ORIGINAL ARTICLE

Evaluating South African and Namibian governments' use of digital media during Covid-19

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Abstract
Governments during the Covid-19 pandemic in response to the challenge of reaching as many of their citizens as quickly as possible have relied on the use of digital media communication. Various stakeholders, however, have questioned whether strategic use of digital communication by governments has been effective during the Covid-19 health crisis. We thematically analyzed a public online bi-country webinar and conducted a netnographic analysis of South African Health Minister Dr. Zweli Mkhize and Namibian Ministry of Health and Social Services Twitter accounts to evaluate the effectiveness of government digital communication during the Covid-19 pandemic. Stakeholders and social media analysis highlight that government digital communication has lacked engagement, falling short in assisting citizens to understand the effects of the Covid-19 pandemic. We highlight the shortcomings of governments simply transmitting information on channels built for dialogue, the digital divide limiting reach, as well as how limited engagement opens up opportunities for misinformation.

KEYWORDS
Covid-19 health crisis, digital media communication, stakeholder engagement

Highlights
- Many governments, including the South African and Namibian governments, have relied on the use of digital media to disseminate as much information as possible.

- Various stakeholders have questioned the effectiveness of using digital media as a strategy in reaching citizens across parts of Southern Africa.
- Stakeholders acknowledged that the use of digital media by governments, particularly South Africa and Namibia started as a good initial reaction to the Covid-19 pandemic.
- However, these governments were mostly reactive in their online communication with limited engagement that fueled misinformation online and citizens looking to other nongovernment sources for information.
- Some of these alternative sources of information became health-care professionals and other helpful citizens that were online, taking on the communication burden.
- The governments were perceived as not being humanistic in their digital communication and part of the challenge was digital inequality that highlighted the need for traditional communication in media convergence.
- Inefficient use of digital and social media erodes trust and quality of the relationship between government and their key stakeholders, that is, citizens, reversing any gains made in this case, in the fight against the Covid-19 pandemic.

INTRODUCTION

The Covid-19 pandemic has challenged governments to look for ways of reaching their citizens, as key stakeholders, as swiftly as possible to enable their publics to engage in containment behavior. The power of digital and social media lies in the opportunity for real-time engagement between government officials and citizens for public health, especially during a crisis (Currie, 2009). The very nature of the Covid-19 virus is that it spreads through close human contact, and thus timely information delivery has been critical in fighting this pandemic. Many governments, including the South African and Namibian governments, have relied on the use of digital media to disseminate as much information as possible. South Africa has been one of the hardest-hit African countries by the Covid-19 pandemic (Msomi et al., 2021) along with its Southern African neighbors like Namibia. The two countries South Africa and Namibia's government responses to the coronavirus pandemic have been similar, with the various infection waves following similar patterns. As key members of the Southern African Development Community (SADC), the 1997 SADC Health Programme that includes a Health Policy Framework and Protocol on Health (SADC, n.d.) informs the coordination of the response to the Covid-19 pandemic by South Africa and Namibia.

Digital media use by governments has been hailed as a step toward greater transparency toward citizens. Communication is crucial during a pandemic crisis (de Rosa et al., 2021) because communication shapes and informs our reality (Falkheimer & Heide, 2018). Increasingly, digital communication channels are used in health communication (Kreps, 2017). The digital media communication used by the South African (and Namibian) government has included short messaging service (SMS), social media, video

streaming, instant messaging platforms, and an official dedicated Covid-19 government website (Sitto & Lubinga, 2020). While other traditional media have been included in the Southern African governments' communication mix, emphasis particularly in South Africa has been placed on digital platforms. Social media is useful to interact efficiently with numerous stakeholders; however, the user-generated content and exchange create a fertile breeding ground for communication risks (Cheng, 2018).

Various stakeholders have questioned the effectiveness of using digital media as a strategy in reaching citizens across parts of Southern Africa. The main question we explore is whether strategic use of digital communication by Southern African, specifically South African and Namibian governments, has been effective during the Covid-19 pandemic. The article reviews the literature on stakeholder theory and engagement, focusing on Covid-19 communication strategies, as well as critical factors for effective digital communication strategies. Thematically analyzing a public online webinar evaluating government use of digital media during the Covid-19 pandemic and netnographic analysis of a Twitter thread from former South African Health Minister Dr. Zweli Mkhize on the new variant and the Namibian Ministry of Health and Social Services Twitter account, we aim to explore the above question.

LITERATURE REVIEW

Stakeholder engagement and good faith

The definition of a stakeholder as originally defined by Freeman (1984) is one of the groups or people affected by or affecting an organization. However, over time, the definition of a stakeholder as a concept has changed as demonstrated by one of the more recent definitions of stakeholders as groups or individuals *vital* to the survival and success of an organization (Freeman et al., 2004). The evolution of the definition demonstrates the shift of focus away from the organization leaning more toward stakeholders, where such groups and individuals are considered vital for the survival of organizations. Governments function as organizations and are expected to deal with their citizens as their stakeholders based on good faith.

Good faith in stakeholder theory encourages engagement while preserving the individual autonomy of stakeholders to pursue self-interest and helps to balance power inequalities (Dawkins, 2014). The concept of good faith stakeholder engagement thus relies on dialogue, negotiation, transparency, and totality of conduct (Dawkins, 2014). Communication solutions can be different in dealing with stakeholders and are not equally available to various stakeholders because stakeholders have power inequality among themselves (Fontaine et al., 2006). This is true for the diverse stakeholders that governments need to engage with throughout the Covid-19 pandemic. Communication encompasses communicative transactions meant to achieve mutual interpretation of message meaning. Recognizing the importance of communication is not enough nor is it a guarantee that communicative practices correspond to outspoken ideals (Falkheimer et al., 2017), especially during a global health crisis.

Covid-19 government communication strategies

The global Covid-19 pandemic has introduced significant uncertainty for government leaders, outside their normal practice. The Covid-19 pandemic poses a clear health crisis, an external shock that has put a strain on governments globally due to the inability to control

it fully. With fluctuating rates of infection and multiple waves of the virus, sharing information as quickly as possible has been critical to governments' efforts to curb the rates of infection among their citizens. The South African government's response, as with others globally, has included imposing lockdowns and travel bans, limiting entry and exit at borders, and instituting additionally localized measures such as substance bans (Hagemeister et al., 2020; Labuschaigne, 2020).

The Covid-19 pandemic, primarily a health crisis, has triggered other crises. The wider impact of the virus and governments' measures in response to it, however, continues to be felt around the globe at the socioeconomic level by citizens. South Africa is a country of many contrasts and deep structural social inequalities (Finn & Kobayashi, 2020) which are linked to socioeconomic status, urban/rural divide, and race (Lubinga et al., 2021). These socioeconomic inequalities make it difficult for the poorest citizens to access health-care services (Lubinga et al., 2021). The more vulnerable groups, such as those living in rural areas and townships in South Africa, reliant on the public health-care system, have been hardest hit by infections and rates of death from Covid-19-related complications (Rogerson & Rogerson, 2020).

The Covid-19 pandemic has forced all governments to consider those affected, primarily their citizens and those within their borders as well as the different levels of impact, socially, economically, physically, psychologically, and emotionally. When the first patient presenting with Covid-19 symptoms was diagnosed, the South African government put in place the Disaster Management Act, enabling the implementation of a hard lockdown (Egbe & Ngobese, 2020). The hard national lockdown effectively shut the country down, with the government intending to use the period to prepare national health systems to cope with the impending wave of cases (South African Government, 2020). The former South African minister of health became responsible for the communication of monitoring and evaluation of all health systems nationally, collating statistics about overall tests conducted, overall positive cases, total recoveries, total deaths, daily deaths, and new cases both nationally and provincially. Creating public awareness involved spending millions of rands on multiplatform communication (Sitto & Lubinga, 2020).

Countries globally have chosen specific communication strategies to disseminate information and communicate about the Covid-19 pandemic. Digital communication has been central to their disseminating of information, in light of the need to engage in social distancing as part of pandemic containment measures to be adhered to by all (Mukumbang et al., 2020). "Digital communication channels have the unique capacity to combine mass and interpersonal forms of communication through media convergence by disseminating messages to broad audiences, while also engaging users in interpersonal interactions" (Kreps, 2017, p. 519). Regular briefings by presidents and their ministers as well as other key stakeholders such as the World Health Organisation have become commonplace as the global population attempts to keep abreast of dynamic developments during this crisis. In an effort by officials to fight infodemics, frequent official transmission of information has been done. An infodemic is an epidemic of misinformation about the virus, its spread, and risk avoidance strategies (Zarocostas, 2020). In between the national addresses and ministerial committee briefings, various government departments in South Africa have increasingly made use of social media, primarily Twitter and Facebook to keep citizens on those platforms updated daily.

Communication strategies by the South African and Namibian governments have included converged use of mass media, digital and social media. The combined use of mass and interpersonal communication such as social media has proven valuable for information sharing, engagement, and collaborative decision-making; all critical communication processes for achieving health promotion outcomes such as education and behavior change (Kreps, 2017). Of particular strength for the South African government has been the

use of social networking sites and related interpersonal communication technologies, such as Facebook, Twitter, and WhatsApp to communicate about Covid-19. Interactive communication technologies featuring both mass as well as interpersonal processes of communication include social networking sites (SNS) (Walther & Valkenburg, 2017, p. 416) such as Twitter and Facebook. Social networking has influenced social life as the development of ICT has given rise to the network society (Basuki et al., 2015), with people continually connected to their online communities of choice as part of their daily realities.

The advancements in communication technologies have allowed governments globally to learn from observing one another's communication strategies online in response to the Covid-19 global pandemic. The Internet helps foster global communication between people through various channels, profoundly affecting interpersonal social interactions between people (Matusitz, 2014). Digital online communication, however, lacks social cues, requiring communication that is more mindful and active engagement due to the asynchronous nature of most computer-mediated communication, that is, more time to plan and edit messages (McQuillen, 2003). Engagement is a critical factor to the successful use of digital and social media technologies to build common understanding and strengthen feelings of closeness within online communities.

While digital media have been hailed as a saviour for reaching more people that are geographically spread during the Covid-19 pandemic, in a society like South Africa, with deep inequality and gaps in access to digital services, this may not be the primary solution in the converged media mix. Kreps (2017) identifies seven key strategic communication factors for converged health communication. Kreps' (2017, pp. 522–525) seven strategic communication factors for designing digital health information systems are:

1. tailored to users;
2. easy and convenient;
3. provide relevant and clear information;
4. provide feedback and interaction;
5. responsive to user needs and feelings;
6. interesting and immediate;
7. connect to trusted social networks.

These seven factors according to Kreps (2017) are important for ensuring the effectiveness of strategic communication for health. There are also several obstacles when digital media is used for stakeholder engagement, mainly linked to control, channel choice, time invested, listening to feedback, and quality of engagement (Navarro et al., 2017). The seven key strategic communication factors outlined by Kreps (2017) enjoy overlap with the obstacles identified by Navarro et al. (2017) on the use of digital media.

Converged media health communication and digital inequality

The first key strategic communication factor of converged health communication involves ensuring that such systems are tailored to users (Kreps, 2017). In South Africa, digital communication needs to take into account the low levels of Internet access, as the country's Internet penetration remains at 57.5% (Internet World Stats, 2021). The Internet is accessed by 60% of households nationally through their mobile phones, which is expensive, with access concentrated in urban centers (Kahla, 2019; Statistics South Africa, 2018). This leaves a large segment of South Africans offline, and unable to access critical health information increasingly shared by the government online during the Covid-19 pandemic. A recent study on health disparities and the digital divide in South Africa supports this, with

most of the participants confirming that they had relied primarily on mass media for Covid-19 information (Lubinga et al., 2021). Online access is one of the least used modes for information access in Namibia largely because of the cost of access and usage (Stork, 2009) and divided along lines of affordability in the urban/rural socioeconomic divide (Kadhila & Nyambe, 2021).

Online digital inaccessibility is counter to Kreps' (2017) second factor of ease and convenience of the use of online health information systems. One of the key obstacles to convenience in the use of digital media by governments during the Covid-19 pandemic is that they often fear losing control over information disseminated (Navarro et al., 2017), and this leads to them limiting the comments and people's access to the information shared online. At times, in the quest to control the information, governments share official statements as is, online. The practice of shovelware is when the same content is used on multiple digital media without being changed (Azionya & Sitto, 2018, p. 29), which numerous governments do to avoid distortion of their messages. While having authority over information to stem an infodemic, the selection of channels is also critical to the success of digital communication by governments. There are often difficulties involved in choosing the correct channels because of the diversity of stakeholders and differing levels of access inequality, balanced against finding the appropriate channels for the message (Navarro et al., 2017).

Clarity of information can be hampered by the use of professional jargon by health-care practitioners and experts in communication about the Covid-19 pandemic, resulting in confusion and ineffectiveness of the messages shared. The third and fourth key success factors for strategic health information systems are the provision of relevant and clear information, as well as providing feedback and interaction (Kreps, 2017). Chomsky (2006, p. 102) stated, "to have command of a language is to be able, in principle, to understand what is said." Health, as with other areas of specialization, has its own language that can only be understood by health-care professionals and experts, such as doctors, epidemiologists, and nurses.

Provision of relevant, clear communication and interaction requires a significant investment of time by governments in engaging with their stakeholders, particularly during the Covid-19 pandemic with so many changes and regular information updates. Most organizations, however, including governments, underinvest in their engagement online and struggle to devote the time necessary to their communication management (Navarro et al., 2017).

The time investment in health information systems and digital communication strategy execution can prove invaluable for governments when used optimally. Governments can learn a lot from stakeholders by engaging with feedback, although this is often not done thoroughly or to improve relationships (Navarro et al., 2017). Hertlein and Ancheta (2014) identified three categories of reasons people use technology in relationships, which are to: (i) develop, (ii) manage and (iii) enhance their relationships. There has been a criticism of the South African government that they do not use digital optimally in their health communication strategy on Covid-19, and thus counter to Kreps' (2017) factors, they are not responsive to user needs and feelings, making their messages uninteresting and not immediate. The inefficient use of digital and social media is considered a contributing factor to the erosion of the relationship between government and its citizens during the Covid-19 pandemic. Proactive engagement is critical to digital media communication success as it can help avoid crisis and with the development of technologies, the measurements of online dialogue are continually improving (Navarro et al., 2017). Being connected to trusted digital social networks is a key strategic communication factor (Kreps, 2017) and can prove to be a valuable tool for influencing behavior change.

The former South African Health Minister's social status has been elevated with his increased use of Twitter as part of his department's converged communication strategy for information sharing about the state of the Covid-19 pandemic nationally. Dr. Mkhize was considered a beacon of hope during the Covid-19 pandemic and in December 2020 was named newsmaker of the year for his leadership role in the fight against the coronavirus pandemic (*Daily Vox*, 2021). Participating in online social networks can increase one's social capital and psychological well-being (Malinen, 2015). As key stakeholders, there are questions as to whether all citizens are being reached with digital communication, the quality of the online engagements, especially given the significant financial investment that has gone into strategic communication using digital media. The level of trust the South African citizens had in former Minister Mkhize was so immense that his involvement in a matter of a multimillion rand irregular tender with a digital communications supplier (IOL, 2021) has undermined the gains made in the digital Covid-19 communication strategy by the government with citizens.

METHODOLOGY

The virtual panel discussion titled *Evaluating government use of digital media during Covid-19* was held on April 21, 2021, from 15:00 to 17:00 through the University of Johannesburg Library on Zoom and Facebook Live. The goal of the virtual panel was to evaluate the use of digital communication technologies by governments, primarily South African and Namibian governments since the start of the Covid-19 pandemic. This panel discussion formed part of an NRF-funded project that aims at exploring, among other issues, how governments use digital media to curb infodemics that arise during pandemics. The panel consisted of a mixed group of five experts, namely a leading health journalist, a senior health-care professional, a senior communication academic, a journalist, and a digital communication specialist. The session was publicly held and is accessible via the University of Johannesburg Library Facebook page. A third party was contracted to transcribe the webinar's 2-h-long webinar video, which we analyzed thematically. We also included a word cloud to observe the most frequently used terms during the session.

As a secondary analytical process, we analyzed the Twitter accounts of the former Minister of Health, Dr. Mkhize's Twitter account, and that of the Namibian Ministry of Health and Social Services, a popular tool for disseminating daily Covid-19 information. The aim of analyzing the two data sets from the webinar and Twitter accounts is to provide balance to the webinar panel discussion data by also evaluating the public's response online to government Covid-19 communication. The Namibian Ministry of Health account has just over 1900 followers, with the account only having been opened in March 2020. Upon examination, the account had little engagement, and the tweets from the account consisted mostly of the daily Covid-19 statistics. The former South African Minister of Health's account has been active since March 2017, and he has nearly 600,000 followers. All the tweets from April 2020 to January 2021 examined were for their original tweet content and follower engagement. The selected tweet thread from the former minister's account was one of the key media briefings during the second wave, which was the discovery of a variant in the strain found in South Africa, that is, mutation of the Covid-19 virus, labeled 501Y.V2. The original thread of tweets, 14 in total, were combined into a single document and the text was formatted to prepare the content for netnographic analysis. Netnography, that is, ethnography on the Internet, a rigorous methodology suited for studying the uniqueness of online communities (Kozinets, 2002, p. 62; 2015) was used for analysis. The analysis was done on over 300 responses to the former minister of health's thread. All the responses analyzed and reported on excluded the usernames, that is, handles of the respondents.

Kozinets developed 12 methodological steps that are iterative and interact throughout the process of analysis during netnography (Kozinets, 2015). Kozinets' (2015, p. 98) 12 steps as outlined below were used in a nonlinear fashion for the purposes of netnographic analysis of the tweets replying to Dr. Zweli Mkhize's thread about the new variant of the Covid-19 (501Y.V2) virus:

1. Introspection—a reflection of the role of research in approaching how the data would help achieve the research aims and objectives of the study. This included reflection on the official government online discourses about Covid-19 and the purposive selection of online government activity on the topic.
2. Investigation—the search for official government accounts communicating about Covid-19 online on social media, checking common platforms for analysis which was Twitter for South Africa and Namibia from March 2020 to December 2020.
3. Information—ethical considerations involved accessing only publicly available conversations on Twitter from official accounts as communicated in the bios, including building anonymity in the interpretation of the data collected by excluding the handles of user responses.
4. Interview—the sites to be inspected were Twitter accounts of the then South African Minister of Health and the Department of Health in Namibia, although there was more volume on the South African Twitter account, and the high volume conversations were included for analysis.
5. Inspection—this involved a thorough analysis and data collection of each accounts' (South African and Namibia) Covid-19 daily updates and resultant conversations.
6. Interaction—the entrée strategy was through a public search on Twitter, which allowed for these updates and conversations to be identified.
7. Immersion—the authors had to immerse themselves in the conversations, including reading comments and retweets, shared links, memes, videos, as well as collecting the original tweets and replies on Covid-19 from both official accounts.
8. Indexing—this phase was about weighting the data collected concerning the Covid-19 updates, the importance of the conversations to the context of the coronavirus infection rates and waves, selecting more high-quality and meaningful data from the conversations.
9. Interpretation—interpretive analysis, which is termed interpenetration; that is an analysis-seeking depth of understanding. The interpretation was done using the stakeholder theory and converged health communication framework to code the tweets from the selected conversation in an attempt to understand them without distorting them through interpretation.
10. Iteration—there were phases within these phases for this netnographic analysis, including thematic analysis from coding to the development of themes and arrangement on tweets across different themes.
11. Instantiation—the most appropriate analysis approach was humanist, given the sensitivity and novelty of the Covid-19 pandemic especially during the period analyzed and the schismatic nature of the conversations.
12. Integration—the data analyzed were integrated with the research objectives to develop insights from the netnographic analysis conducted, forming part of the overall findings and interpretation discussion.

One of the benefits of netnography is the near-automatic transcription of the contents downloaded, and the ease with which the data were obtained (Kozinets, 2002). Netnography helps provide insights into individuals' experiences (Xun & Reynolds, 2010), especially for such a novel pandemic of the Covid-19 virus and the uncertainty people are experiencing in an emergent context. Netnography "provides a window into the cultural realities" (Kozinets, 2006, p. 282) such as those of South Africans in response to

communication about the Covid-19 virus and arising themes. Only publicly accessible tweets were used, and none were selected from any private conversations or direct messages, to which we had no access.

Governments have identified digital communication as the go-to solution for reaching the masses during the Covid-19 pandemic, with the requirement for limited in-person social interaction. One of the most popular mediums for daily updates was Twitter, with the Covid-19 statistics shared by both governments, making it the site of choice for data collection for the netnography due to the similarity of use and information shared by the South African and Namibian governments. The connectivity challenges are similar concerning cost, Internet penetration (52% Namibia and 57% South Africa per Internet World Stats, 2021), and mobile-first access. We then compare the Twitter engagement by the former Health Minister Dr. Zweli Mkhize and that of the Namibian Ministry of Health, in light of the discussion by the various stakeholder representatives that participated in the webinar panel. The comparative analysis aims to evaluate whether the digital communication strategies for Covid-19 of the governments addressed issues of the digital divide, poor quality health information and whether they engaged stakeholders to ensure common understanding.

RESULTS

The use of digital media by governments, particularly the South African and Namibian governments, has been acknowledged by participant stakeholders in the webinar panel as a good initial reaction to the Covid-19 pandemic. The webinar discussion was analyzed through the stakeholder theory frame, specifically the characteristics of good faith, namely dialogue, negotiation, transparency, and totality of conduct (Dawkins, 2014, p. 283); particularly the participants' perceptions as government stakeholders of the Covid-19 public health digital communication. Several themes were identified from the webinar discussion evaluating government use of digital media during the Covid-19 pandemic. During the thematic data analysis, the transcribed text from the webinar was evaluated based on the context in the video-recorded discussion, and not simply by the words in the transcription document. The initial codes generated during the thematic data analysis centered on the constructs from the webinar discussion, such as government activity, public engagement, and their professional experiences as stakeholders of the official Covid-19 digital communication government activities in their respective countries. Manual coding of the webinar data was critical to the process, as the context needed to be preserved to apply human interpretation. The codes were then organized into seven themes (see Table 1) based on the similarity of the codes.

TABLE 1 Webinar data analysis themes

Theme number	Theme
1	Reactive government communication
2	Lack of engagement online
3	Misinformation online
4	Citizens looking to other nongovernment sources for information
5	Healthcare professionals taking on communication burden
6	Missing human touch
7	Need for traditional communication in media convergence

The governments, from the themes generated from the data analysis, were seen as reactive, with limited engagement online, all of which were seen as driving misinformation and citizens looking for other nongovernmental sources of Covid-19 information. The themes are discussed below in more detail, including excerpts from the discussion to support each theme.

Reactive government communication

A key theme highlighted from the discussion was that the governments simply copied what governments in other parts of the world did, without tailoring it for the local contexts. As pointed out by the panelists, the communication about the pandemic was centralized, with regular updates from the respective governments online through social media, with Twitter becoming a platform of choice. The governments were seen as being reactive in their digital communication of the pandemic (Table 2).

Lack of engagement online

In addition to limited localization of the content used in the communication, the webinar panel of stakeholders observed that governments did not make optimal use of digital media. There was limited engagement based on stakeholder observations, particularly in government answering clarity-seeking questions asked by citizens online. The theme of digital communication on social media as lacking engagement was a recurring matter in the discussion, pointing out the drawbacks of misuse of digital platforms for communication. In some instances, short mobile service (SMS) messages were used, and a panelist questioned the effectiveness of such digital communication (Table 3).

Misinformation risks online

The dangers of limited digital engagement by governments during the Covid-19 pandemic highlighted in the discussion were limited understanding by citizens of the implication of the information. This opened up a space for misinformation and misinterpretation of the

TABLE 2 Theme 1: Reactive government communication

Reactive government communication	• I think they should be proactive, not reactive, but sad thing this has always been the case throughout, it is not a COVID thing is has always been like this when the department of health communicate, I find it very sad that lesson has not learnt and taken forward in covid and in all respects. • It felt like we were hoping is not going to come to our country and we were watching what America, what America was doing and everywhere else and necessary thinking of what if, what if that was the sense I was getting on social media. • As already said our government were very reactive at some point they were very confused • We are very reactive, we started hearing about COVID in 2019, towards late 2019 right, I feel like as a country, people at higher level should have started assessing, I mean we live in such a globalised space in such a globalised world, we shouldn't have waited until that moment to take decisions

TABLE 3 Theme 2: Lack of online engagement

Lack of engagement online	• The problems are that these platforms are not interactive…I have rarely or have never seen the health minister account answering questions, there are so many questions from our people • Government used social media and online media last week when it launched registration system and it explained very well how to register, but when there were questions there was just no answers • Those questions and answers are full on social media and yet there is no answer coming forward • Namibia still haven't exploited maximally and optimally to try and deal with the questions and the disinformation that people are facing on social media • But it was just one-way communication which is not the best way to use social media it has to be a two-way communication, so many things, so many questions we had a nation

TABLE 4 Theme 3: Misinformation

Misinformation online	• Public Health authorities, as well as the local media, weren't stepping into this space to try and deal with the disinformation that was flooding across social media, and that people were engaging with • Not just through their legacy platforms, but making full use of social media, which Namibia still haven't exploited maximally and optimally to try and deal with the questions and the disinformation that people are facing on social media • There was an opportunity for our politicians those who hold positions to relook the usage of social media, because, on the other hand you have Zweli Nzi, the minister of health saying one thing and on the other hand you have politicians you seem to be like us, you know confused like us, or having fun like us and it creates a confusion • So, all those moments fuel the myths and all the things people were saying, the fake news around these things, about why you should get it and why you shouldn't get it and you really needed to know the facts

information shared by governments, as well as contradictions in matters reported about the Covid-19 pandemic. This as people sought to demystify the information communicated by government health authorities about the Covid-19 pandemic (Table 4).

Looking to other nongovernment sources for information

The panelists highlighted that some citizens and stakeholders, in their desperation to get information, looked to other nongovernment sources for help. The limited engagement by governments was discussed having become a breeding ground for further mistrust of government communication, as well as fuelling infodemics. The misleading and harmful information spread more easily due to the engagement vacuum, building resistance toward government communication as observed by the panelists (Table 5).

Healthcare professionals taking on communication burden

The discussion, led by the health-care practitioner panelist highlighted the personal involvement of health-care professionals in becoming sources of information during the Covid-19 pandemic that were considered credible because of their professional profiles. The panelists noted the rise in the number of doctors, epidemiologists, virologists, and other

TABLE 5 Theme 4: Seeking alternative information sources

Citizens looking to other nongovernment sources for information	• I also seen it in the work that we do there is a lot of questions we wish to give to the health department and come to Bhekisisa Twitter account because people feel they are not getting the answers
	• We have seen actually in the past two years our traditional healers using social media, an increase in use of social media to share information to share how they do certain things. One of the pillars that was centred around was steaming, the herbs and a lot of traditional healers came out and said do not overdo this you will mess up with your kidneys. We did not see this partnership with our government and that was such a missed opportunity because like we saw people coming with cues from everywhere

TABLE 6 Theme 5: Healthcare professionals' online communication

Healthcare professionals taking on communication burden	• After the vaccination health professional were directed to a space to take pictures while on the site and you have to post the on your social media to show that you have been vaccinated. So health professionals were used to drive positive messages, but the question is at what cost?
	• We saw on social media, Twitter for instance, there were lot of doctors from various fields, a lot of epidemiologists of course share their own information, but that was over and above government communication. So you can see health professional took an extra burden upon themselves to share information than the public could not get from the government
	• So one of the prominent doctors on social media did a whole thread on how the J&J vaccine is a trial run
	• Prominent doctors who have built their brands on social media and I feel like that was an important time to bring our doctors on board in order to have consistence messaging
	• Other people took advantage of that gap started populating some of these social media platform for an example we saw doctors opening twitter account and become the kind of go to people to find credible information, and something we never saw people becoming influencers driving the narrative

health specialists blurring their personal and professional online profiles to offer information and simplified explanations of complex Covid-19 health messages. However, in using their own personal initiative, health-care professionals' well-being was not regarded by unengaged governments with respect to the effects of the pandemic and having to fight online misinformation voluntarily (Table 6).

Government communication missing the human touch

The government information shared online of Covid-19 included a number of statistics on the daily infection, recovery, and death rates. Panelists observed that the daily updates of this information led to citizens experiencing disconnect that these numbers were human beings and lost the human touch of empathy. This lack of human touch extended to the analysis of how governments shared information with limited engagement and developed

TABLE 7 Theme 6: Missing the human touch

Missing human touch	• I want to highlight about digital usage and it is very scientific…we forgot the human aspect of what this has done to our country and what this has done to people and South Africa missed that opportunity. • Things have changed this is not normal times you cannot just focus on number forget that you are speaking about people • We forget the human side of it and this is where I feel like is such or something that our government could do better, because there are people right, there is the mental aspect • The human part of these things, respond in a respectful way don't be defensive, our government was very defensive in dealing with these things they like "we deal with everybody the same" but there were pictures and videos that showed something different • The humanness, the compassionate and the empathy that this particular pandemic which required us to do was a missing link • Let us not forget the human behind the challenges we have. There is actually a human with emotions with psychosocial issues that need to be attended to, so whatever we do let's remember there is a human with issues that need to be taken care of

TABLE 8 Theme 7: Inclusion of traditional media

Need for traditional communication in media convergence	• We can't completely write off traditional media, we can't completely write off the posters • But also social media literacy, how you use social media, how you educate and the likes • I totally agree that social media and online media are not the only way to communicate with people • That became a priority to us as a health media organization is to make time for radio and TV because that is the only way to can communicate information to people who cannot access social media

regulations that left limited room for people to understand how to continue in human nature but limiting their potential exposure to the virus (Table 7).

The combination of these themes painted a bleak picture of government use of digital media during the Covid-19 pandemic going forward. All panelists agreed that governments needed to become less reactive and more proactive, come down to the level of the layperson, engage in answering questions and make use of local knowledge. Some panelists highlighted the lack of inclusion of traditional medicine and health care in all communications as a missed opportunity for convergence, even with the growth of traditional medicine's presence online, especially on social media.

Need for traditional communication in media convergence

All the panellists agreed that solely relying on digital communication for Covid-19 communication by governments would be detrimental to making gains during the Covid-19 pandemic, given the low Internet penetration numbers as well as relatively low social media participation of citizens. Thus, the importance of traditional media in the converged media mix needed to be recognized, according to the panellists, as it has a critical role to play to ensure mass access to information (Table 8).

Twitter engagement analysis of main government accounts

The analysis of the Namibian Ministry of Health and Social Services (@MhssNamibia) Twitter account reflected key observations the panelists had mentioned. The account had a low number of followers, relative to the population of the country, with just shy of 2000 followers as of June 2021. The content shared daily consisted of images of official news releases and PowerPoint slides from briefings of information about Covid-19. There was little engagement with the content, and few replies to the content since the account was opened in March 2020, at the start of the Covid-19 pandemic in Southern Africa. The bulk of the content was shovelware, with almost no content uniquely designed for the Twitter account. This made it challenging to compare it with the former South African Minister of Health Dr. Mkhize's Twitter account.

The former South African Minister of Health's tweets from April 2020 to January 2021 were analyzed, focusing on the period during which the country was placed under alert level 1, from September 21, 2020. With daily tweets getting significant attention from followers, we selected a tweet thread from the former minister's account was one of the key media briefings during the second wave, which was the discovery of a variant in the strain found in South Africa, that is, mutation of the Covid-19 virus, labeled 501Y.V2. There were 14 tweets in the original thread, with over 300 responses to the thread analyzed netnographically. The themes of the netnographically indexed tweets in reply to the former minister's thread could be categorized into the following main themes:

- Lack of understanding of the announcement and its implications because of jargon—people asking what the former minister means and asking him to simplify the language used.
- Linking the announcement to metaphors—trying to understand the announcement in familiar terms.
- Citizens trying to be helpful—engaging with the questions from fellow Twitter users asking the former minister's account for clarity, to try and explain the announcement more simply.
- Questioning vaccine efficacy—responses asking about the effectiveness of the vaccine against the new strain.

The discussion of the webinar by the various stakeholders of government's use of digital media to communicate about the virus was affirmed by the Twitter netnographic analysis done on the two main government social media accounts used for Covid-19 daily updates. There was limited online engagement; information was not easy for citizens to understand, making it difficult to have effective Covid-19 government digital communication.

RECOMMENDATIONS

Quick information sharing remains critical to the fight by governments to stem the fluctuating waves of infection and death among citizens during the Covid-19 pandemic. While governments recognize the need for communication, as Falkheimer et al. (2017) emphasize this recognition alone is not enough. Analysis of a panel evaluating two governments' use of digital media raises serious matters that need attention for successful health communication to happen particularly during the Covid-19 pandemic.

One of the most critical themes from the data is that of building understanding for ordinary citizens, by ensuring that their questions are answered and that digital and social media are used optimally through frequent engagement. The concept of good faith in dealing with stakeholders relies on dialogue and autonomy (Dawkins, 2014) which both the South African and Namibian governments are not perceived as carrying out during their Covid-19 digital communication. The transmission of information without the solicitation and

engagement with public views can undermine their efforts in stemming the rate of infections. The inefficient use of social media can erode the trust and relationship between government and their citizens, reversing any gains made in the fight against the Covid-19 pandemic.

Digital communication systems rely on users for relevance and content. Ensuring that converged health communication systems are tailored to users is the first key strategic communication factor outlined by Kreps (2017). Digital media is critical for reaching people as quickly as possible; however, governments need to ensure engagement is done using multiple mediums and increasing reliance on traditional media to reach a diverse range of stakeholders with Covid-19 messages. Ease and convenience for converged health communication systems is a key factor (Kreps, 2017) which the governments under review have been criticized for not getting right concerning public access to Covid-19 information that is easy to understand. While centralized government communication has been critical for the verification of information, for it to be successful it requires a more multi-stakeholder approach to ensure that it is accurate, consistent, and accessible for ordinary citizens to understand the implications of the health messages. Kreps' (2017, pp. 522–525) strategic communication factors three, four, and five outline the importance of relevant and clear information, feedback, and interaction, as well as responsiveness to user needs and feelings. All these are key strategic communication factors for ensuring successful converged health communication systems.

It is not good enough for governments simply to transmit information on channels built for dialogue, as their lack of response opens up opportunities for misinformation. Navarro et al. (2017) highlight that organizations underinvest in their online engagement, struggling to invest the requisite time in their communication management. Since the start of the Covid-19 pandemic, low online engagement by the South African and Namibian governments has opened up space for others to be considered as credible sources of information. Health-care professionals, for example, have taken it on themselves to share information online through social media and other digital channels, possibly at the risk of their professional profiles, but to assist citizens to understand better. While governments can learn from these engagements, it is critical for them to become more proactive, as Navarro et al. (2017) highlight a key benefit thereof is avoiding crisis and continually improving dialogue. The involvement of other stakeholder voices in South Africa and Namibia may help build better trust in health communication about the Covid-19 pandemic by the government.

The South African and Namibian governments have been called to question concerning their approach to health information during the Covid-19 pandemic. The panel of stakeholders highlighted that the governments' reliance on mostly western medicine has excluded traditional medicine as active stakeholders in the fight against Covid-19. The result of this exclusion has been seen as leading to divergent communication activities particularly for traditional health practitioners, even though they are working toward the same health communication goal. Stakeholders have power inequality among themselves as Fontaine et al. (2006) point out and thus communication solutions in dealing with diverse stakeholders are not always equally available to them. Governments during the Covid-19 global health crisis need to be cognizant of the stakeholder power inequalities address them and make an effort to engage with them in good faith to help balance those power inequalities. Above all else, government communication needs to humanize the pandemic for all by developing health communication with the ease of understanding of people at the forefront to take requisite action.

CONCLUSION

The power of digital media as a medium for communication is unquestionable, despite some of the psychological drawbacks. Particularly during a crisis, digital media provides an efficient way of sharing information quickly and providing support, if used appropriately.

Transmission of information without engagement, however, particularly online, leaves messages open to distortion and misinterpretation. Misinterpretation and anxiety are amplified by the ability of user-generated content to overtake official information, leading to possible misinformation and infodemics. During a pandemic like the Covid-19 health crisis, the risks of misunderstanding have far-reaching consequences, including undermining of authorities, mistrust, and rejection of messages. Citizens will continue to engage among themselves if digital media use by governments remains one-way communication transmission, with adverse outcomes for responses to stemming the spread of Covid-19 from key stakeholders, the ordinary citizens.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

ETHICS STATEMENT

The authors of this article have adhered to ethical research standards. All funding has been declared. The data used are publicly available. We have adhered to all institutional research ethics policies and the project has received ethical clearance from the lead institution, the University of Johannesburg.

REFERENCES

Azionya, C., & Sitto, K. (2018). Understanding the characteristics of writing online content. In M. Pritchard, & K. Sitto (Eds.), *Connect: Writing for online audiences* (pp. 13–38). Juta.

Basuki, Y., Akbar, R., & Miharja, M. (2015). ICT and social relationship engagement: Women's online communities in Indonesia. *Procedia-Social and Behavioral Sciences*, *184*, 245–251.

Cheng, Y. (2018). How social media is changing crisis communication strategies: Evidence from the updated literature. *Journal of Contingencies and Crisis Management*, *26*(1), 58–68.

Chomsky, N. (2006). *Language and mind*. Cambridge University Press.

Currie, D. (2009). Public health leaders using social media to convey emergencies: New tools a boon. *The Nation's Health*, *39*(6), 1–10.

Daily Vox. (2021, June 10). *Never far from controversy*: *The life and times of Zweli Mkhize*. https://www.thedailyvox.co.za/never-far-from-controversy-the-life-and-times-of-zweli-mkhize/

Dawkins, C. E. (2014). The principle of good faith: Toward substantive stakeholder engagement. *Journal of Business Ethics*, *121*(2), 283–295.

de Rosa, A. S., Mannarini, T., Gil de Montes, L., Holman, A., Lauri, M. A., Negura, L., Giacomozzi, A. I., da Silva Bousfield, A. B., Justo, A. M., de Alba, M., Seidmann, S., Permanadeli, R., Sitto, K., & Lubinga, E. (2021). Sensemaking processes and social representations of COVID-19 in multi-voiced public discourse: Illustrative examples of institutional and media communication in ten countries. *Community Psychology in Global Perspective*, *7*(1), 13–53.

Egbe, C. O., & Ngobese, S. P. (2020). COVID-19 lockdown and the tobacco product ban in South Africa. *Tobacco Induced Diseases*, *18*(May), 39.

Falkheimer, J., & Heide, M. (2018). *Strategic communication*: *An introduction*. Routledge

Falkheimer, J., Heide, M., Nothhaft, H., Von Platen, S., Simonsson, C., & Andersson, R. (2017). Is strategic communication too important to be left to communication professionals? Managers' and coworkers' attitudes towards strategic communication and communication professionals. *Public Relations Review*, *43*(1), 91–101.

Finn, B. M., & Kobayashi, L. C. (2020). Structural inequality in the time of COVID-19: Urbanization, segregation, and pandemic control in sub-Saharan Africa. *Dialogues in Human Geography*, *10*(2), 217–220.

Fontaine, C., Haarman, A., & Schmid, S. (2006). The stakeholder theory. *Edlays Education*, *1*, 1–33.

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pittman.

Freeman, R. E., Wicks, A. C., & Parmar, B. (2004). Stakeholder theory and "the corporate objective revisited". *Organization Science*, *15*(3), 364–369.

Hagemeister, D. T., Mpeli, M. R., Shabangu, B. E., & Dhai, A. (2020). 'Please confirm your HIV-positive status by email to the following government address': Protection of 'vulnerable employees' under COVID-19. *South African Journal of Bioethics and Law*, *13*(2), 91–96.

Hertlein, K. M., & Ancheta, K. (2014). Advantages and disadvantages of technology in relationships: Findings from an open-ended survey. *The Qualitative Report*, *19*(11), 1–11.

Internet World Stats. (2021). Internet Users Statistics for Africa. *Internet World Stats*. https://www.internetworldstats.com/stats1.htm

IOL. (2021, June 1). *Zweli Mkhize must take full responsibility for Digital Vibes debacle*. https://www.iol.co.za/news/opinion/zweli-mkhize-must-take-full-responsibility-for-digital-vibes-debacle-cce8a2ce-4dc4-4453-9109-1dc2eec5c847

Kadhila, N., & Nyambe, J. (2021). Barriers to the quality of emergency online pedagogies in higher education during the COVID-19 pandemic: A case study from the University of Namibia. *Journal of Learning for Development*, *8*(3), 516–531.

Kahla, C. (2019, 18 December). Report: South Africa has the most expensive internet [infographic]. *The South African*. https://www.thesouthafrican.com/technology/south-africa-most-expensive-internet-infographic/

Kozinets, R. V. (2002). The field behind the screen: Using netnography for marketing research in online communities. *Journal of Marketing Research*, *39*(1), 61–72.

Kozinets, R. V. (2006). Click to connect: Netnography and tribal advertising. *Journal of Advertising Research*, *46*(3), 279–288.

Kozinets, R. V. (2015). *Netnography: Redefined*. Sage.

Kreps, G. L. (2017). Online information and communication systems to enhance health outcomes through communication convergence. *Human Communication Research*, *43*(4), 518–530.

Labuschaigne, M. (2020). Ethicolegal issues relating to the South African government's response to COVID-19. *South African Journal of Bioethics and Law*, *13*(1), 6–11.

Lubinga, E., Sitto, K., & Molebatsi, K. (2021). Health disparities and the digital divide within South African disadvantaged communities during the COVID-19 pandemic. *Catalan Journal of Communication & Cultural Studies*, *13*(2), 285–302.

Malinen, S. (2015). Understanding user participation in online communities: A systematic literature review of empirical studies. *Computers in Human Behavior*, *46*, 228–238.

Matusitz, J. (2014). Intercultural perspectives on cyberspace: An updated examination. *Journal of Human Behavior In The Social Environment*, *24*(7), 713–724.

McQuillen, J. S. (2003). The influence of technology on the initiation of interpersonal relationships. *Education*, *123*(3), 616–624.

Msomi, N., Lessells, R., Mlisana, K., & de Oliveira, T. (2021, December 1). *Africa: Tackle HIV and COVID-19 together*. https://www.nature.com/articles/d41586-021-03546-8

Mukumbang, F. C., Ambe, A. N., & Adebiyi, B. O. (2020). Unspoken inequality: How COVID-19 has exacerbated existing vulnerabilities of asylum-seekers, refugees, and undocumented migrants in South Africa. *International Journal for Equity in Health*, *19*(1), 1–7.

Navarro, C., Moreno, A., & Al-Sumait, F. (2017). Social media expectations between public relations professionals and their stakeholders—Results of the ComGap study in Spain. *Public Relations Review*, *43*(4), 700–708.

Rogerson, C. M., & Rogerson, J. M. (2020). Covid-19 tourism impacts in South Africa: Government and industry responses. *GeoJournal of Tourism and Geosites*, *31*(3), 1083–1091.

Sitto, K., & Lubinga, E. (2020). A disease of privilege? social representations in Online media about Covid-19 among South Africans during lockdown. *Papers on Social Representations*, *29*(2), 6.1–6.29.

South African Government. (2020, March 18). *Disaster Management Act: Regulations*. https://www.gov.za/documents/disaster-management-act-regulations-english-afrikaans-18-mar-2020-0000

Southern African Development Community (SADC). (n.d.). *Health*. https://www.sadc.int/themes/health/

Statistics South Africa. (2018). *General Household Survey*. http://www.statssa.gov.za/publications/P0318/P03182018.pdf

Stork, C. (2009). *Namibia 2009—Access to online information and knowledge*. https://giswatch.org/country-report/20/namibia

Walther, J. B., & Valkenburg, P. M. (2017). Merging mass and interpersonal communication via interactive communication technology: A symposium. *Human Communication Research*, *43*(4), 415–423.

Xun, J., & Reynolds, J. (2010). Applying netnography to market research: The case of the online forum. *Journal of Targeting, Measurement and Analysis for Marketing*, *18*(1), 17–31.

Zarocostas, J. (2020). How to fight an infodemic. *The Lancet*, *395*(10225), 676.

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