



Health Information and Social Inclusion of Women During COVID-19: Exploring Botswana Television's Functionalist Communication Strategy

Gopolang Ditlhokwa ^{1*}

 0000-0002-1876-7715

¹ Institute of Communication Studies, Communication University of China, Beijing, CHINA

* Corresponding author: gdilhokwa@hotmail.com

Citation: Ditlhokwa, G. (2022). Health Information and Social Inclusion of Women During COVID-19: Exploring Botswana Television's Functionalist Communication Strategy. *Online Journal of Communication and Media Technologies*, 12(3), e202219. <https://doi.org/10.30935/ojcm/12169>

ARTICLE INFO

Received: 23 Apr 2022

Accepted: 1 Jun 2022

ABSTRACT

This paper explored the role of Botswana television in harnessing the right to health information and social inclusion of women during the COVID-19 pandemic. The researcher sampled 36 episodes (n=36) between March and June 2020 from the Botswana television Facebook page and employed content analysis to examine comments, reactions, viewership patterns, and gender disparities during programming. The program recorded over one million views from its audience, attracting many reactions and comments. However, there was a ratio of 74.5% for males against 25.5% for female representation, which was lower than the half margin of all the guests in the program. Furthermore, the study found that indeed Facebook boosted television viewership and audience engagement, although women's issues were not satisfactorily addressed by the program, both dedicated to gender equality during the pandemic and crafting topics that discussed the vulnerability of women.

Keywords: health information, social inclusion, COVID-19

INTRODUCTION

By its nature, access to health information derives from different perspectives, as both a basic human right necessity and a risk factor. As illustrated by Demuyakor et al. (2021), Enders et al. (2020), King (2020), and Radwan and Radwan (2020), when health pandemics strike, the public is exposed to the dangers of misinformation and misguided views from unconfirmed reports, especially in the era of the rapid spread of social media usage. COVID-19 as a recent example of a pandemic that caught the attention of the entire world was faced with misrepresentations and facts from both the public and the media (Brownson et al., 2020; Duraisamy et al., 2020).

Despite social media's influence and infiltration of the credible role of the media to protect lives by creating awareness through public education and disseminating health information, in some cases, there has been limited information from the health authorities and government officials (Haug et al., 2020). Foundationally, it is expected that the government undertakes a leading role in managing the flow of information to protect the citizens' right to life. However, the sanctioning of media practice in the backdrop of healthcare reportage has for a long time been part of bigger debates (Collins et al., 2006). Because of the different dimensions explored by previous researchers, it is clear that there is a need to revisit the application of the 'right to health' as a fundamental human right concerning information sharing and public education, to underscore its meaning, purpose, and merge both the underlying traditional and contemporary practices geared towards embracing human rights in health. Previously, there have been habitual misperceptions stemming from illusions of the apparent violations of human rights in health, as usually being indistinct (Gruskin, 2004). According to Mann (1996), the World Health Organization (WHO) recognizes the promotion of health

information as a necessity for human rights protection, by ensuring that the information serves both the mental, physical and social well-being of every individual. It is within this scope that emerging issues mostly speak to lack of proper medical care, unfair treatment by health professionals-ethical misconduct, and inadequate policies that govern the existing health practices than addressing the pivotal role played by the media to facilitate and ensure credibility on the shared information. The Geneva Declaration of 2005 for example, recognizes the media to be a strategic partner whenever a public health emergency occurs, by fulfilling trust, improving knowledge (providing education to encourage appropriate actions and behaviors when dealing with health emergencies), and strengthening cooperation within societies (Covello & Hyer, 2005).

While justifying the right to health information, another discrepancy is the little attention dedicated to an equal gender representation of those at the helm of the control and management of information in times of public health emergencies. This may include being the face of communication strategies during the control and management of a pandemic and addressing the public on radio, television, and online platforms. As noted by Heidari et al. (2020), Jansen et al. (2017), and Kalabikhina (2020), gender particularities always emerge as a hindrance to social inclusion, especially with less representation of women in key strategic positions. This study, therefore, seeks to explore the propagation of information under the COVID-19 pandemic in Botswana, through television as a medium of information dissemination, and indicate how gender equality has been achieved as regards the right to health information. In March 2020, the WHO officially declared COVID-19 a health pandemic (Cucinotta & Vanelli, 2020). As a result, many countries began to knit measures to control and manage the virus, which also led Botswana Television (Btv) to coin a television program named 'COVID-19 Botswana Responds,' with the aim of fast-tracking information delivery to the public. The program was structured to be presenter-driven, where various guests were invited for sit-in studio discussions on a range of topics concerning COVID-19 management, hence the naming. Within this program, the guests came from different government departments, parastatals, and non-governmental organizations across Botswana. Most important, the program was broadcast simultaneously on its satellite, terrestrial, and Facebook live-streaming through the Btv Facebook page. At the end of the show, the previously streamed episodes [on Facebook] could be replayed anytime, this time as recorded content, which taps from Facebook algorithms that allow for future retrieval of previously live-streamed videos (Parsons, 2018). Btv is a state-owned broadcaster under the control of the Office of the President, arguably operating as a public service broadcaster (Balule, 2013; Mosanako, 2014).

LITERATURE REVIEW

A Right to Health Information

A majority of studies view health information from the perspective of medical records, with much emphasis on 'improved' healthcare systems, especially with infectious diseases (Chaudhry et al., 2006; Cheol Seong et al., 2016; Zheng et al., 2014). Improvement is used herein, to selectively refer to efficiency through computerizing health-related data and making it available for assessment on medical grounds without any guarantee to make such information publicly available.

When studying the usage of the Internet as a search tool for health-related information, Polgreen et al. (2008), and Scandfeld et al. (2010) positioned public health organizations at the forefront of making available the health (public) information via Web 2.0 applications for ease of access, for awareness and educational purposes. These include information that is by extension, shared on social media networks either by the media or the public. The researchers argued that there had been a noticeable tradition of engaging in the vetting process, where web-based information is scrutinized to determine its authenticity and origin. Although both of these studies pursue technological inclusion in health information, what distinguishes their views is that the former focused more on the health informatics data, while the latter skewed towards information published on the Internet either for public consumption or otherwise.

Certainly, as media technologies continue to advance with improved convergence features and capacity, it becomes debatable that health information could be accessible to all. According to Sato et al. (2019), there is a need to view equal information distribution as regards health matters by first identifying pertinent

disparities in the way people access health information from the media. This goes further to suggest an imbalance in trust levels between different social groups about their preference for the Internet over traditional media or vice versa. Given the above, the merger between television and social media is becoming an admirable theme that needs further exploration, especially within the scope of the functions of the media, the government, and the society that is served by both the media and the government.

Viewing Television Through Facebook for Mass Outreach

Television is one of the trusted sources of information during health crises, and it can be acknowledged to graciously merge with other technological forms such as social media apps to harness rapid information delivery. A couple of years ago, social media's rise had almost threatened the existence of traditional media, as it was poised to take over the information space (Hughes et al., 2012; Turcotte et al., 2015). However, that is not the case anymore, as the evolution of technology have already facilitated the two mediums to harmoniously work together. Moe et al. (2016) and Maca et al. (2016) emphasize the great changes that occurred over the years, with information availability and reinvigorated audience engagement of the 21st century, owing to new media technologies. Notably, a combination of Facebook and television improves active participation from the social audience (Ouma, 2013). During public health emergencies like COVID-19, which spreads quickly from human to human (Madubueze et al., 2020), there is a need for swift public outreach utilizing technology.

Regardless of the authenticity of the information, its source, or origin, the public's trust normally rests upon health professionals as the most reliable providers of accurate health information. According to Ntsala and Dikotla (2019), the public has for a long time been expected to visit their nearest health facilities to get health-related information. However, since the beginning of the COVID-19 pandemic, health information had to be shared through multiple platforms to reduce congestion at health facilities and elsewhere. That is why social television was at its peak as content consumption was mostly channeled through the Internet, to reinforce online communication strategies that were employed to boost public outreach by linking television programming to social media sites such as Facebook (Geni et al., 2021), without the public being expected to throng health facilities for information. Even before COVID-19, there has been a growing presence of Facebook globally which has attracted irresistible research interest, viewed as one of the most used social networking sites (Moyo, 2019; Snelson, 2016; Tremayne, 2017).

Certainly, shifting to online health reporting and crisis information management not only increases the availability of information but also promotes social television viewership, and improves interactions and audience engagement (Kim et al., 2021). Aided by its feature Facebook Live, Facebook's popularity was sharply increased by the algorithms that allow usage of extended devices such as mobile phones that propagate quick access to information and sharing, where viewers would no longer need to be at home watching content on a television set (Hammock, 2017; Kümpel et al., 2015). With the help of the above literature, the researcher seeks to answer the following question:

RQ1-How has the strategy to Livestream COVID-19 program harnessed the audience's right to health information?

Social Inclusion and Promoting Women's Leadership in a Pandemic

Regarding the COVID-19 pandemic, pressure groups, researchers, and media reports about the social inclusion of women veered towards equity in healthcare support and protection of the poor and the vulnerable from distress and infections. According to Rawal (1970), social inclusion is a contextual concept that takes a dualistic form that also involves exclusion, hence the inadequate sole definition of the term. However, Hayes et al. (2008) aligned the social inclusion concept towards advocacy for equal social participation, fair social integration, and equal distribution of power. On the other hand, Cobigo et al. (2012) define social inclusion from a human rights perspective, positioning individuals or groups within the community service context. The researchers argue that for a person to feel socially included, they need to be accorded opportunities to make meaningful contributions to the communities they live in, and access to information is instrumental in that regard. While investigating issues of social inclusion, Tull (2021) identified several social inclusion concepts such as religious and cultural myths, ethnicity, and discrimination in several countries leading the pack on marginalizing women and other vulnerable groups. Gibbons and Sidun (2021)

and Otieno and Nkenyereye (2021) also postulate that women and girls were mostly affected by the downside of the pandemic repercussions, leading to the null presence instead of being on the forefront of the collective efforts to fight the pandemic.

Hardy et al. (2021), and Shahid and Pelling (2020) argue that there was visible mistrust towards women leadership, greatly influenced by the lack of suitable strategies for gender mainstreaming and implementation of the pandemic fighting approaches, save for the female health workers (frontline staff) who would carry the healthcare burden in the workplace and household responsibilities. These studies found other prevalent challenges associated with anxiety and mental breakdown, mostly affecting women and girls more than men and boys. Therefore, based on the social inclusion of women to be at the forefront of information management during the pandemic, the researcher seeks to answer the following question:

RQ2-To what extent did the program facilitate for social inclusion of women in managing information during the pandemic?

THEORETICAL FRAMEWORK: STRUCTURAL-FUNCTIONAL APPROACH AND INFORMATION PROPAGATION

Within the structure of media and society, tenets of mass media's functional role position themselves within broader perspectives. As proposed by Talcott Parsons in the 1950s, structural-functionalism would later synchronize analytical and systems theories by roping in the idea of the media's role as an intersection of political economies, education, and authoritative philosophies (Münch, 2001). As a result, this theory has been debated at different levels.

Perspectives of Structural Functionalism

According to Anderson and Meyer (1975), both the theoretical and methodological grounds of functionalism in the media commonly recognize the media holistically, regardless of the medium. This kindles diverse discourses on the tangible 'functionality' of information dissemination taking a monomorphic form rather than distinct demarcations of operational boundaries. Additionally, Couldry (2004) suggested that the media function as a mediator in society. This process acts as a pivot between two fields, health, and human rights, in which the functions of members of a society are determined by the state of their health, and their psychological wellbeing (Amzat & Razum, 2014; Stam 2000). Also, Haslam et al. (2021) point out the merits of using media platforms to encourage community outreach where both the health authorities work together with community leaders and the media as an information propagation strategy during a crisis.

Drawing from Heal (2003), strategies applied in functionalism are resultants in answering societal needs of being, which include information sharing and collaboration. Within a wider spectrum of the media function in society, it is not surprising for the government to take the lead in providing the platform and resources for the community to utilize in spreading information and ultimately downsize the spread of the virus. Using functionalism as a theoretical base, this study attaches to Talcott Parsons's proposition that functionalism as a social theory treats all the systems of society as one and, is expected to pull together to make the system function better. Informed by that, the researcher then drew from the approach by Btv to invite different systems such as the government, non-governmental organizations (NGOs), parastatals, and private entities to the program, where they served the same interest of public education, awareness, collectivism in managing and control the spread of COVID-19. **Table 1** presents the categorized systems that formulated this study.

Table 1. Descriptive statistics studio invitations

Name	Data group	
	Frequency (n=98)	Percentage (100%)
Government	26	26.5
NGOs	30	30.6
Parastatals	13	13.3
Private	29	29.6
Total	98	100

MATERIALS, PROCEDURES AND METHODS

This study used content analysis based on primary data collected from videos streamed between March and June 2020 on the Btv Facebook page. Given the aim of this study as highlighted earlier, the data sample for content analysis was a selection of 36 videos (n=36), where the number of comments, viewership, and total reactions were analyzed from the streamed video posts (Peruta & Shields, 2018).

ANALYSIS

The data were analyzed in two sets, starting with the counting of all the comments, reactions, and views that the program had attracted to inform question 1, which aimed to establish the status of information propagation through the program. The analysis also included probing into how topics were allocated across the different sectors that were selected for this study by order of relevance to the control and management, to determine whether the government dominated the discussions through more relevant and impactful topics or is it the community or both. The second attempt which aimed at addressing question 2, was to establish how the gender balance of those invited to speak on the television served the purpose of social inclusion of women during the pandemic, including topics that discussed the vulnerability of women and children during the pandemic. This was done by directly drawing from each selected episode by a way of counting the representations.

RESULTS

RQ1-The Public Outreach Serving the Audience’s Right to Health Information Based on Comments, Reactions, and Viewership

Comments

In all the reviewed 36 episodes (videos), there were 424 comments, episode six recorded the highest number of comments (141) while episodes 2, 3, 5, 7, and 12 recorded the lowest (0) comments.

Reactions

2,505 reactions were recorded from the selected episodes. 2,289 (91%) were likes, with 181 (7%) heart reactions (love), 14 (1%) sad reactions, 10 (0.4%) angry reactions, 10 (0.4%) laughter reactions, and 1 (0.04%) wow reaction (see [Figure 1](#)), where April and May recorded the highest reactions than other months.

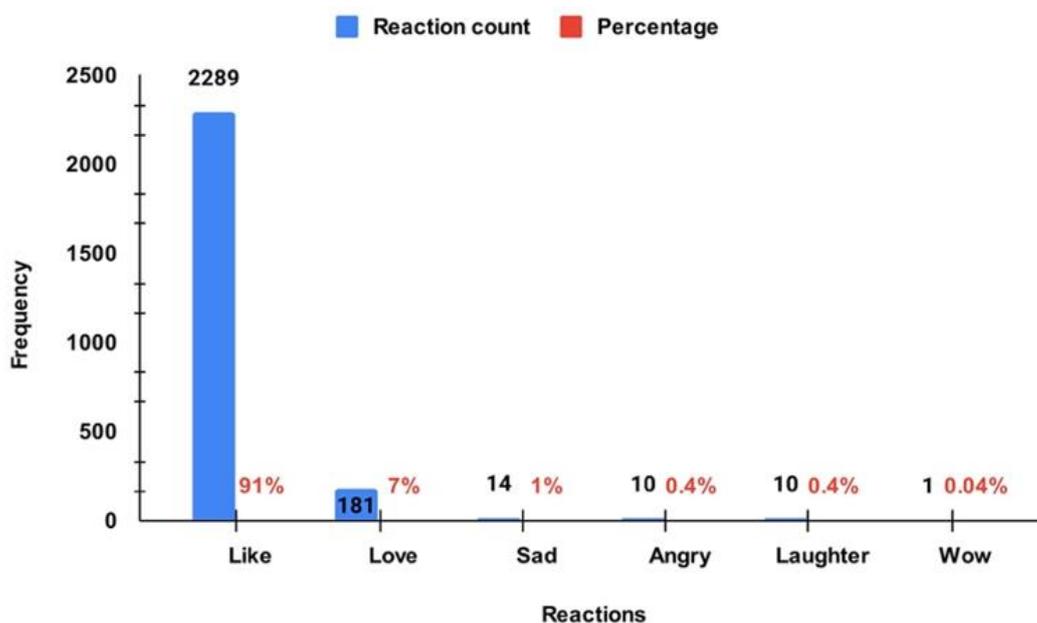


Figure 1. Audience reactions

Viewership

All the episodes accumulated 1,461,900 views between March and June 2020. March accounted for 90,000 (6%) views, April 544,000 (37%) views. May had 393,000 (27%) views and June 434,900 (30%) views (see [Figure 2](#)). The median percentage for viewership patterns was 28% while the mean percentage for viewership patterns was 25%. April recorded the highest viewership, which was 10% higher than the second-highest viewed month, June. At the beginning of the pandemic in March, viewership was very low.

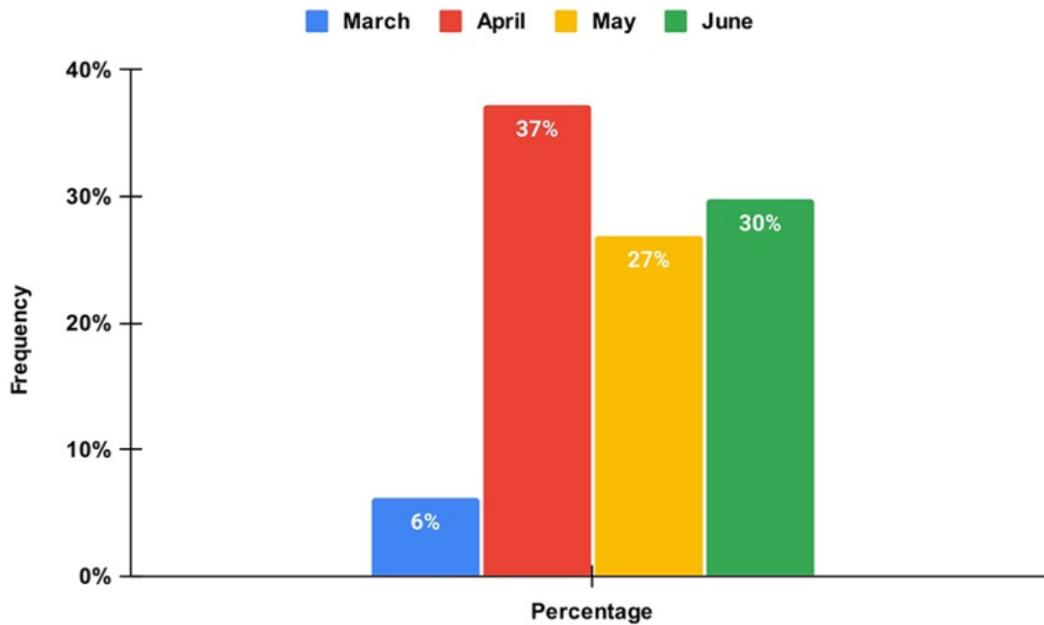


Figure 2. Viewership patterns

RQ2: Social Inclusion: Gender Disparity in Leadership and Authority of Information

Of the 98 studio guests, 73 (74.5%) were male, while 25 (25.5%) were females, displaying a difference of 48 (49%) (see [Figure 3](#)). The number of studio guests indicated a huge margin between men and women.

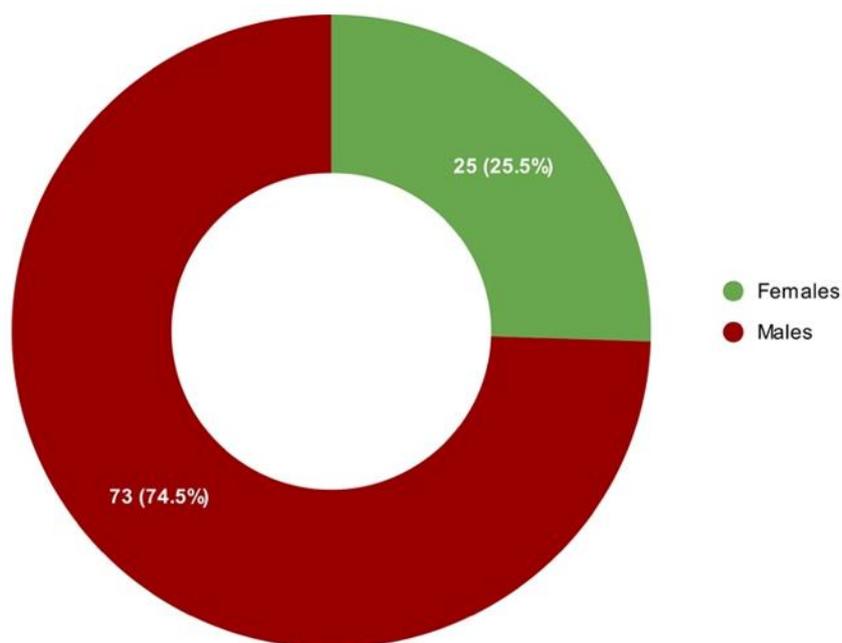


Figure 3. Gender representation

DISCUSSION

The number of comments revealed by the results denotes more than half of the episodes having been commented-on, compared to those that did not have any comments; also, a sizable number of them were real-time comments; those that were posted during the live stream, as identified by a timestamp depicting the exact time that they were posted. This further suggests the program was accessible to many viewers as a live stream than as a recorded program. Thus, the highest commented-on episode attracted 141 comments in total, where many questions, exchanges, and opinions converged in the comments section. The episode featured a cabinet minister who addressed the audience on labor-related matters at the height of a lockdown. Through the comments, a lot of interest was mostly drawn towards the informal sector partakers who demanded to know the government's position on their welfare during extreme social distancing.

Given the total recorded reactions in the results, a '*like*' reaction (represented by a thumb symbol), was the leading reaction used in each episode. Having accumulated 91% usage out of the total reactions to the program, it is worth noting that the program certainly became relevant and well-received by most of the Facebook audience. A '*like*' on a post signifies having interacted with the content, mostly in a positive way (Scissors et al., 2016), or even what Eranti and Lonkila (2015) argue to be an influencer of support from one follower to the other especially when users have a kind of connection to the post in question. Regardless of other reactions not being greatly used akin to a '*like*', the audience still conveyed emotions using the available facial symbols [*laughter*, *wow*, *sad* and *angry*], and a *love* (heart) reaction that was introduced by Facebook in 2016 for global usage (Krug, 2016). Reactions such as '*sad*' and '*angry*' were mostly used to react to information from episodes that discussed sad news such as death announcements and the rising spread of the virus, whereas '*love*,' '*wow*' and '*laughter*' were neutrally dispersed around different episodes that did not bear any sad reports.

As indicated in the results, the program garnered over one million views of all the episodes between March and June. Previous studies have examined online video content 'views' for other social media platforms such as YouTube, and tallied this kind of viewership with content popularity, hinting at a high demand for COVID-19-related information during this period. Observing that April saw a rise in viewership surpassing other months that were studied, indeed there was a surge in online live-streamed television content viewership during the first months of the pandemic (Rajan, 2020). While they recognize the existing relationship between views and popularity, Ham and Lee, (2020) acknowledged that it would be inappropriate to hypothesize that high numbers in viewership would signal good content or high impact the content has, bearing in mind that proving whether the content is good or bad is a subjective matter, sanctioned at a personal level. On the other hand, there was a huge disparity in the viewership patterns for March and April, where the former only had 6% viewership compared to the latter with 37% as shown in [Figure 2](#). Given that this program started broadcasting content immediately after COVID-19 was declared a pandemic, it had been evident in the past that television viewing had been on the decline and was revived by the demand for pandemic-related content (Túñez-López et al., 2020). This could suggest that in March, television had just begun to regain momentum as an information tool.

Deriving from its name 'COVID-19 Botswana Responds', it is a delineation that the program meant to respond to or publicize Botswana's efforts towards fighting the pandemic. The topics discoursed more about the control, management, and prevention of the COVID-19 spread. These topics reflected on ideas by professionals coming from both the government and civil society groups to discuss their mandate to collaborate in the fight against the virus, including individuals who were affected by the virus, either through the loss of their family members or being survivors. This shows an effort made to harness the new and available information about the state of the country in the fight against the virus. As a state-owned television station, Btv succeeded in safeguarding public safety by providing daily updates on different topics and using real subjects (individuals) to address issues related to the containment of COVID-19.

Strategically, there was a mix of guests, not only coming from government departments but also from civil society organizations, academics, and independent health professionals to share their efforts in the fight against COVID-19. Lin et al. (2017), and Marston et al. (2020) underscored the importance of community leadership engagement as a strategy for public outreach and project management during health crises,

drawing from the Tsunami occurrence in Japan, and the active participation of non-governmental actors during the COVID-19 pandemic recently.

Although the positioning of the topics tilted towards the mandate of the government through its ministries and departments, it, however, showed the sensitivity of COVID-19 related information and handled it in the highest regard. Hence, using the program to ensure more credibility on the information released for public consumption, with the involvement of community leaders from different sectors. Meanwhile, even when non-governmental organizations' representatives were invited for discussions, most of the time, the government mandate of being at the forefront of fighting the pandemic was repeatedly emphasized. Researchers have presented varied findings on the power of television in shaping peoples' thinking and influencing behavior (Enikolopov & Petrova, 2017) and the influence of content on social networks. On repeated occasions, the program used the invited community leaders to remind the public about adhering to the COVID-19 protocols, including movement restrictions, washing hands with clean water and soap, sanitizing, wearing masks, etc. It should also, be noted that the way questions were molded, was mostly for guests to provide formal responses to either an ongoing public outcry or the potential misunderstanding about the virus; positioning the government and stakeholders at the forefront in the fight against the pandemic.

The program constructively considered the use of both male and female subjects in the studio discussions. However, a ratio of 74.5% of males against 25.5% of females as studio guests for the program indicates that leveling the playfield, to have women playing more leadership roles in the fight against pandemics is still a daunting task. Also worth noting is the program (COVID-19 Botswana Responds) lacked topics that specifically discussed the social inclusion of women and children and their vulnerability during the pandemic. Otherwise, discussions were fully dominated by the control and management of the pandemic from the government level to NGOs, addressing issues of health for all, proper information management, and the status of the country through public partnerships in spreading awareness. The fact that the two presenters who hosted the program were both females still did not prove a balanced gender representation in the program, especially with the everyday faces that the audience would see in-studio discussions, deliberating on the management efforts to deal with the pandemic. In history, women have been underrepresented in television programming (Martinez-Sheperd, 2006). This has the potential to affect the effectiveness of the program, despite the message of the program being well received. Some audiences may prefer or get motivated when being addressed by the gender they associate well with than the opposite gender. According to Nathanson et al. (1997), men and women have a history of using television differently, which stems from their psychological connections and stereotypical gender sympathy.

CONCLUSIONS, LIMITATIONS AND FUTURE RESEARCH

Information about the COVID-19 pandemic was fairly disseminated by Btv, given that, it was provided simultaneously both on its satellite network and Facebook page (live-stream) and viewership was satisfactory on their Facebook page as the program was educative and addressed a wide range of issues. The ultimate reach of the populace is evidenced by their interest to interact with the program by watching, commenting, and reacting during the live-streaming of every episode having attracted over one million views. It is worth noting that many of the guests were specialists in different fields, community leaders, and volunteers. The strategy to live-stream the program on Facebook also boosted its accessibility as it offered convenient options for accessing information about COVID-19. Furthermore, the strategic naming of topics was highly relevant to the fight against the pandemic and to spread more information about programs and initiatives in place that the communities participate through. Despite having adequately propagated health information, gender equality was overlooked, especially in the representation of females in key strategic leadership positions either in their communities or in government and parastatals in which the ratio for males and females was wider, where females could not even reach the half margin of the total representation. This study, therefore, suggests that in future programming by Btv, social inclusion to empower women as voices of authority on issues of communal concern be utilized. This study also recommends that future studies conducted in this area could explore viewers' perceptions on issues of gender representation by drawing an assessment of a similar television program from a different country, to establish the different ways in which gender issues are dealt with during a pandemic.

Funding: The author received no financial support for the research and/or authorship of this article.

Declaration of interest: The author declares no competing interest.

Data availability: Data generated or analyzed during this study are available from the author on request.

REFERENCES

- Amzat, J., & Razum, O. (2014). *Medical sociology in Africa*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-03986-2>
- Anderson, J. A., & Meyer, T. P. (1975). Functionalism and the mass media. *Journal of Broadcasting*, 19(1), 11-22. <https://doi.org/10.1080/08838157509363766>
- Balule, T. B. (2013). Public service broadcasters or government mouthpieces—An appraisal of public service broadcasting in Botswana. *SCRIPTed*, 10(1), 77-92. <https://doi.org/10.2966/scrip.100113.77>
- Brownson, R. C., Burke, T. A., Colditz, G. A., & Samet, J. M. (2020). Reimagining public health in the aftermath of a pandemic. *American Journal of Public Health*, 110(11), 1605-1610. <https://doi.org/10.2105/AJPH.2020.305861>
- Chaudhry, B., Wang, J., Wu, S., Maglione, M., Mojica, W., Roth, E., Morton, S. C., & Shekelle, P. G. (2006). Systematic review: Impact of health information technology on quality, efficiency, and costs of medical care. *Annals of Internal Medicine*, 144(10), 742-752. <https://doi.org/10.7326/0003-4819-144-10-200605160-00125>
- Cheol Seong, S., Kim, Y.-Y., Khang, Y.-H., Heon Park, J., Kang, H.-J., Lee, H., Do, C.-H., Song, J.-S., Hyon Bang, J., Ha, S., Lee, E.-J., & Ae Shin, S. (2016). Data resource profile: The national health information database of the national health insurance service in South Korea. *International Journal of Epidemiology*, 46(3), 799-800. <https://doi.org/10.1093/ije/dyw253>
- Cobigo, V., H. Ouelette-Kuntz, R. Lysaght, and L. Martin. (2012). Shifting our conceptualization of social inclusion. *Stigma Research and Action*, 2(2), 75-84. <https://doi.org/10.5463/sra.v1i3.45>
- Collins, P. A., Abelson, J., Pyman, H., & Lavis, J. N. (2006). Are we expecting too much from print media? An analysis of newspaper coverage of the 2002 Canadian healthcare reform debate. *Social Science & Medicine*, 63(1), 89-102. <https://doi.org/10.1016/j.socscimed.2005.12.012>
- Couldry, N. (2004). Theorising media as practice. *Social Semiotics*, 14(2), 115-132. <https://doi.org/10.1080/1035033042000238295>
- Covello, V., & Hyer, R. (2005). *Effective media communication during public health emergencies: A WHO field guide*. <https://epdf.pub/effective-media-communication-during-public-health-emergencies-a-who-field-guide.html>
- Cucinotta, D., & Vanelli, M. (2020). WHO declares COVID-19 a pandemic. *Acta Bio Medica Atenei Parmensis*, 91(1), 157-160. <https://doi.org/10.23750/abm.v91i1.9397>
- Demuyakor, J., Nyatuame, I. N., & Obiri, S. (2021). Unmasking COVID-19 vaccine “infodemic” in the social media. *Online Journal of Communication and Media Technologies*, 11(4), e202119. <https://doi.org/10.30935/ojcm/11200>
- Duraisamy, B., Rathinaswamy, J., & Sengottaiyan, K. (2020). Social media reigned by information or misinformation about COVID-19: A phenomenological study. *SSRN Electronic Journal*, 09(03), 585-602. <https://doi.org/10.2139/ssrn.3596058>
- Enders, A. M., Uscinski, J. E., Klofstad, C., & Stoler, J. (2020). The different forms of COVID-19 misinformation and their consequences. *Harvard Kennedy School Misinformation Review*. <https://doi.org/10.37016/mr-2020-48>
- Enikolopov, R., & Petrova, M. (2017). Mass media and its influence on behaviour. *CREI, Centre de Recerca en Economia Internacional [International Economics Research Center]*. https://crei.cat/wpcontent/uploads/2018/03/Opuscle44_ENG.pdf
- Eranti, V., & Lonkila, M. (2015). The social significance of the Facebook Like button. *First Monday*, 20(6). <https://doi.org/10.5210/fm.v20i6.5505>
- Geni, G. L., Briandana, R., & Umarella, F. H. (2021). The strategies of television broadcast during the COVID-19 pandemic: A case study on Indonesian television. *Jurnal Komunikasi: Malaysian Journal of Communication [Journal of Communication: Malaysian Journal of Communication]*, 37(2), 243-256. <https://doi.org/10.17576/JKMJC-2021-3702-15>

- Gibbons, J. L., & Sidun, N. M. (2021). Global women during the COVID-19 pandemic: Vulnerabilities and strengths. *International Perspectives in Psychology, 10*(3), 127-129. <https://doi.org/10.1027/2157-3891/a000025>
- Gruskin, S. (2004). What are health and human rights? *The Lancet, 363*(9405), 329. [https://doi.org/10.1016/S0140-6736\(03\)15399-8](https://doi.org/10.1016/S0140-6736(03)15399-8)
- Ham, M., & Lee, S. W. (2020). Factors affecting the popularity of video content on live-streaming services: Focusing on V Live, the South Korean live-streaming service. *Sustainability, 12*(5), 1784. <https://doi.org/10.3390/su12051784>
- Hammock, L. A. (2017). *The adoption of Facebook live for internet news broadcast by local television affiliates: A creative project* [Masters of Arts Thesis], Ball State University, Graduate School, Indiana.
- Hardy, L. J., Mana, A., Mundell, L., Benheim, S., Morales, K. T., & Sagy, S. (2021). Living in opposition: How women in the United States cope in spite of mistrust of federal leadership during the pandemic of COVID-19. *Journal of Community Psychology, 49*(6), 2059-2070. <https://doi.org/10.1002/jcop.22544>
- Haslam, S. A., Steffens, N. K., Reicher, S. D., & Bentley, S. V. (2021). Identity leadership in a crisis: A 5R framework for learning from responses to COVID-19. *Social Issues and Policy Review, 15*(1), 35-83. <https://doi.org/10.1111/sipr.12075>
- Haug, N., Geyrhofer, L., Londei, A., Dervic, E., Desvars-Larrive, A., Loreto, V., Piniór, B., Thurner, S., & Klimek, P. (2020). Ranking the effectiveness of worldwide COVID-19 government interventions. *Nature Human Behaviour, 4*(12), 1303-1312. <https://doi.org/10.1038/s41562-020-01009-0>
- Hayes, A., Gray, M., & Edwards, B. (2008). *Social inclusion: Origins, concepts and key themes*. Social Inclusion Unit, Department of the Prime Minister and Cabinet.
- Heal, J. (2003). *Mind, reason and imagination: Selected essays in philosophy of mind and language*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511615894>
- Heidari, S., Ahumada, C., & Kurbanova, Z. (2020). Towards the real-time inclusion of sex- and age-disaggregated data in pandemic responses. *BMJ Global Health, 5*(10), e003848. <https://doi.org/10.1136/bmjgh-2020-003848>
- Hughes, D. J., Rowe, M., Batey, M., & Lee, A. (2012). A tale of two sites: Twitter vs. Facebook and the personality predictors of social media usage. *Computers in Human Behavior, 28*(2), 561-569. <https://doi.org/10.1016/j.chb.2011.11.001>
- Jansen, W. S., Otten, S., & van der Zee, K. I. (2017). Being different at work: How gender dissimilarity relates to social inclusion and absenteeism. *Group Processes & Intergroup Relations, 20*(6), 879-893. <https://doi.org/10.1177/1368430215625783>
- Kalabikhina, I. E. (2020). Demographic and social issues of the pandemic. *Population and Economics, 4*(2), 103-122. <https://doi.org/10.3897/popecon.4.e53891>
- Kim, J., Merrill Jr., K., Collins, C., & Yang, H. (2021). Social TV viewing during the COVID-19 lockdown: The mediating role of social presence. *Technology in Society, 67*, 101733. <https://doi.org/10.1016/j.techsoc.2021.101733>
- King, A. (2020). Fast news or fake news?: The advantages and the pitfalls of rapid publication through pre-print servers during a pandemic. *EMBO Reports, 21*(6), e50817. <https://doi.org/10.15252/embr.202050817>
- Krug, S. 2016. *Reactions now available globally*. <https://about.fb.com/news/2016/02/reactions-now-available-globally/>
- Kümpel, A. S., Karnowski, V., & Keyling, T. (2015). News sharing in social media: A review of current research on news sharing users, content, and networks. *Social Media+Society, 1*(2), 205630511561014. <https://journals.sagepub.com/doi/10.1177/2056305115610141>
- Lin, Y., Kelemen, M., & Kiyomiya, T. (2017). The role of community leadership in disaster recovery projects: Tsunami lessons from Japan. *International Journal of Project Management, 35*(5), 913-924. <https://doi.org/10.1016/j.ijproman.2016.09.005>
- Maca, V. M. M., Diaz, V. G., Espada, J. P., & Semwal, V. B. (2016). Measurement of viewer sentiment to improve the quality of television and interactive content using adaptive content. In *Proceedings of the 2016 International Conference on Electrical, Electronics, and Optimization Techniques* (pp. 4445-4450). <https://doi.org/10.1109/ICEEOT.2016.7755559>

- Madubueze, C. E., Dachollom, S., & Onwubuya, I. O. (2020). Controlling the spread of COVID-19: Optimal control analysis. *Computational and Mathematical Methods in Medicine*, 2020, 6862516. <https://doi.org/10.1155/2020/6862516>
- Mann, J. M. (1996). Health and human rights. *BMJ*, 312(7036), 924-925. <https://doi.org/10.1136/bmj.312.7036.924>
- Marston, C., Renedo, A., & Miles, S. (2020). Community participation is crucial in a pandemic. *The Lancet*, 395(10238), 1676-1678. [https://doi.org/10.1016/S0140-6736\(20\)31054-0](https://doi.org/10.1016/S0140-6736(20)31054-0)
- Martinez-Sheperd, I. (2006). Portrayals of women in prime time reality TV programs [Master's thesis, Iowa State University]. <https://doi.org/10.31274/rtd-180813-14591>
- Moe, H., Poell, T., & van Dijck, J. (2016). Rearticulating audience engagement: Social media and television. *Television & New Media*, 17(2), 99-107. <https://doi.org/10.1177/1527476415616194>
- Mosanako, S. (2014). *Television in Botswana: Development and policy perspectives* [Doctoral dissertation, The University of Queensland]. <https://core.ac.uk/download/pdf/43366076.pdf>
- Moyo, C. (2019). Social media, civil resistance, the Varakashi factor and the shifting polemics of Zimbabwe's social media "war." *Global Media Journal: African Edition*, 12(1), 1-36.
- Münch, R. (2001). Functionalism, history of. In *Proceedings of the International Encyclopedia of the Social & Behavioral Sciences* (pp. 5838-5844). Elsevier. <https://doi.org/10.1016/B0-08-043076-7/00069-3>
- Nathanson, A. I., Perse, E. M., & Ferguson, D. A. (1997). Gender differences in television use: An exploration of the instrumental-expressive dichotomy. *Communication Research Reports*, 14(2), 176-188. <https://doi.org/10.1080/08824099709388659>
- Ntsala, M., & Dikotla, M. (2019). *Equal access to health information in Africa: A dream or reality?* <http://ulspace.ul.ac.za/handle/10386/2703>
- Otieno, M. K., & Nkenyereye, L. (2021). Effects of pandemics on migrant communities: Analysis of existing sources. *Religions*, 12(5), 289. <https://doi.org/10.3390/rel12050289>
- Ouma, N. C. (2013). *Effects of social media on content of local television programs in Kenya: A case study of Citizen TV's Gospel Sunday Show* [Master's thesis, University of Nairobi].
- Parsons, J. (2018). What happens to Facebook live videos after you stream? *Boostlikes.com*. <https://boostlikes.com/blog/2018/07/facebook-live-videos-stream>
- Peruta, A., & Shields, A. B. (2018). Marketing your university on social media: A content analysis of Facebook post types and formats. *Journal of Marketing for Higher Education*, 28(2), 175-191. <https://doi.org/10.1080/08841241.2018.1442896>
- Polgreen, P. M., Chen, Y., Pennock, D. M., & Nelson, F. D. (2008). Using internet searches for influenza surveillance. *Clinical Infectious Diseases*, 47(11), 1443-1448. <https://doi.org/10.1086/593098>
- Radwan, E., & Radwan, A. (2020). The spread of the pandemic of social media panic during the COVID-19 outbreak. *European Journal of Environment and Public Health*, 4(2), em0044. <https://doi.org/10.29333/ejeph/8277>
- Rajan, A. (2020). *TV watching and online streaming surge during lockdown*. <https://www.bbc.com/news/entertainment-arts-53637305#:~:text=By%20the%20end%20of%20June,than%20this%20time%20last%20year>
- Rawal, N. (1970). Social inclusion and exclusion: A review. *Dhaulagiri Journal of Sociology and Anthropology*, 2, 161-180. <https://doi.org/10.3126/dsaj.v2i0.1362>
- Sato, K., Viswanath, K., Hayashi, H., Ishikawa, Y., Kondo, K., Shirai, K., Kondo, N., Nakagawa, K., & Kawachi, I. (2019). Association between exposure to health information and mortality: Reduced mortality among women exposed to information via TV programs. *Social Science & Medicine*, 221, 124-131. <https://doi.org/10.1016/j.socscimed.2018.12.019>
- Scanfeld, D., Scanfeld, V., & Larson, E. L. (2010). Dissemination of health information through social networks: Twitter and antibiotics. *American Journal of Infection Control*, 38(3), 182-188. <https://doi.org/10.1016/j.ajic.2009.11.004>
- Scissors, L., Burke, M., & Wengrovitz, S. (2016). What's in a like?: Attitudes and behaviors around receiving Likes on Facebook. In *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing* (pp. 1501-1510). <https://doi.org/10.1145/2818048.2820066>
- Shahid, S., & Pelling, M. (2020). *Leaving no one behind in tomorrow's cities: Strengthening gender, intersectionality and social inclusion in the COVID-19 crisis and beyond*. <https://doi.org/10.7488/ERA/1013>

- Snelson, C. L. (2016). Qualitative and mixed methods social media research: A review of the literature. *International Journal of Qualitative Methods*, 15(1), 160940691562457. <https://doi.org/10.1177/1609406915624574>
- Stam, H. J. (2000). Theorizing health and illness: Functionalism, subjectivity and reflexivity. *Journal of Health Psychology*, 5(3), 273-283. <https://doi.org/10.1177/135910530000500309>
- Tremayne, M. (2017). The Facebook agenda: Global social media news characteristics. *American Communication Journal*, 19(1), 25-35.
- Tull, K. (2021). Social inclusion and immunisation. *Institute of Development Studies (IDS)*. <https://doi.org/10.19088/K4D.2021.025>
- Túñez-López, M., Vaz-Álvarez, M., & Fieiras-Ceide, C. (2020). COVID-19 and public service media: Impact of the pandemic on public television in Europe. *El Profesional de La Información [The Information Professional]*, e290518. <https://doi.org/10.3145/epi.2020.sep.18>
- Turcotte, J., York, C., Irving, J., Scholl, R. M., & Pingree, R. J. (2015). News recommendations from social media opinion leaders: Effects on media trust and information seeking. *Journal of Computer-Mediated Communication*, 20(5), 520-535. <https://doi.org/10.1111/jcc4.12127>
- Zheng, Y.-L., Ding, X.-R., Poon, C. C. Y., Lo, B. P. L., Zhang, H., Zhou, X.-L., Yang, G.-Z., Zhao, N., & Zhang, Y.-T. (2014). Unobtrusive sensing and wearable devices for health informatics. *IEEE Transactions on Biomedical Engineering*, 61(5), 1538-1554. <https://doi.org/10.1109/TBME.2014.2309951>

