allowed users to generate online groups with whom they shared information, ideas and personal messages (Chibita & Ugangu, 2017). To add on social media did not require physical contact to stay in touch with friends and family, and thus it was the above factors that separated social media from traditional media such as radio, television and newspapers. Examples of popular social media platforms include Facebook, Twitter, LinkedIn, Pinterest, Google+, YouTube, Instagram, Flickr and WhatsApp.

In Zimbabwe social media platforms are accessible due to the mobile phone industry which can be closely tied with the rise in the use of the Internet in Zimbabwe in 2008. The industry is currently dominated by three cellular networks namely Econet, Netone and Telecel (potraz.gov.zw). And the number of mobile subscribers has increased since then. As of December 2020, Zimbabwe had 8,400,000 Internet users and Internet penetration was at 55.7% (internetworldstats.com, 2022). The popularity of WhatsApp and Twitter is that it has come in to fill the void that

traditional/mainstream media was not able to fill due to tight regulation, in terms of distributing alternative views in issues and polices (Thomas, 2020) and thus is a formidable contender as a source of news as opposed to mainstream media. It is against this background that this chapter focuses on WhatsApp. However, it has to be noted that social media platforms are not for everyone in Zimbabwe, there is a digital divide due to economic barriers such as acquiring a smartphone and the prohibitive cost of data required to access the Internet.

Although it has given a voice to the subaltern, social media as 'parallel market of information' is fraught with misinformation, disinformation and outright fake news. It should not be dismissed but closely studied as it represents a 'networked public sphere', a 'digitised counter hegemonic space' that could inform and possibly enrich public health campaigns (Moyo, 2009; Moyo, 2011; Mutsvairo et al., 2014). The chapter's main objective therefore is to investigate how social media platforms particularly WhatsApp have the potential to enhance or undermine public health communication campaigns/interventions on the COVID-19 vaccination drive in Zimbabwe. The study sought to address the following questions: What are the messages/conversations about vaccination on WhatsApp? What are the complexities that are revealed through these messages? What are the possible implications of such messages on the health care system in Zimbabwe?

13.2 Literature Review and Conceptual Framework

13.2.1 Public Health Campaigns and Anti-Vaccination ('Anti-Vax') Campaigns

Public health campaigns are part of health communication. They involve the study and use of communication strategies to inform and influence individual and community health decisions (Healthy People Report, 2010). Among these strategies are public health messages and campaigns and these are to educate, change and encourage healthy behaviour among members of the public. Campaigns have traditionally been mounted on billboards, radio, television, newspapers and pamphlets to deliver health messages and as highlighted by Randolph and Viswanath (2004) 'Mass media campaigns, because of their wide reach, appeal and cost-effectiveness, have been major tools in health promotion and disease prevention. They are uniformly considered to be powerful tools capable of promoting healthy social change' (2004:43). The environment for communicating about health has however changed significantly and has become challenging due to multiple and convergent platforms and an audience that demands quality health information (Healthy People Report, 2010).

Research however shows that these multiple platforms can better reach various segments of the audience in contexts that are relevant to them (Healthy People Report, 2010). Thus, the multiplicity of platforms can thus be a blessing or a curse

for health communication professionals. A curse in the sense that there is a lot of inaccurate information on the Internet which can lead to the public making poor uniformed decisions about their health (Healthy People Report, 2010). Besides the misleading information social media has given a platform to the 'Anti-vax' (Anti-vaccination) campaign. The anti-vax movement poses a huge threat to global public health in the era of COVID-19 but yet raise important issues pertaining to safety and effectiveness of the vaccines (Armitage, 2021). To address these issues, governments should provide transparent, timeous and accessible public health messaging to the public (Armitage, 2021).

Social media has hampered effective response by health departments and governments and has become the major driver of fake news, false heath information and conspiracies, particularly WhatsApp, Twitter, YouTube Facebook and Instagram (Cindelli et al., 2020; Allington et al., 2020; Lima et al., 2020; Singh et al., 2020). The impact of social media has become a concern in the management of vital health information. Cindelli et al. (2020) in their comparative analysis of social media platforms, Twitter, Instagram, YouTube, Reddit and Gab looked at the dangers of misinformation through social media platform. This has been termed an infodemic and this infodemic has made it difficult to manage the spread of the pandemic. On the positive they also concluded that, 'Social media is extremely important to fight this contagious disease, not only to get information and be updated about it but also to understand how it spreads, how people interact, and how we can respond to it' (2020 p. 2). Thus making it a vital tool in the fight against the virus.

A study by Allington et al. (2020) focused on how conspiracy beliefs compromised health-protective behaviour by studying social media as sources of health messages by respondents from the age of 16–75 years in the UK through online questionnaires. They looked specifically at three conspiracy beliefs: 'The virus that causes COVID-19 was created in a laboratory'. Second, the 'symptoms of COVID-19 seem to be connected to 5G mobile network radiation' and third 'The COVID-19 pandemic was planned by certain pharmaceutical corporations and government agencies' (2020 p. 1765). Their results revealed a positive relationship between COVID-19 conspiracy beliefs and the use of social media as a source of information. Thus they conclude that 'unregulated social media can present a health risk (2020). All three studies suggest that conspiracy beliefs act to inhibit healthprotective behaviours and that social media act as a vector for such beliefs' (2020 p. 1768). In a health crisis such as COVID-19 this has meant life or death and increased anxiety in society.

As to why COVID-19 is prone to false information on social media, Jaiswal et al. (2020) highlight 'Much of the evidence needed to fully inform clinical and public health responses is not yet available, making COVID-19 uniquely vulnerable to a proliferation of disinformation, misinformation and medical mistrust, including what are often called "conspiracy beliefs" (Jaiswal et al., 2020 p. 1). They further define the terms disinformation, misinformation and mistrust and call for an understanding of the origin of these to carry out successful public health campaigns,

Disinformation (strategically and deliberately spread false information), misinformation (false information, not necessarily with intent to mislead), and mistrust (more than the lack of trust; suspicion of ill-intent) are multi-faceted phenomena, heterogeneous underlying motivating factors... understanding the etymologies of disinformation, misinformation, and medical mistrust must be an important component of the public health response to COVID-19 (Jaiswal et al., 2020 p. 1).

Understanding the dynamics of social media can thus be used to address issues of race and xenophobia like in the United States where people of colour (including Asians and Black people) were blamed for the virus. Understanding this phenomenon can further assist to dispel state sanctioned disinformation (Jaiswal et al., 2020 p. 1).

To add credibility to this disinformation and misinformation, Lima et al. (2020) add that 'These messages and texts always start the same way: they feature a physician, nurse, surgeon or other authority figure who shares advice - such as holding your breath as a COVID-19 confirmation test, or taking vitamins to decrease the possibility of infection' (2020 p. 2). The major source of all this being social media, thus people are overwhelmed by information and do not know which sources to trust, hence the need to evaluate the contribution of social media during the COVID-19 pandemic and regulate it. They however point out that regulating social media platforms is difficult and where possible it has been done inconsistently and thus curtailing the spread of these conspiracies is near impossible (Lima et al., 2020). In their observation from Nigeria Obi-Ani, Anikwenze, and Isiani (2020), highlight the advantages and disadvantages of social media and the role that social media played in spreading information during the COVID-19 pandemic. The qualitative study looked at social media platforms such as Facebook, Twitter, WhatsApp, blogs, online newspapers and YouTube where the contestations about the pandemic were prevalent. In their findings, they uncover that religious practices contributed to the fake messages on social media. They concluded that 'these platforms have been abused as people hide under its anonymity to spread fake messages and instigate panic amongst members of the general public' (2020 p. 1).

These findings however remind us of the importance of social media during times of crisis as highlighted by Singh et al. (2020). Their study centred on the amount of conversation on the social media platform Twitter. They conclude that social media platforms can be used as a surveillance approach to understanding how people are impacted by the virus and the influence of social media platforms on public health and behavioural changes. To further understand the influence of social media, Al-Dmour, Masa'deh, Salman, Abuhashesh, and Al-Dmour et al. (2020) examined the influence of social media platforms on public health protection against the COVID-19 pandemic. This study sampled 2555 social media users in Jordan and revealed that the use of social media platforms had a significant positive influence on public health protection against COVID-19 as a pandemic. They concluded that 'the use of social media platforms can positively influence awareness of public health authorities may use social media platforms as useful tools to increase public health awareness through the dissemination of brief messages to targeted populations'

(2020 p. 12). This chapter therefore seeks to add on to this body of knowledge by examining how social media platforms can potentially enhance or hinder public health communication in Zimbabwe.

13.2.2 The Networked Public Sphere and the 'Parallel Market of information'

Digitally networked technologies have transformed the communication industry. 'This change is technological (with social media platforms enabling new forms of publishing, receiving and discussing stories) as well as cultural, with idiosyncratic conversations emerging on these platforms' (Mutsvairo et al., 2014 p. 4). This digitally networked space has been called a digitally networked public sphere (Mutsvairo et al., 2014). The public sphere concept originated in the writings of Jurgen Habermas in the 1960s. Habermas (in Cladwell, 2017 p. 162) argues that the public sphere 'may be conceived as a space where private people come together as public and discuss matters of common concern'. It can also be defined as 'the space where citizens converge for the purpose of deliberating over matters of public importance, and where they can form public opinion, being an aggregate of their opinion' (Cladwell, 2017). Traditional media was central in this public space or sphere and thus the coming in of new media or digitally networked technologies was seen as bringing hope for democracy as the platform enabled citizen participation. And indeed it has allowed citizen participation and discussion of important social issues as the COVID-19 pandemic. As Goldstein and Rotich (in Mutsvairo et al., 2014) assert, 'Digitally networked technologies enable ordinary citizens, to become their "own broadcasters" and reach large numbers of people in unprecedented ways at trivial cost' (2014 p. 5). However this networked public sphere represents more of a public space rather than a public sphere as these discussions do not influence democratic processes (Bosch, 2017; Cladwell, 2017).

Yet, this does not dismiss these spaces as according to Caldwell, 'Successful instances of cyber-activism have demonstrated only too poignantly the power of the Internet and social media, which governments and corporates ignore to their peril' (2017 p. 162). Controlling or regulating this space has thus become a challenge for governments in this COVID-19 pandemic as it has emerged as a 'parallel market of information' (Chuma, 2008; Moyo, 2009). The concept arose during the March 2008 elections in Zimbabwe, when the government withheld election results, and this resulted in a lot of speculation about the outcome of the elections and gave alternative communication platforms an opportunity to fuel false information (Moyo, 2009). Similarly the gap in information about COVID-19 opened up or fuelled a parallel market or black market of information, disinformation, misinformation and medical mistrust thus, 'in a situation where information flows were restricted and the mainstream media were unable to fulfil the citizen's informational needs, the parallel market of information became the dominant source of a mix of

information and disinformation' (Moyo, 2009 p. 553). Furthermore these platforms can provide counter hegemonic spaces, counter narratives to reports in mainstream media yet the downside is they can promote violence and misinformation (Moyo, 2011). In the subject under study, the COVID-19 pandemic can be a threat to or a positive influence on the public mental and physical health.

13.3 Methodology

The study focuses on the period March 2020 to December 2021 during which time the country had experienced three waves of the virus and vaccination. This qualitative study employs virtual ethnography which is defined as an 'academic research method for explaining how people make sense of the internet' (Hine, 2000). 'Virtual ethnography draws on a range of qualitative methods including direct observation, participant observation and sometimes content analysis' (Fourie in Bosch, 2017 p. 62). 'Virtual ethnographies in much the same way as traditional ethnography centres around communities; studies communities and cultures created online' (2017 p. 62). Thus 'the internet is approached, in much the same way as communities can be co-constructed, in much the same way as communities were created in the pre-digital age' (2017 p. 63). 'The major point of departure here being that a researcher can explore the social spaces of the internet from his/her desk with focus on technological mediated interactions in online communities' (Bosch, 2017 p. 64). Virtual ethnography was carried out to study two WhatsApp chat groups, which the researcher is a member. Data was gathered from these two different personal chat groups on WhatsApp. The researcher was immersed in these WhatsApp chat groups as a participant observer. The two groups or rather sites of study consisted of:

- Group 1 Neighbours group: this group consists of neighbours in the area and has 257 participants. This online community is composed mainly of Zimbabweans living locally in Masvingo and Zimbabweans living in the diaspora who have properties in this specific local neighbourhood. Data from this divergent group consisted mainly of messages marked 'forwarded' or 'forwarded many times' on COVID-19. This implied these messages which were being passed from group to group and from unverified sources.
- Group 2 Work group: This online community is composed of professionals mainly university employees and has 34 participants. Messages from this group was mostly from sources such as newspapers and online news sites. The differences in the group could possibly account for the messages. Group 2 is largely dominated by academics and thus understood the implications of passing on unverified information. This however requires further study.

Data extracted from these WhatsApp groups was purposively sampled. For WhatsApp, the researcher mainly looked at messages on or related to COVID-19 and COVID-19 vaccination. Content and discourse analysis of the messages was

carried out and the data was presented thematically. The messages were divided along the following themes that emerged:

- (a) Religiosity specifically religious discourse on vaccines
- (b) The main motive behind the virus and vaccines is commercial purpose/gain
- (c) Mistrust or suspicion of political manipulation by the government
- (d) General mistrust of vaccines-vaccine safety

The weakness or limitations of virtual ethnography however relates to the validity and reliability of such information (Bosch, 2017 p. 62). To compensate for this, the researcher employed online document analysis of documents from organisations such as the World Health Organization, Ministry of Health and Child Care in Zimbabwe. To address ethical concerns related to informed consent and privacy of participants and anonymity of research subjects, the researcher did not cite any names to information found on WhatsApp.

13.4 Findings and Discussion

13.4.1 Messages and Complexities to Public Health Communication

13.4.1.1 Religiosity Specifically Religious Discourse on Vaccines

Data gathered revealed that narratives centred on religious beliefs and the end of the world due to the COVID-19 pandemic dominated the messages from Group 1. The coronavirus pandemic was a sign of the times as revealed in Mathew 25 in the Bible and thus the world needed to repent and be saved. Messages on vaccination warned that the vaccine contained toxins and being vaccinated was tantamount to receiving the mark of the beast and the Anti-Christ mentioned in the Bible in Revelations. The Anti-Christ could possibly be Bill Gates who is funding and driving the vaccination agenda as shown below:

Information from Credible Source About the Lockdown Due to COVID-19

The objective of the group (a group called ID2020) is to bring the NWO (New World Order) to reality by the use of vaccines. How? The group has successfully produced & launched the ID2020- a vaccine so to speak but not a vaccine in reality...It contains the vaccine alright but the main aim is the DIGITAL IDENTITY it gives to everyone that receives it. This digital identity enables you to be able to track a man like you would track a phone. Bill Gates is also working with the ID2020 group to produce this nano chip that is called the ID2020 project which when inserted into your skin (they have proposed already-right hand& forehead just as scripture predicts) makes you traceable- you can do money transfers from your hand, (not a phone), make calls with your hand (not a phone) etc. this is the mark of the Beast. Governments will now much more than ever be able to manipulate man beyond what they are doing now with the media filled with all sorts of concocted lies

Please take note that the Book of Revelations 13 vs. 16–18 identifies the Antichrist as the man that will spearhead the implanting of the Mark of the Beast (RFID chip) on human beings. Bill Gates is the chief proponent of implanting the chip on human beings.

This is why everyone must reject the Coronavirus vaccines and the RFID Chip which is the Mark of the Beast. For according to the Book of Revelations 14:19–11, anyone who receives the Mark of the Beast is doomed forever, as they will not enter the Kingdom of God (WhatsApp Group 1; accessed on 4 May 2020).

Thus, anyone who chose to be vaccinated would be doomed to hell. This messages on WhatsApp were passed from group to group as it was marked 'forwarded many times'. To add authenticity, it claimed to be from credible source and thus it ought to be trusted and taken seriously. These messages can become a formidable threat to the vaccination drive. To try and repair the damage one of the Christian leaders had to later retract his earlier statements on vaccination. He claimed that he had been misquoted and was therefore encouraging his followers to be vaccinated (YouTube, Hot263, 28 July 2021). One influential government official, the spokesperson and permanent secretary in the Ministry of Information came out clearly blaming religious leaders for deaths due to COVID-19, 'I am going to be blunt (as usual). Men of cloth are responsible for a number of deaths among the unvaccinated' (Twitter; accessed on 28 July 2021).

Zimbabwe has a large Christian community about 87.4% (www.indexmundi. com 2015est.) and thus religious leaders are considered opinion leaders. Christian leaders are thus influential in important social and political issues in Zimbabwe. Some Christian leaders thus made bold statements against the virus and vaccination, declaring divine immunity for their followers, vowing not to be vaccinated and encouraging their followers to follow suit as one pastor declared, 'Don't think what is happening right now has to do with the virus. It's not a virus. The world has chosen to be deceived. As they have been deceived many times before,' 'This is basically a group of people serving a devilish cause trying to checkmate humanity to hell' (Kukurigo News WhatsApp Updates, 9 April, 2020). These Christian leaders found a voice on social media platforms such as WhatsApp and Twitter. Such messages as from the study by Obi-Ani et al. (2020) can 'significantly influence the spread of false preventative measures of the Coronavirus disease' (2020 p. 7).

To confirm the above and in anticipation as it were of resistance from religious groups, the government of Zimbabwe also issued a statutory instrument that explicitly mentioned that those gathering for religious gatherings or gatherings for the purpose of worship were to be vaccinated as the definition for 'gathering' shown in the Statutory Instrument (S.I.) 234 of 2021 under the Public Health (COVID-19 Prevention, Containment and Treatment):

'Vaccine mandate

2 HH. (1) In this section –

"gathering" means a gathering of more than two persons for a purpose specified in section 5 (1) (j), (gatherings at a place of worship for the purpose of worship) which are subjected to a vaccine mandate

(2) For the avoidance of doubt, this section does not apply to gatherings of two or more persons for a purpose specified in section 5(1) other than gatherings referred to in paragraph (j) of that provision (gatherings at a place of worship for the purpose of worship)' (S.I. 234 of 2021 Public Health (COVID-19 Prevention Containment and Treatment) Regulations (National Lockdown) (No. 2) (Amendment) Order, 2021 (No. 35)

Religious gatherings were clearly seen as hotspots of the infodemic and thus needed to be controlled. What the above also revealed was that the social media space as a place of discussing matters of importance proved that it could influence national policies and discussions as shown in the above instrument.

13.4.1.2 The Main Motive Behind the Virus and Vaccines Is Commercial Purpose/Gain

Due to very little information about the virus, conspiracy theories also dominated social media. When the virus broke out in 2019 in Wuhan, many viewed the virus as a biological weapon manufactured in some lab in China specifically in Wuhan which was the epicentre of the virus in 2020. Social media speculation was rife, and the virus became known as the 'Chinese virus' or 'Wuhan virus' with influential leaders such as Donald Trump giving legitimacy to this disinformation by calling it the 'Chinese virus' (Jaiswal et al., 2020 p. 9). The virus was something human-made and the main suspects or culprits being the World Health Organization (WHO), major pharmaceutical organisations in league with major conglomerates led by billionaires such as Bill Gates to create a new world order (WhatsApp; 18 July 2021). Data gathered revealed that there was a belief that the virus and vaccines were manufactured for commercial gain/ profit as shown below a WhatsApp message which circulated:

The Snakes Are Coming Out

'The Chinese biological laboratory in Wuhan is owned by GlaxoSmithKline, which (accidentally) owns Pfizer!' The one who makes the vaccine against the virus which (accidentally) started at the Wuhan Biological Lab and which was (accidentally funded by Dr. Fauci) who promotes the vaccine!"

"Black Rock" is also (coincidentally) a major shareholder of MICROSOFT, owned by Bill Gates, who coincidenatally is a shareholder of Pfizer (which remember sells a miracle vaccine) and (coincidentally) is now the first sponsor of WHO! Now you understand how a dead bat sold in a wet market in China has infected the WHOLE PLANET! Now you know pass it on until the whole world knows' (WhatsApp Group 1; accessed on 18 July 2021).

The simplicity of social media is that at little cost, messages such as these can be forwarded and forwarded so many times 'until the whole world knows' and unlike mainstream media there is no verification of facts hence the infodemic label. Such conspiracy theories were passed on from group to group dismissing the vaccine as mere marketing gimmick meant to enrich phamaceutical companies and Bill Gates. The call was to discredit vaccination and encourage all who received the message to refuse vaccinaton. The source of these messages as alluded to earlier was the anivax movement (Counterhate.com). As espoused by Allington et al. (2020) such can pose a health risk as their studies suggested that 'conspiracy beliefs act to inhibit health-protective behaviours and that social media act as a vector for such beliefs' (2020 p. 1768).

13.4.1.3 Mistrust or Suspicion of Political Manipulation by the Government

Data gathered also revealed that the vaccination drive was viewed as harbouring a hidden political agenda, why specifically vaccines from China; Sinopharm and not vaccines from Western countries? A general mistrust of the Zimbabwean government and its dealings with the Chinese prevails in Zimbabwe as there is a belief that the relationship is exploitative and non-beneficial (Mano, 2016; Maketo & Mutizwa, 2021). This sentiment was echoed in the messages on the selected groups. And the discourse on these vaccines revealed this. This message was from group and was from a local newspaper.

ALARMING: 50 Mberengwa rural teachers have reportedly been admitted in Munene Mission Hospital with breathing problems

Interestingly, all the cases are of teachers who were allegedly 'coerced' by Government to receive both 'shots' (1st and 2nd Jabs) of the controversial Chinese Sinopharm Vaccine donated to Zimbabwe by the Chinese Communist Party.

Frightening enough the head of Government Vaccination program was quoted 'Live and direct' admitting that the Government was using its citizens as Guinea pigs to Chinese Experimental vaccines... (WhatsApp Group 2; accessed on 18 July 2021).

The messages above revealed that it was the vaccine not the idea of vaccination that people were against. Any other vaccine would be welcome not the Chinese brands. Vaccine diplomacy was feared, the Chinese and other developed countries were using vaccines to further political hegemony (Maketo & Mutizwa, 2021 p. 65). This was essentially an anti-vaccination drive as the prevalent vaccine in Zimbabwe was Sinopharm from China. However, it was not only China that donated vaccines, other donated vaccines were Sputnik from Russia and Covaxin from India. As of July 2021, the donations from the three nations are shown in Table 13.1:

The exact statistics on how many had been vaccinated by either Sinopharm or the other vaccines were not available but statistics from the Ministry of Health and Child Care (MOHCC) daily updates as of 8 December 2021 show that about 3,907,860 had received the first dose whilst 2,926,141 had received the second dose (MoHCCZ, 2021).

This further revealed that the targeted herd immunity of ten million by the end of 2021 was still a long way from being realised. Even when political leaders offered to get the jab/ vaccine first messages circulated that they were not being injected with the vaccines but something else as pointed out by one prominent Christian

Country	Vaccine type	Donated vaccines
China	Sinopharm	500,000
Russia	Sputnik	125,000
India	Covaxin	35,000

 Table 13.1
 COVID-19 vaccine sources for Zimbabwe as of July 2021

Source: Maketo and Mutizwa (2021)

leader in a video that circulated on social media (WhatsApp; 5 March 2021). Furthermore it was viewed as a campaign move by political leaders to gain popularity with voters in the upcoming 2023 general elections, as shown from these tweets:

COVID-19 has been a god-send for ZANU PF. Zimbabwe is rejecting vaccines because of where they come from rather than what they can do. Also ZANU PF is looking for political capital in the vaccination drive. Sad. (Twitter; accessed on 20 July 2021)

This potentially could have deterred and caused vaccine hesitancy in the public as it was dismissed as a political stunt by the ruling party. It was even revealed by WhatsApp that the government was refusing to authorise the use of Ivermectin, a new drug for COVID-19 in favour of vaccination to allow the Chinese government to 'experiment' on Zimbabwean citizens. '...the head of Government Vaccination Program was quoted "Live and Direct" admitting that government was using its citizens as Guinea pigs to Chinese experimental vaccines' (WhatsApp Group 2; accessed on 18 July 2021).

13.4.1.4 General Mistrust of Vaccines – Vaccine Safety

Debates have also emerged on the issues of whether vaccination does work. Do vaccines really work? Are they effective? What are the unforeseen health effects? Are they safe? What causes other people to die soon after taking the vaccine? What causes blood clotting after taking some of these vaccines? And how long does immunity last? Data from WhatsApp showed that this debate was on-going as there were voices pushing that vaccination saves lives while other voices are dismissing it. The following WhatsApp messages revealed some deep seated fears on vaccination:

HEALTH WORKER STROKES, DIES AFTER RECEIVING CHINESE VACCINE

A Gutu health worker at Mutema Health Care Centre has reportedly died in Harare days after being vaccinated with the Chinese Sinopharm COVID-19 vaccine (www.tellZim; 3 March 2021 on WhatsApp Group 2).

Reports on social media that people died after being vaccinated such as the above mentioned health worker further stirred fears and anxieties. The issue on the safety of COVID-19 vaccines dominated and continues to dominate social media. To give credence to these fears were reports from allegedly prominent and influential persons such as Nobel Prize winner Luc Montagnier, Robert F. Kennedy Jr. (both have named as anti-vaxxers: Counterhate.com), like the messages below:

All vaccinated people will die within two years

Nobel Prize winner Luc Montagnier has confirmed that there is no chance of survival for people who have received any form of vaccine.

They will all die from antibody dependent enhancement. Nothing more can be said. The history books will show that, because it is the vaccination that is creating variants (WhatsApp Group 1; accessed on 18 July 2021).

Breaking News: US Supreme Court has cancelled Universal vaccination

Bill Gates, US Chief Infectious Disease Specialist Fauci, and Big Pharma have lost a lawsuit in the US Supreme court, falling to prove that all their vaccines over the past 32 years have been safe for the health of citizens.

Robert F. Kennedy Jr: 'The new COVID vaccine should be avoided at all costs'. This is an instrument of genetic influence. Gene weapon! That is, they were going to destroy from earthlings, and the survivors will become GMOs!

DAMAGE CAUSED BY VACCINATION WILL BE GENETICALLY IRREVERSIBLE! Vaccination –weapons of genocide of the century (WhatsApp Group 1; accessed on 18 July 2021).

These messages echoed once again that vaccines were biological weapons meant to wipe out humanity and thus should be avoided. The message by Montagnier was later dismissed as fake news: 'WhatsApp Forward claiming "Vaccinated People Will Die in 2 Years" is untrue' (Health Analytics Asia ha-asia.com, 27 May 2021). To complicate the situation were messages that pointed out that vaccines it seemed were not effective because in some countries COVID-19 infections had actually increased after vaccination. The implications of such mis- and disinformation had the potential to lead to poor, uninformed decisions among members of the public and even cause more COVID-19 related deaths. Thus, such messages as earlier established contributed to misinformation and disinformation on social media and thus one of the leading causes of vaccine hesitancy, a threat to global health (Jaswal et al., 2020; Armitage, 2021).

13.4.2 Implications for Health Delivery

That being established, the messages on WhatsApp were not all negative. Positive messages were also circulated. Of note were messages from the WHO which had health experts explaining vaccination and the advantages of being vaccinated (WhatsApp Group 1; 7 November 2021) the video was a programme entitled 'Science in 5' in which Vismita Gupta –Smith (WHO Communications Director) and Dr Soumya Swaminathan (WHO Chief Scientist) provided information on vaccination addressing some of the fears raised on the platform. Shutting down the Internet or heavy censorship therefore might not be the answer, rather social media might enrich public health campaigns. Zimbabwe had hoped to achieve herd immunity of 60% by the end of 2021; however, the statistics above show that the country is still a long way to achieve this figure, and this could adversely affect the health system in Zimbabwe. Government needs to step up public health messages and awareness campaigns so that these messages do not drown in the infodemic or sea of misinformation and disinformation. Social media has the potential to derail this goal or hamper efforts to curb the spread of the virus. On the other hand, it can provide a rich research ground for health communication specialists.

Social media platforms such as WhatsApp and Twitter allow debates and discussion on vaccination a gap that traditional media cannot fill. Traditional media is restricted by legislation, especially in Zimbabwe. These narratives are not entertained by mainstream media but can find a space on these alternate platforms. These alternate platforms should thus inform public health campaigns and can be used to address the public's fears and concerns about vaccination.

13.5 Conclusion and Recommendations

This chapter has shown that social media has swayed perceptions about vaccination against COVID-19. Some misleading circulations in these platforms have strong language and are persuasive enough to potentially mount strong resistance by citizens against vaccination. To address this all avenues to distribute authentic information need to be utilised. Social media can also be used to gauge public opinion on the issue of vaccination. The questions and issues raised surrounding the pandemic can be used as indicators on how to redirect messages to the public. Social media is a networked public spaces in which due to the anonymity offered, important matters can be discussed without fear and as pointed out ignoring this space can be detrimental to any government during this pandemic (Caldwell, 2017). As highlighted by Cinelli et al. (2020 p. 9) 'We believe that the understanding of social dynamics behind content consumption is an important subject, since it may help to design more efficient epidemic models accounting for social behaviour and to implement more efficient communication strategies in times of crisis'.

Governments, political, religious leaders and the Ministry of Health and even the World Health Organization can be held to account on these platforms as witnesses can report abuse of human rights anonymously. Social media can counter hegemonic practices and provide counter narratives. Furthermore, this parallel market of information seems to fulfil users' informational needs which mainstream media cannot do, thus by tapping into social media, public health campaigns can be more educative and informative and benefit ordinary people. Government thus needs to educate the public on vaccination and provide more informed and educative health communication to counter misinformation and disinformation. The religious community should also be roped into the vaccination drive as mentioned above they can be influential in their communities. Reliable and authentic public health messages should be 'passed on wildly' on social media platforms. To address the lack of reliable information, governments and health ministries should provide tools to assist the public to get authentic information on the virus and vaccination. COVID-19 applications and official websites can help the public access information about the vaccine and vaccine centres in Zimbabwe. Not everyone is on social media thus more intense awareness campaigns to bridge the digital divide and reach out to rural and marginalised communities in Zimbabwe are needed. There is still room for follow-up research into the COVID-19 virus and efficacy of vaccines.

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