

Broadcasting the Covid-19 pandemic in Central Africa: A Content Analysis of a United Nations Peacekeeping Radio

Transmitindo sobre a pandemia do Covid-19 na África Central: Análise de conteúdo da rádio da missão de paz das Nações Unidas

Transmitiendo la pandemia del Covid-19 en África Central: Un análisis de contenido de la radio de la misión de paz de Naciones Unidas

Fabiola Ortiz dos Santos e Antonio Brasil

Abstract

Radio plays a critical role in the African continent particularly in areas with weak infrastructure, low literacy rates and extreme poverty. Amid the current crisis caused by the Covid-19 pandemic, it is opportune to analyze the role of a medium such as Guira FM in the Central African Republic. Through a minutious analysis of codes, keywords and frames, this study delved into news content produced by journalists on how this medium attempted to respond to the health crisis. It discusses the challenges of doing radio in a transitional society under a United Nations peacekeeping mission and reveals a dynamic of efforts to counter this global threat. It analyzes the concept of risk communication and problematizes the implications of a radio that is administered by the UN with the aim of evaluating its duty to public service communication.

Keywords

Pandemic; journalism; Africa; risk communication; UN.

>> **Informações adicionais:** artigo submetido em: 10/07/2020
aceito em: 28/09/2020.

>> Como citar este texto:

SANTOS, F. O.; BRASIL, A. Broadcasting the Covid-19 Pandemic in Central Africa: A Content Analysis of a United Nations Peacekeeping Radio. **Radiofonias — Revista de Estudos em Mídia Sonora**, Mariana-MG, v. 11, n. 02, p. 89-128, mai./ago. 2020.

Sobre os autores

Fabiola Ortiz dos Santos

fabiola.ortizsantos@gmail.com

<http://orcid.org/0000-0003-0308-1734>

Journalist and PhD fellow at the doctoral program MEDAS 21 – ‘Global Media: Applied Research, Improved Practice in the 21 Century’ (Erich Brost Institute for International Journalism, Dortmund) and research associate at the Institute of Communication Science in Duisburg-Essen University, Germany. She holds a MA at the Erasmus Mundus Journalism – Media and Globalization at Aarhus University (Denmark) and Swansea University (United Kingdom). BA in Journalism, at the School of Communication, Federal University of Rio de Janeiro (UFRJ), and BA in History at Rio de Janeiro State University (UERJ).

Antonio Brasil

antonibrasil@gmail.com

<http://orcid.org/0000-0001-8172-2934>

Research fellow in the Erich Brost Institute for International Journalism at TU Dortmund University, Germany. Associate Professor (retired) in the Department of Journalism at Federal University of Santa Catarina (UFSC). Holds a PhD in Information Science at the Federal University of Rio de Janeiro (UFRJ) and Master Degree in Social Anthropology at the The London School of Economics.

Resumo

O rádio desempenha um papel fundamental no continente africano em áreas onde há fraca infraestrutura, baixas taxas de alfabetização e pobreza endêmica. Dada à atual crise causada pela pandemia do Covid-19, se faz apropriado analisar o papel de um meio de comunicação como a rádio Guira FM na República Centroafricana. Por meio de uma análise detalhada de códigos, palavras-chave e enquadramentos, este estudo adentrou-se ao conteúdo noticioso produzido por jornalistas acerca de como esse meio de comunicação fez para responder à crise sanitária. O estudo discute os desafios de se fazer rádio em uma sociedade em transição no âmbito de uma missão de manutenção da paz das Nações Unidas (ONU) e revela uma dinâmica de esforços para combater essa ameaça global. Além de analisar o conceito de comunicação de risco, também problematiza as implicações de uma rádio administrada pela ONU a fim de avaliar seu papel no serviço público de comunicação.

Palavras-chave: Pandemia; jornalismo; África; comunicação de risco; ONU.

Resumen

La radio desempeña un papel fundamental en el continente africano en áreas donde hay una débil infraestructura, bajas tasas de alfabetización y pobreza endémica. Ante la crisis actual por la pandemia del Covid-19, se hace oportuno analizar el rol de un medio de comunicación como la radio Guira FM en la República Centroafricana. A través de un desglose de códigos, palabras clave y encuadres, este estudio adentró al contenido noticioso producido por periodistas de como este medio de comunicación hizo para responder a la crisis sanitaria. El estudio discute los desafíos de hacer radio en una sociedad en transición bajo una misión de paz de las Naciones Unidas (ONU) y revela una dinámica de esfuerzos para contrarrestar esta amenaza global. Además, analiza el concepto de comunicación de riesgo y problematiza las implicaciones de una radio administrada por la ONU con el fin de evaluar su papel en el servicio público de comunicación..

Palabras clave: Pandemia; periodismo; África; comunicación de riesgo; ONU.

1. Introduction

As a trusted source of information, radio plays a critical role for creating a sense of cooperative resilience among communities. Amid times of emergencies, individuals and social groups rely on radio for essential information and guidance. In countries with weak infrastructure and low literacy rates, radio has the greatest reach.

This study aims at problematizing the challenges of doing radio in transitional societies under peacekeeping missions towards a pandemic sensitive journalism. It looks particularly at communicating risk in times of Covid-19. By performing a content analysis of a United Nation sponsored radio, Guira FM, in the Central African Republic (CAR), this paper assesses the role of a UN media and its duty to public service communication during the coronavirus pandemic.

With a population of five million people, Central African Republic is a landlocked country surrounded by South Sudan, Sudan, Chad, Cameroon, Republic of Congo and, on the other southern margin of the Oubangui River, the Democratic Republic of Congo. It remains one of the world's most silent health crises (WHO, [s.d.]). Since its independence (1960) from France, it has had few democratic transfers of power (notably in 1993 and 2016, after a long period of *coups d'État* and a civil war in between) with elections mainly organized by the United Nations.

Over the last two decades, the country hosted a succession of UN and regional peace missions and military interventions. The current UN mission was deployed after rebels seized power in 2013 overthrowing the former president François Bozize and forcing him to flee (DW, 2013; KÄIHKÖ; UTAS, 2014). On February 6, 2019, the current CAR's government led by Faustin Archange Touadera signed in Khartoum a peace agreement with 14 armed groups. Seven other deals had been signed and eventually collapsed in the last few years.

Although Africa's handling of the pandemic has received scarce global attention in the international media, experts have warned that the virus may ravage countries with weak health systems and with a population disproportionately affected by infectious diseases (NORDLING, 2020). The antecedents of conflict and extreme poverty make some African countries particularly vulnerable to a health emergency.

The first confirmed case of Covid-19 in CAR was announced in March 14, 2020. By early July 2020 the number of cases reached 3,969 and 48 deaths¹. Although the figures do not appear impressive, the situation is aggravated by the weak medical system with only three ventilators and poor intensive care (MACLEAN; MARKS, 2020; NRC, 2020).

By analyzing the evening newscast for two consecutive weeks in April 2020, this study scrutinized Guira's news coverage during the pandemic. The research question posed is 'What was Guira's news coverage during the Covid-19 pandemic in CAR?' with its sub-questions: (1.1) What were the main headlines about?, (1.2) Who were the main actors in the newscasts?, (1.3) What was the construction of the newscasts and how did the newscasts inform about halting the spread of the virus?, (1.4) What were the main frames?

The next sections review the literature of radio in times of crisis and past experiences of broadcasting health through the airwaves, as well as introduce the UN's role in setting peacekeeping radios. Additionally, communicating risk and framing a pandemic are also

¹ (MINISTÈRE DE LA SANTÉ ET DE LA POPULATION, 2020)

approached in the discussion. Four types of risk framing are outlined forming the basis for the content analysis. Additionally, an extra section offers a glimpse of the peacekeeping context in the Central African Republic and on the creation of the United Nations Radio Guira.

Broadcasting Health Through Radio

Scholarly research has shown that radio carries the potential to reach large populations and could be a useful and powerful instrument for a crisis response. Establishing communication and access to reliable information have the potential to facilitate health recovery and reduce mortality after disasters (HUGELIUS; ADAMS; ROMO-MURPHY, 2019, p. 8).

During the Ebola crisis in Western Africa, radio was used to inform listeners about symptoms, personal protection and preventive measures (HUGELIUS; ADAMS; ROMO-MURPHY, 2019, p. 8). As such, radio is a tool to reduce stress and contribute to advise on how to cope. The use of "humanitarian radio" has proved to be important source of information and support after a disaster, as well as in situations where all other means of communication are lost (HUGELIUS; ADAMS; ROMO-MURPHY, 2019).

Five evidence-based principles for psychosocial support suggest that radio may foster the promotion of *i) a sense of safety; ii) calmness, iii) of self- and community efficacy, iv) connectedness and v) hope* (HOBFOLL et al., 2007; HUGELIUS; ADAMS; ROMO-MURPHY, 2019). Hobfoll et al. (2007) identified these intervention principles as guiding values to inform on prevention efforts at the early and mid-term stages:

By providing information about what has happened and advising people on how to stay safe, radio can enhance a sense of safety. Information itself is a well-known factor contributing to the creation of feelings of control and clarity (...). Radio contributes to all this by providing information, reporting on the authorities' abilities to manage the situation. (HUGELIUS; ADAMS; ROMO-MURPHY, 2019, p. 7).

In order to enhance the best practices of using radio as an effective health response intervention, Hugelius et al. highlighted in a review the need for close cooperation among local authorities, the radio provider and health professionals (HUGELIUS; ADAMS; ROMO-MURPHY, 2019, p. 8).

Mass media campaigns have long been a tool for promoting public health concerns and, particularly, the use of radio as a vehicle of empowerment has gained intellectual distinction and prominence. Radio is perceived to be a powerful medium in involving target audiences in relation to essential matters of health. According to Crisell (1994), ra-

radio's enduring power as a mass medium stems from its "unique combination of suggestiveness and flexibility" upon the listener's imagination coupled with the idea that it can accompany the listener in a range of other activities s/he may wish to perform (CRISELL, 1994, p.14). It is largely upon the listener's aptitude to imagine the facts and subjects that the radio's typical sense of "personal companionship" relies, since we hear not only the descriptions and sounds of the world but also the voices of the persons who are describing them (CRISELL, 1994, p.10). By communicating through only one of our five senses, radio strives to constantly catch the listener's attention.

In certain cases, this medium is capable of covering events which would be overlooked by the print press or by television "on the grounds that for all their news-value they are not worth sending a camera crew out for, yet could not be broadcast without some visual accompaniment" (CRISELL, 1994, p. 125). Thus, for Crisell, radio can forge a connection between events and audiences more rapidly than any other medium can.

A major concern of media studies, stressed Barnard (2000) is how the various mass communications media represent their audience. As representation has a double meaning, it may imply that the medium speaks and acts on behalf of their listeners, but it also means "re-presentation" in the sense of presenting to the audience a picture of itself (BARNARD, 2000, p. 222).

It is known that the mass media can inform about health and disease. Nonetheless, providing knowledge does not necessarily alter attitudes and habits, as individuals must be made to "desire change" in order to bring about transformation in their actions, discussed Epstein, Magrowski and McPhail (1975) who pioneered in the evaluation of health message effectiveness in changing health attitudes and habits. "People learn best what they believe they need to know", they stressed, thus, the importance of arousing interest and directing the recognition of needs of the individual (EPSTEIN, MAGROWSKI, MCPHAIL 1975, p. 396). The authors suggested three ways of inducing attitudes: either by relating a current specific situation to past experience and giving it meaning; or by creating identification with persons or groups; or even by shaping the formation of attitudes that a person uses in protecting her/his sense of adequacy. "These attitudes can affect perception, rational thinking, learning and forgetting" (EPSTEIN, MAGROWSKI, MCPHAIL 1975, p. 396).

Therefore, Epstein et al. indicated methods that could be used to influence human learning and health actions, as such: airing programs which demand changes in knowledge, attitudes and behaviour (e.g., immunization programs); programs which provide

information for people to make their own evaluations and judgements; and self-directed learning situations like in community groups (EPSTEIN, MAGROWSKI, MCPHAIL 1975, p. 396). "To be successful public health announcements must manipulate human motives and desires to develop a need for goals with which the individual has previously not been familiar" (EPSTEIN, MAGROWSKI, MCPHAIL 1975, p. 397). Additionally, in the authors' view, communication could strengthen the acceptance of new opinions or actions, but if excessive levels of anxiety are awakened and the suggestions are not perceived as sufficient to meet the threat, "the attempted persuasion will be ineffective", pondered (EPSTEIN, MAGROWSKI, MCPHAIL 1975, p. 397). In order to be effective, the communication must be perceived as sufficient to meet the threat and alleviate the tension.

Previous studies conducted on health education have demonstrated that broadcast media has the potential of shaping people's identity and to make them adopt health protective behaviours (ABROMS; MAIBACH, 2008; AGHA, 2003; AL-HASSAN; ANDANI; ABDUL-MALIK, 2011; GODWYLL; NGUMBI, 2009; JANES; MARQUES, 2013; NOAR, 2006; NYAWASHA; CHIPUNZA, 2015; SCHROEDER, 2016; SINGH; RABINDRANATH; SINGH, 2017; WATERS; JAMES; DARBY, 2011).

Public health experts have identified unique advantages of using radio as a vehicle for health promotion and one common asset is its capacity to reach a wider audience than any other medium of behaviour change communication. It can directly attain those who might not have access to health information and facilities due to cost or distance and, most notably, it is an interactive medium encouraging constant dialogue and discussion even after the broadcast. These discussions are often associated with a change in attitude and behaviour, as stressed Nyawasha (2015) in a study that assessed the relevance and effectiveness of radio broadcasting as a strategy facilitating the adoption and use of safer sexual practices among students at a South African university. The paper assessed the relationship between exposure to radio broadcasting messages and the adoption of safer sexual practices suggesting that broadcasting in the university could be instrumental in promoting HIV/AIDS awareness and education. The building of disease awareness and knowledge is among the key factors that underlie and define radio broadcasting efficacy (NYAWASHA, 2015, p. 234).

For radio messages to be efficacious, they need to reflect the real situation of the target audience, argued Godwyll and Ngumbi (2009) in a study that problematized the health education messages concerning HIV/AIDS in sub-Saharan Africa. The study chal-

lenged the top-down method of disseminating health information and further advised for a more culturally sensitive and bottom-up approach.

If radio messages or programs do not reflect real situation of the target group, they will be treated as “fiction” since the audience will not be able to relate to them (IDEM, 2009, p. 82). Health promotion may incur the risk that the audience may not identify the real-life threatening issues and, thus, the need to change their behavior. “Messages and programs are required to model behavior change, show the benefits to the listeners of behavior change and raise their motivation to change within their own social-cultural context” (Ibidem). Nonetheless, Godwyll and Ngumbi contended that some radio programs in parts of Africa are not “tailor-made” for social groups and messages are often “too unusual, too unfamiliar, too culturally irrelevant, or too novel” for this population (GODWYLL; NGUMBI, 2009, p. 82).

Abroms and Maibach (2008) are among the scholars in favour of the potential of communication interventions to change public behavior and promote public health. They hold the view that media can influence change in behavior and attitudes at different levels: on the individual, at the individual’s social network and at a community level. “Compelling evidence demonstrates that being embedded in a large social network positively affects health” (ABROMS; MAIBACH, 2008, p. 223). The use of mass media aiming at stimulating interpersonal communication, for instance, encouraging members of social networks who are exposed to a campaign to discuss the topics of the campaign in their social surrounding and, so, passing on and enlarging the health information is one strategy to be implemented. “Campaigns that can stimulate interpersonal communication about the campaign topic generate larger behavior change effects” (ABROMS; MAIBACH, 2008, p. 224). The use of media for campaigns to influence community level usually aspires to adjust “perceived social norms” (ABROMS; MAIBACH, 2008, p. 225).

In a study to determine whether an AIDS prevention mass media campaign influenced risk perception and self-efficacy, Agha (2003) suggested there is a strong correlation between exposure to media messages transmitted through radio and behavior change. According to this study, participants exposed to branded advertising messages were more likely to consider themselves at higher risk of acquiring HIV and to believe in the severity of AIDS. Whereas, exposure to generic advertising messages was less frequently associated with positive health beliefs and these relationships were also weaker (AGHA, 2003, p. 749).

Mass media campaign serves as a compelling health communication intervention tool that may potentially address health attitudes, behavioral change and create aware-

ness across numerous health problems and audiences, agreed Noar (2006, p. 22) and Mamun-ur-Rashid (2019). And due to its intimate community orientation, radio is a valuable tool in facilitating and encouraging social change.

Public health interventions often take the form of media campaigns, to spread awareness and inform the population of risk factors, prevention methods, and treatment options, affirmed Schroeder (2016) pointing to radio as an effective medium of communication for these messages, particularly because it is the most accessible form of media in many countries in Sub-Saharan Africa since newer types of media are simply unaffordable for most of the population. Among the various mediums for health campaigns, radio programs tend to have the most widespread impact in terms of the amount of audience reached (SCHROEDER, 2016, p. 2–3).

The importance of communicating risk via community radio interaction was described by Janes and Marques (2013) in a study that analyzed how the communication of public health risks took place. It assessed the influence of these messages on the listener's lives through community broadcasting in the Brazilian province of Sao Paulo. It concluded that community radios can be a space for communication on public health, using "edu-communicative processes" that may play an educational role in the community, as well as encourage the communication of health risks in a dynamic and democratic way (JANES; MARQUES, 2013, p. 70). Hence, combining education and communication is an efficient form of mediating the processes of protection from health risks.

Radio stations that try to remain a-political and non-partisan, particularly in conflict prone areas have greater impact in delivery of services, stated Al-hassan, Andani and Abdul-Malik (2011, p. 5) in their paper that examined the role of community radio in improving livelihood of the people in the Tolon-Kumbungu District of the Northern Ghana. A radio in a community enables the promotion of awareness of social groups as well as it provides the avenue for the community empowerment to use radio and to speak directly to the community members (AL-HASSAN; ANDANI; ABDUL-MALIK, 2011, p. 2).

Despite the above mentioned evidence, local media is still an under-utilized tool in public health strategies, according to Internews (2011), a US-based international non-profit organization working in the field of media sector development. Establishing, supporting, and enhancing local information platforms can contribute significantly to health-seeking behavior and community mobilization around health issues to ensure free, easy access to quality health information so that individuals, communities, and gov-

ernments can make informed decisions to protect, improve, and save lives, informed the organization in a report. Public health policy and health-related attitudes are largely influenced by local media coverage, but "little has been done within the public health framework to develop capacity of local media professionals to report on health in an informed and appropriate manner", discussed the report (INTERNEWS, 2011).

Additionally, Waters, James and Darby (2011) agreed that community radios have proved to be a valuable tool in facilitating and encouraging development and social change. By producing programs that are community focussed and relevant, they are able to address community specific issues and concerns. "Local voices airing local opinions about local issues and generating community relevant solutions through dialogue is a key feature and purpose of community radio" (WATERS; JAMES; DARBY, 2011, p. 2). Journalists have a very important role to play as issues of public concern take on new dimensions during the pandemic of the new coronavirus. The outbreak of Covid-19 has tested radio stations' resilience everywhere, discussed Myers, Harford, Ssemakula (2020) who conducted a recent research project at the Center for International Media Assistance (MYERS; HARFORD, 2020) on radio financial sustainability in Africa profiling eight small and independent radio stations in Uganda and Zambia.

With a 'temporary' characteristic, stories are often broadcasted on air only once, and if the listener finds the information confused or misses a point, it might not be easy to get explanation afterwards. Radio news or reports need to write clear and use simple words, expressed Singh, Singh and Rabindranath (2017), having their presenters and reporters taking a great care while speaking. Particularly in news on health and hygiene where it lies the importance of using techniques to make the readers familiarize with the health information. Health awareness will make people well conscious of the benefits of such information and make them understand to follow some of the given ideas, as discussed Singh, Singh and Rabindranath:

In giving health messages through radio, it requires a good convincing communication medium. Lack of appropriate information on health care among public is also one factor that delays achieving the goal of public health care. (...) Health information based on the facts that are concluded after careful study of everyday lives of their target groups and environment are undoubtedly quite successful. (...) In health awareness campaign too, the news-value of the information with practical solutions within the reach of the common people should be kept in mind before broadcasting. (SINGH; RABINDRANATH; SINGH, 2017, p. 365).

In order to popularize health news just like social, political or sport news, a radio house should be imbued with an obligation to include a health section in its grid, oriented Singh et al. (2017). The benefits of the health information provided by the radio may have, on the first sight, little impact but regular and frequent input of health information may ultimately serve as a companion in achieving success in delivering health messages to masses. In other words, regular supply of health news in communities might make people become accustomed to the benefits of health awareness (SINGH; RABINDRANATH; SINGH, 2017, p. 365).

After discussing the academic literature and practitioners' experience on broadcasting health, the following section will touch upon the role played by the United Nations sponsored radios in peacekeeping contexts.

United Nations Peacekeeping Radios

Since the 1980s, United Nations peace missions have habitually created local radio stations that happened to become over the years pronounced national broadcasters in countries where they were set up. Every UN mission has a 'Public Information Office' and a radio unit with roles that include informing and facilitating international news coverage of the mission and disseminating the UN mandate information to the local population (BETZ, 2015, p. 163).

The inclusion of public information campaigns as a strategic component represented the new requirements for peacekeeping operations in the 1990s (LEHMANN, 1999). A viable public information program has become an imperative for a healthy function of a peace mission. Running "proactive radio programs" would be desirable in order to develop effective information strategies (LEHMANN, 1999, p. 151).

Peacekeepers' basic purpose is to bring about peace and reconciliation between warring parties. Peacekeeping has been defined by various scholars, practitioners, and concerned organizations (BOUTROS BOUTROS GHALI, 1992; BURES, 2007; HOWARD, 2019; RAMSBOTHAM; WOODHOUSE, 1999; UN, 2008). Over the years, peacekeeping evolved from a "primarily military model of observing" ceasefires to incorporating complex elements such as military, police and civilians that work together to create the foundations for sustainable peace (Ibidem). As stated in the *Agenda for Peace* by the former UN Secretary General Boutros Boutros-Ghali (1992):

(...) peacekeeping is the deployment of a UN presence in the field, hitherto with the consent of all the parties concerned, normally involving United Nations military and/or police personnel and frequently civilians as well. (BOUTROS BOUTROS GHALI, 1992, paragraph 20).

As a tool for maintaining international peace and security, UN peacekeeping operations are guided by the principles of consentment of the parties, impartiality and the non-use of force, except in self-defense and in defense of the mandate (UN, 2008, p. 31). They are responsible for observing ceasefires and organizing troop demobilization, but also for monitoring and protecting human rights, providing "humanitarian aid, retraining troops, reforming military and police forces, protecting civilians, reforming legal systems, assisting in economic reconstruction, and sometimes administering the entire state until a new government can take over" (HOWARD, 2019, p. 5–6).

In the absence of a set up media landscapes, UN-produced content has sometimes served as the "only reliable source of information" for local population (BETZ, 2015, p. 163) such as UN Radio Miraya in South Sudan and Radio Okapi in the Democratic Republic of Congo. Over the years, UN radios transcended their traditional public information role shifting towards delivering news and providing space for live dialogue with the country's leadership and its citizens. In some cases, a dual role is played by the UN radio – public diplomacy or public information coupled with news broadcasting (BETZ, 2015, p. 172).

Most UN agreements regarding the use of radio frequencies and broadcasting are negotiated once the mission is in fact established on the ground indicating that there is a lack of long-term planning when it comes to improving the country's media scenario (ORME, 2010, p. 8). Running a radio station should be considered as "legitimate" as deploying troops, Orme stressed (2010, p. 19).

Amid the coronavirus crisis, the UN peacekeeping missions have ventured in offering vital services through their radios ranging from sharing vital health information about COVID-19 to providing educational programmes during school closures (DEPARTMENT OF GLOBAL COMMUNICATION, UNITED NATIONS, 2020). They are striving to deliver Covid-19 information to vulnerable communities in conflict-affected countries.

Providing accurate and timely information to the public and media about the UN's role in Covid-19 prevention and preparedness and the impact on UN personnel and activities in the country is an operational necessity and fundamental to fighting the disease (UNRIC, 2020).

These stations have played the role of getting the word out to vulnerable communities in conflict-affected states about the pandemic and how people can protect themselves and others from getting the disease. Responding to a request from the government, the UN Radio Okapi in the Democratic Republic of the Congo, for example, has become the first media outlet throughout the missions and nationwide to provide education via radio. The Congo-based radio launched classes on air aimed at 22 million children who are at home due to Covid-19 – two to three hours a day of classes are aired on the main primary cycle subjects, including Math, French, reading and writing, health and environmental education and hygiene. In South Sudan, UN Radio Miraya is likewise helping the country's awareness-raising campaign. It also begun broadcasting lessons in support of a remote learning initiative developed in cooperation with the country's Ministry of General Education and UNICEF.

Communicating Risk

We turn now to discuss crisis and risk communication in the face of extreme and sudden danger. Since its origins in the late 1980s, risk communication practice has gained a better understanding of its goals, as stressed Leiss (2004). A good risk communication practice tries to address “divisions between experts and the public” in order to facilitate an informed understanding of the risks (LEISS, 2004, p. 403).

As Powell and Leiss (LEISS, 2004; POWELL; LEISS, 1997) define, risk communication is the process of communicating “responsibly and effectively about the risk factors” that are related to industrial technologies, natural hazards, and human activities. For Lundgren and McMakin (2018), understanding the context and facilitating an exchange of information, attitudes, values, and perceptions in both directions can help build better risk decisions (LUNDGREN; MCKAMIN, 2018, p. 16).

The understanding of risk in this paper is informed by the risk society approach from the work of the German sociologist Ulrich Beck (1992, 2006). Risks can be “changed, magnified, dramatized or minimized within knowledge” (BECK, 1992, p. 22–23). Media, scientific and legal professions are the ones responsible for defining risks that have now become “key social and political positions” (Ibidem). In Beck's view, risks take “symbolic forms” once they are shaped by media that employs certain types of “techniques of visualization” (BECK, 2006, p. 332).

The experience of global risks represents a “shock for the whole of humanity,” as

preconized Beck since they “tear down national boundaries” (2006, p. 330-331). Modern society has become a risk society in the sense that it is more and more occupied with “debating, preventing and managing risks that it itself has produced” (BECK, 2006, p. 332). Risks would mean the anticipation of catastrophe, since they are threatening events and as the moment they become reality, they “cease to be risks and become catastrophes” (BECK, 2006, p. 332).

An example of anticipating catastrophes is the warning done by a group of infectologists in Hong Kong in 2007 regarding the presence of a “large reservoir of SARS-CoV-like viruses in horseshoe bats, together with the culture of eating exotic mammals in southern China” (CHENG et al., 2007). They alerted what could be a “time bomb” with the possibility of the re-emergence of SARS and other new viruses from animals or laboratories and, thus, recommended that the “need for preparedness should not be ignored” (CHENG et al, 2007).

Perceptions of global risk can be characterized by features of “de-localization” of its causes and consequences (not being limited to one geographical location or space); “incalculableness” of its consequences; and “non-compensability” (BECK, 2006, p. 333–334). Within this framework, it is important to note that risk does not exist independently of observation but is socially constructed and a mediated cultural product (MCINNES; ROEMER-MAHLER, 2017, p. 1320). Portraying a health issue as a global risk means a construction of the issue as a “policy problem” with a set of “policy responses” (MCINNES; ROEMER-MAHLER, 2017, p. 1321).

For Beck, some groups of people are more affected than others due to unequal distribution of wealth and growth of risks – since risks produce new international inequalities between what he calls the “Third World” and the “industrial states”, and among the industrial states themselves (BECK, 1992, p. 23). What thus emerges in risk society, according to Beck, is the “political potential of catastrophes” producing a reorganization of power and authority (BECK, 1992, p. 24).

The new coronavirus outbreak has shown that risk society leads to a vulnerable society (SADATI; B LANKARANI; BAGHERI LANKARANI, 2020). In here, risk communication holds a central position in the contemporary public debate as risks are mainly communicated by government agencies, media and social networks that inform how to avoid behavior or how to adopt certain habits (NIHLÉN FAHLQUIST, 2019, p. 111).

Within this scholarly field, risk communication is developed in three phases, (LEISS,

2004; NIHLÉN FAHLQUIST, 2019; POWELL; LEISS, 1997) having the first a form of education where the public should be informed about risk estimates (NIHLÉN FAHLQUIST, 2019, p. 112). In a second phase, the risk communication is transformed into a “marketing practice” with the objective of persuading people to adopt a certain message. In this phase two, the marketing-based communications would attempt to “make unpalatable risk messages acceptable” (POWELL; LEISS, 1997, p. 212). The third phase acknowledges the need for a long-term “institutional commitment” to developing and applying “good risk communication practices” (POWELL; LEISS, 1997, p. 212). It is viewed as a participatory practice which the gap between experts and lay people is bridged (NIHLÉN FAHLQUIST, 2019; POWELL; LEISS, 1997).

How risks are presented or framed in messages have implications on how the audience is affected, argued Fahlquist (2019). One important decision when shaping a risk message is whether it aims at convincing people to behave in a specific way, or whether it should present options for action with “pros and cons” depending on the level of urgency (FAHLQUIST, 2019, p. 116).

Lundgren and McMakin (2018) identified roles of news media in risk communication that embodied the reporting of existing information; the influencing of the way an issue is portrayed; independently bringing an issue to the public’s attention or restricting its coverage; and proposing solutions to a risk-related decision, including taking a stand on an issue (LUNDGREN; MCKIN, 2018, p. 260).

When a crisis presents imminent danger, journalists begin reporting on existing information to warn the public quickly enough. At a later stage, media organizations may turn to a more “investigative role” as an attempt to reveal the factors that led to the crisis. Such role may involve working with official investigating organizations, citizens’ groups, and policy makers to portray a more complete landscape of the risk, its causes, and potential solutions (LUNDGREN; MCKIN, 2018, p. 260). It is during a crisis that media’s influence has become important and, under harsh conditions, society and their citizens find themselves at the peak of their “dependency on mediated communication”. In those occasions, the media are prone to be “supportive of the authority’s efforts” and likely to mute possible criticisms (NEUWIRTH, KURT., 2008, p. 406).

Framing Pandemic as Risk

Global health issues and particularly risks from disease outbreaks have gained

prominence on the international political agenda in the last two decades (MCINNES; ROEMER-MAHLER, 2017, p. 1316). Communicable diseases are considered threats requiring responses that move outside the “realm of normal politics”, as McInnes and Roemer-Mahler evidenced during the west African Ebola outbreak of 2014-15 – “from the closing of borders, restrictions on travel and imposition of curfews to the deployment of militaries and other security personnel” (MCINNES; ROEMER-MAHLER, 2017, p. 1314). The Ebola crisis implied a threat to international peace and security. The authors also revealed abrupt differences in how vulnerable populations were to become infected and the unequal access to treatment during the HIV/AIDS epidemic. Both health crisis, Ebola and Aids, were portrayed as risk to global stability and security (MCINNES; ROEMER-MAHLER, 2017, p. 1317–1318). This paper draws from the study of McInnes and Roemer-Mahler that looked at how international organizations frame risk in different ways. In their definition:

Framing provides an analytical tool to highlight the fact that health is a political space: framings are driven at least partly by strategic interests and compete for resources over how to respond and whose interests to privilege over others.” (MCINNES; ROEMER-MAHLER, 2017, p. 1331).

Four types of risk related framings are outlined and used in this study on the UN Radio Guira coverage in relation to the pandemic: biomedical, security, economic and rights. The risk frame allows to place health issues in a wider context “where disease is just one of a number of concurrent dangers rather than a separately identifiable hazard” (MCINNES; ROEMER-MAHLER, 2017, p. 1336).

The biomedical frame focuses on the spread of the disease and on the suffering of patients. It offers pathways of response based on prevention, containment and treatment (MCINNES; ROEMER-MAHLER 2017, p. 1330). Framing risk in terms of security refers to the risk of a state failure, and threat to international peace and stability in a particular region. “Epidemics may threaten the social contract, when governments are unable to provide protection for their citizens; and new diseases may provoke widespread fear in society” (MCINNES; ROEMER-MAHLER 2017, p. 1330). The economic frame warns to a “potentially catastrophic blow” to economies in an already weak region. Lastly, the rights frame is based on the idea of a risk to “the enjoyment of the highest attainable standard of health,” as preconize the World Health Organization constitution (WHO, 2006) and that how poor health may lead to discrimination and increase of social inequalities.

Radio Guira in Central African Republic

The privately-owned press first appeared in Central African Republic in 1991 when the political scene was being liberalized (FRÈRE; MARTHOZ, 2007, p. 135). In the 2000s, population outside the capital Bangui was completely neglected because none of the media had the technical and financial resources to maintain correspondents in the rest of the country (FRÈRE; MARTHOZ, 2007, p. 146).

The UN Multidimensional Integrated Stabilization Mission (MINUSCA) was created through the UN Security Council Resolution 2149 (UNSCR, 2014) that authorized the deployment of more than 10,000 peacekeepers in the country. The mandate is to protect civilians and to support the political process and restoration of the State authority.

Launched in September 2014 and based in the capital Bangui few months after the official creation of MINUSCA, Radio Guira aims at providing coverage to more than 80% of the population broadcasting 24/7 news programs, features, talk shows, magazines, radio spots and music, according to the radio's statement (MINUSCA, 2015a, 2015b). Guira is staffed by twenty journalists and its mission is to support and promote the peace process, accompany the elections and restoration of state authority and become an instrument of peace, as described in the UN website. Its editorial charter indicates that the outlet is committed to fair, balanced and accurate news and information and freedom of the press with programs aired in French and in Sango devoted to themes related to peace, reconciliation, human rights and protection of civilians.

A Content Analysis of Guira's Evening Newscasts

This section describes the methodology that guided the process of the content analysis with its coding scheme performed with the software MAXQDA. The purpose of content analysis is to identify and count the occurrence of characteristics and dimensions of a media text and, through this, problematize the messages and representations in a wider social implication (HANSEN; MACHIN, 2013, p. 89). The chore of content analysis is to examine a sample of media and to classify it according to a number of predetermined dimensions (HANSEN; MACHIN, 2013, p. 98).

For the purpose of this study, two consecutive weeks of the UN Guira evening's newscast (*Journal de la Soirée*) were collected in April 2020 (from 6 to 17 April), a total of ten newscasts were transcribed (exception of the weekend 11-12 April). A 'Code Book' was created deductively and done in two layers of coding.

It was not possible to obtain the whole programs of the grid due to the difficulty to access Guira's content. A decision was taken to investigate only the main daily newscast. The sample for the analysis only included the news broadcasted in French and not the one in Sango – they are supposed to offer the same news content – and for a limited timeframe in April, when the number of Covid-19 confirmed cases was still small. Although widely accepted the content analysis as a method, a critical discourse analysis could have been applied in the sample so as to deeper in the analysis of power relations. For a bigger and wider scope, a larger sample of the newscasts could be included in the future from the consecutive months following the pandemic to keep track of the evolution of the coverage. Future research could enlarge the size of the samples and vary the methods of analysis.

Actors, Action and Knowledge

The first layer of coding was grouped around three key labels: 'Action,' 'Actors,'² and 'Knowledge' with each one assembling subcodes. The code 'Action' denotes the type of action that was undertaken or encouraged by the speaker (either the anchor of the newscast, the reporters, or the interviewees) with the following subcodes: 'Creating trust' with expressions that pointed to building confidence with the listeners; 'Persuading people' that indicates persuasion; 'Education for behavior change' with expressions pointing to an educative action; 'Participatory Practice' with phrases that stressed the intention to bridge a gap between experts, authorities, people, and communities; and 'Recommendations' denoting what should be done about an event.

The code 'Actors' indicated the categories of sources involved (quoted or referred to) in the newscast. It assembled the following subcodes: 'Armed Groups and Armed Force' including state and non-state armed groups; 'United Nations' embracing UN agencies, peace operation, and UN experts; 'International Organizations' as international community; 'Government, official sources, political parties' and 'Actors from Civil Society' that embrace local voices, community actors, religious figures, and press. It is noteworthy a comment about the code 'Armed Groups and Armed Force'. The armed forces are together with other categories of armed groups since there is a thin line separating the actuation and compliance with the rules of the armed contingents. While the government control area in CAR's territory is around 20%, the fourteen armed groups existent and operational in the country hold control of 80% of the territory (AMNESTY INTERNATIONAL, 2019; ISS, 2019).

² Actor here is understood as a "person engaged in action that is framed, as is all social action" (KARP, 1986, p. 137). An actor's action is rule-governed and rule-oriented. This paper acknowledges that the term actor has been institutionalized by Latour (1996, 2007). Latour (1996) defines an actor as an 'actant': "something that acts or to which activity is granted by others" (IDEM, 1996, p. 373). An actant is, thus, "any entity that acts in a plot until the attribution of a role" (LATOUR, 1994, p. 33).

The third code 'Knowledge' indicated the types of information provided by sources categorized into: 'Factual' (providing information about what happened); 'Explanatory' (why did the fact happen?); 'Descriptive' (with the description of the fact, details of what happened and what was it like to be involved in what happened?); and 'Evaluative' (with moral judgment asking if what happened was good or bad)³. A visual graphic with the first layer of codes are below (Fig.1) indicated:



Fig.1: Visual graphic (MAXQDA) on the first layer of codes

Risk Framing

The following step was to identify possible frames in the newscasts. A second layer of deductively defined codes evoked the conceptualization of news framing defined by Entman (1993)⁴. This paper draws from the study of McInnes and Roemer-Mahler (2017) that looked at how international organizations frame risk in different ways. This layer of codes grouped four main types of framing the pandemics as a global risk: Biomedical, Security, Economic, and Rights.

The framing identification was done in chunks of texts according to each headline and news items. The strategy was to detect possible frames related to the coverage of

3 (ERICSON; BARANEK; CHAN, 1991; CHAN, 1991 apud HANSEN; MACHIN, 2013, p. 100).

4 Frame is the process of organizing a news story, thematically and stylistically to fit into a specific storyline. To frame is to select aspects of an “observed reality and use them in a news content; journalists package viewpoints, quote phrases and use stereotypical images to support a specific interpretation of a news event” (ENTMAN, 1993, p. 52) so as to promote a particular definition of a problem, a causal interpretation and a moral evaluation.

the pandemic and subjacent issues. It was possible that a portion of text had more than one subcode within a same frame and that subcodes from different frames overlapped.

The Biomedical frame gathered six subcodes: informing about the 'Nature and spread of the disease and risk of contamination'; description of 'Suffering of patients'; information about 'Pathway of response: prevention, behavior change'; 'Pathway of response: treatment'; information about the 'Health system'; and 'Shortage of (health/ medical/ material/ general) resource'.

The Security frame had four subcodes: 'Risk of state failure/ outbreak of violence'; 'Threat to peace'; acting '(against) Rumors, misinformation, fake news'; and 'Transparency (holding Government accountable)'.

The Economic frame embodied five subcodes: 'Warning to economic impact of development'; information on 'Lost productivity, loss of jobs, lack of workforce'; 'Reduced investment in areas affected by a disease'; 'Need for investment'; and information on 'Travel/ mobility restrictions'.

Finally, the Rights frame grouped three subcodes: the need to 'Safeguarding rights (prisoners/ workers/ citizens/ etc)'; 'Humanitarian dimensions'; and 'Impact on women and children'. The daily section of newscasts on Sports did not fit in any particular frame. '*La Page de Sport*' informs the latest news related to the operations of sports' clubs during the pandemic. It suited in the Rights frame since sports may be seen as condition for the exercise of human rights (UNESCO, 2015)⁵. A visual graphic with the frames and the second layer of codes are below (Fig.2) indicated:

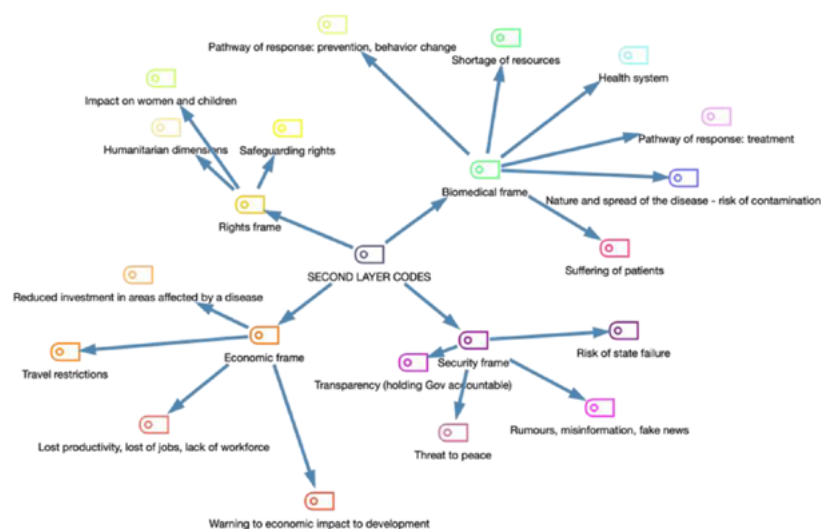


Fig.2: Visual graphic (MAXQDA) on frames, the second layer of codes.

⁵ As informed in the 2015 International Charter of Physical Education, Physical Activity and Sport, on Articles 1, 9 and 11, the practice of physical education, physical activity and sport are a fundamental right for all. Safety and the management of risk are necessary conditions of quality provision.

The next section discusses the findings of the variables and frames and gives a closer look at the language and structure of the newscasts.

Findings and Data Analysis

1 - Variables and Frames

The evening newscasts are the main news program at Guira's grid. The ten newscasts sum up two hours and 22 minutes, an average of 14 minutes for each program. Each newscast had an average of six headlines per broadcast. In total, there were 41 standalones interviews (average of four per program) lasting in total 1 hour and 16 minutes with an average of less than two minutes (00:01:52) per interview. The 41 pre-recorded interviews account for half of the total newscasts. Four of them reproduced public speech of authorities (either governmental or international public figures), and two others were on the format of Vox Populi, interviewing randomly the population and assembling them in a block of soundbites. The final interview of the program is a Question and Answer (Q&A) format, 'Invité de la Redaction'. The ten Q&A sessions lasted in total around 46 minutes, an average of less than five minutes per program. Related to the 11 reportage that were aired (on a format of the reporter's voice over and soundbites), only two newscasts did not broadcast any reportage, three aired two reportage in the same newscast and five newscasts aired only one reportage with an average of one minute and a half of duration.

- **Actors**

In seven out of 10 newscasts, government, official authorities and political parties were the main actors. In only one newscast (9 April), civil society was coded more times than the official authorities and on 10 April, UN and international organizations appeared as the main actors.

The 41 interviews and 11 reportage had the government, official authorities and political parties as the main sources, counting almost half (31) of the 64 'Actors' totally coded. The rest was shared mainly among actors from civil society (15) and UN voices (11), summing both 26 times. International organizations were coded four times and three times the armed groups or armed forces (particularly the Central African Armed Force-FACA). This proportion is very similar if we only consider the 41 pre-recorded interviews without the reportage – the governmental actors summed 23 out of 43 total 'Actors' coded in the interviews; being followed by ten times coded among actors from

civil society; only four times UN voices and three times each international organizations and armed forces. The table below (Tab. 1) indicates the amount of 'Actors' coded in the 41 interviews and in the 11 reportage:

Tab. 1: 'Actors' coded in broadcasted interviews and reportage

ACTORS*	TOTAL Interviews + Reportage	ONLY Interviews
G	31	23
ACS	15	10
UN	11	4
IO	4	3
AG	3	3
Total	64	43

*G - Government and official political parties

ACS - Actors from Civil Society

IO - International Organizations and international community

UN - United Nations agencies, departments or peace operation

AG - Armed Groups and Armed Force

If we consider the 'Actors' subcodes within the whole newscast scripts, they appeared in 254 coded segments, as indicated below (Tab. 2):

Tab. 2: Coded Segments: 'Actors' throughout the newscasts

Actors	Frequency	Percentage
Actors\Government, official sources. political parties	117	46,06
Actors\Actors from civil society	49	19,29
Actors\UN	46	18,11
Actors\International organizations – NGOs, international community	27	10,63
Actors\Armed Groups, Armed Force	15	5,91
Total	254	100,00

The governmental and official actors represented almost half (46%) of the coded segments in all the ten newscasts scripts together, followed closely by actors from civil society and UN (19% and 18% respectively), and lastly NGOs and armed groups (10% and 6%, respectively). A visual chart with the proportion of the coded segments of 'Actors' is displayed below (Fig. 3):

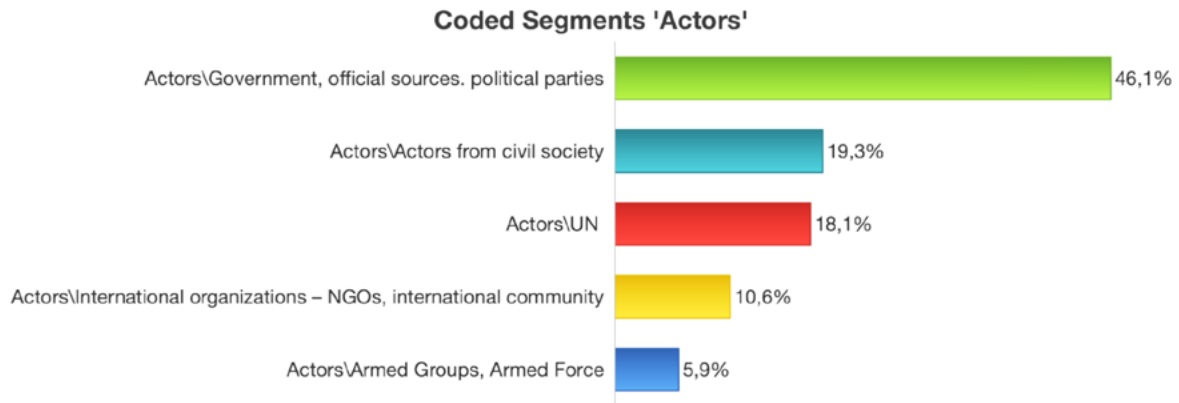


Fig. 3: Visual graphic of the proportion of 'Actors' coded throughout the newscasts.

- **Action**

Related to the group named 'Action' that denoted the type of action that was being undertaken or encouraged by the speaker (either the anchor of the newscast, the reporters, or the interviewees), the subcode 'Recommendations' (standing for the sources or journalists suggesting what could be done in relation to an event of phenomenon, particularly related to the COVID-19 pandemic) appeared thirty times, i.e. one third of the 'Action' codes (Tab. 3) in the pre-recorded interviews and reportage. It was followed by 'Education for behaviour change' (expressions that pointed that an educative action should be carried out), being coded 24 times (25%); followed by 'Persuading people' (with expressions that indicated persuasion and advice) with 20 times; eleven times of 'Creating trust' (language spoken that pointed to building trust and reliance with the listeners); and, finally 'Participatory Practice' (that stressed the intention to bridge a gap between experts, authorities and people and promote more participation within communities) was detected only eight times, appearing less than ten percent of the total 93 times in the five subcodes (Tab. 3).

In relation to solely the 41 interviews, discarding the reportage, the code system follows a similar pattern: first 'Recommendations' (almost a third, with 22 coded) followed in the second place by 'Education for behavior change' (coded 20 times); then, 'Persuading people' (18); and finally, 'Creating trust' and 'Participatory Practice' appeared only ten and seven times, respectively. As indicated in the table below (Tab. 3):

Tab. 3: ‘Action’ coded in broadcasted interviews and reportage

ACTION**	TOTAL Interviews + Reportage	ONLY Interviews
RC	30	22
ED	24	20
P	20	18
C	11	10
PP	8	7
Total	93	77

** RC - Recommendations
ED – Education for behavior change
P - Persuading people
C - Creating trust
PP - Participatory practice

If we consider the five subcodes of ‘Action’ within the whole newscast scripts, they appeared in total in 282 coded segments (Tab. 4). The subcode ‘Recommendations’ was present in all the ten newscasts individually (appearing in 87 subcoded segments), and particularly in four days (8, 10, 15 and 17 April) representing at least one third of the five subcodes in six document transcripts separately (Tab. 5).

‘Recommendations’ was regularly coded coupled with ‘Education for behavior change’ (81 coded segments) (Tab. 4). ‘Persuading people’ appeared in 62 coded segments (Tab. 4) in nine newscasts (being absent only on Monday 6 April), having prominence in six newscasts with more than 20% of the coded texts (Tab. 5). ‘Creating trust’ and ‘Participatory Practice’ were the least coded in each daily newscast with 38 and 14 coded segments respectively (Tab. 4). ‘Creating trust’ appeared with more emphasis on Monday 6 April corresponding to 60% of the coded segments, the rest of the nine newscasts it was coded an average of 13% proportionally (Tab. 5). Interesting to note that ‘Participatory Practice’ was not detected in three newscasts (6,7, 8 April) and on the other seven documents it corresponded to an average of 5% of the coded segments (Fig. 4), reaching the highest amount of coding only in April 10 with 11,8% (Tab. 5). See below the table (Tab. 4) and the visual graphic (Fig. 4) indicating the proportion of the subcodes of ‘Action’ in 282 coded segments throughout the ten newscasts:

Tab.4: Coded Segments of 'Action' throughout the newscasts

	Frequency	Percentage
Action\Recommendations	87	30,85
Action\Education for behaviour change	81	28,72
Action\Persuading people	62	21,99
Action\Creating trust	38	13,48
Action\Participatory practice	14	4,96
TOTAL	282	100,00

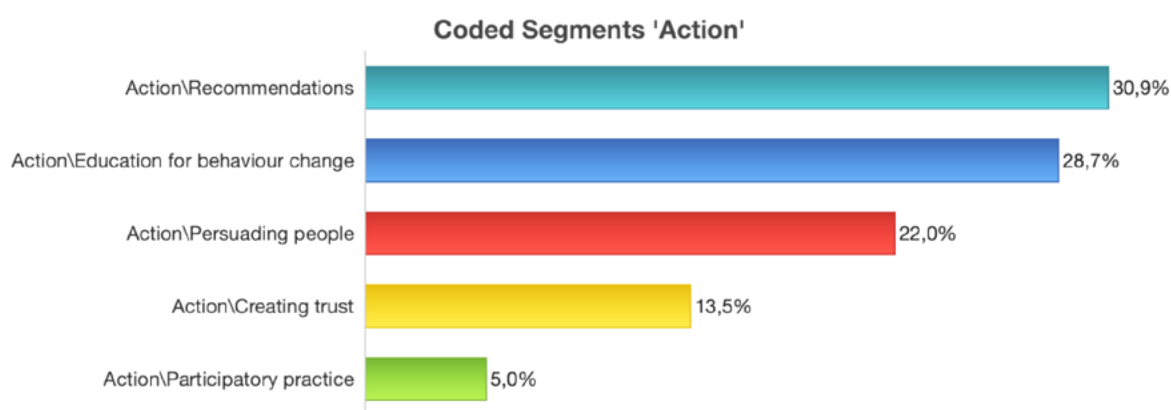


Fig. 4: Visual graphic of the proportion of 'Action' coded throughout the newscasts.

Additionally, the table (Tab. 5) below offers in more detail the proportion of the sub-codes of 'Action' detected in each daily newscast separately:

Tab. 5: Proportion of subcodes of 'Action' in each of the daily newscasts

	17 abr.	16 abr.	15 abr.	14 abr.	13 abr.	10 abr.	9 abr.	8 abr.	7 abr.	6 abr.
Creating trust	18,8%	13,9%	11,5%	29,6%	13,6%	11,8%	5,9%	15,8%	6,7%	60%
Education for behaviour change	25%	36,1%	23,1%	23,1%	31,8%	19,6%	33,3%	31,6%	36,7%	20%
Participatory practice	6,3%	2,8%	7,7%	3,8%	4,5%	11,8%	3,9%	0	0	0
Persuading people	6,3%	13,9%	34,6%	29,6%	27,3%	23,5%	23,5%	15,8%	23,3%	0
Recommendations	43,8%	33,3%	23,1%	19,2%	22,7%	33,3%	33,3%	36,8%	33,3%	20%

When we turn to analyse the co-occurrence of the 'Action' subcodes, it is observed that 'Recommendations' and 'Persuading people' appeared jointly and overlapping to-

gether with 'Education for behaviour change' that appeared in a triangle relation as we see can see in the graphic below (Fig. 5). The numbers in parenthesis are the number of coded segments, the font size reflects the frequency. 'Participatory Practice' and 'Creating Trust' appear both isolated in different edges pointing that they did not accompany any other code.

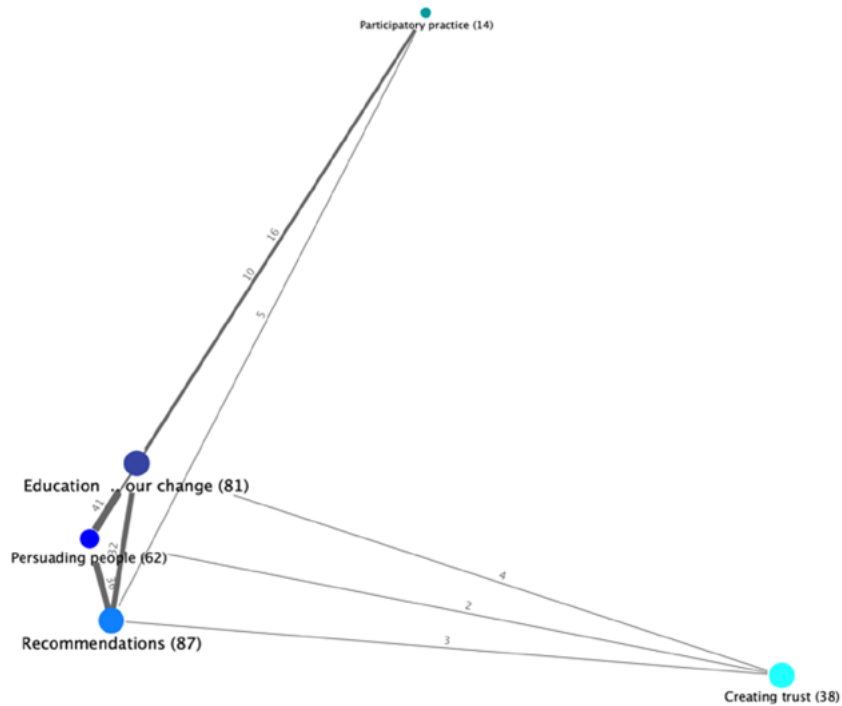


Fig. 5: Visual graphic (MAXQDA) of the co-occurrence of the 'Action' subcodes.

A reportage aired on Thursday, 16 April depicted a capacity building promoted by the Disarmament, Demobilization and Reintegration (DDR) section of MINUSCA to a dozen of members of the 'council of wise men' (conseil des sages) and agents of the municipality of Bria on measures related to the pandemic. One of the soundbites from a MINUSCA-DDR representative is an example of the three subcodes that were coded together ('Recommendations,' 'Persuading people' and 'Education for behavior change'):

“[Interviewee]: We are going to see the community leaders so that these leaders can help our emissaries with the population to tell them about this disease, and introduce barrier actions to prevent the spread (...) The barrier gestures first is to wash your hands constantly with soap and water to remove the germs or to finish in the elbow to avoid this pandemic.” (translation from the original in French)

An excerpt of fostering 'Participatory practice' can be highlighted on 13 April when

the presenter announced an activity promoted by a local youth association to campaign with the displaced people on issues concerning the COVID-19:

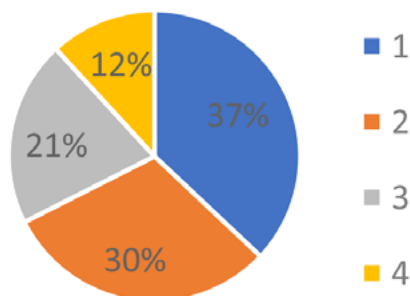
“[Presenter]: Still on the subject of combating the spread of the coronavirus, the Central African youth association for peace and development in Bambari carried out a week-end awareness campaign on the displaced persons on the sites.” (translation from the original in French).

- Risk Frames

When we turn to the four main types of risk framing, the Biomedical was the dominant representing 37% of the newscasts (97 of a total of 262 coded segments) coupled with the Rights frame (30%, 80 coded segments). Less prominent but also important was the Economic frame (around 20%) with 54 coded segments, and the less remarkable was the Security frame present in 11,8% (31 coded segments), as Tab. 6 and Fig. 6 show:

Tab. 6: Coded Segments and proportion of Frames throughout the newscasts

Frames	Frequency	Percentage
Actors\Government, official sources. political parties	117	46,06
Actors\Actors from civil society	49	19,29
Actors\UN	46	18,11
Actors\International organizations – NGOs, international community	27	10,63
Actors\Armed Groups, Armed Force	15	5,91
Total	254	100,00



1 – Biomedical / 2 – Rights / 3 – Economic / 4 – Security

Fig. 6: Visual graphic of the proportion of Frames coded throughout the newscasts.

The Biomedical frame was coded in six newscasts (7, 10, 13, 14, 15, 16 April). The Rights appeared in five programs (6, 8, 9, 10, 17 April), whereas the Economic frame

occurred with notoriety in three days (7, 8, 16 April). The Security frame was not coded in three newscasts (6, 7, 14 April) and only appeared more notably on 8, 9, 17 April. Noting that one frame does not exclude the other, and they may be overlapping on the same newscast.

The Biomedical was prominent in 26 out of 41 interviews. The second most coded frame within the interviews was the one of Rights being detected in 20 interviews. The Economic frame was coded in 16 interviews, and far off came the Security that appeared in six interviews only. The Economic tended to be associated with the notion of Rights being coded jointly.

On 6 April, the Rights frame was salient in the journalists' questions to a psycho-social assistant of a health center in the town of Bouar, who was the guest for the Q&A session. The same would go for the 14 April Q&A guest who was the head of a listening center and counselling for young people in Bouar, and the director general of arts and culture who spoke on 15 April about the importance of cultural diversity while evoking the contribution of artists and musicians in the fight against Covid-19 in the CAR.

In two occasions the Economic frame was predominant in Q&A sessions: on 8 April when the general manager of transport spoke about preventive measures taken by the authorities to reduce the number of passengers in buses, taxis and motorcycles; and on 16 April, when the invited was the manager of the agency for agricultural development, a subsidiary at the town of Bouar.

A similar phenomenon appeared in a smaller scale with the Security frame that was often detected preceding or succeeding the information on Rights. The first headline of 13 April indicates the Security frame with the subcode '(against) Rumors, misinformation, fake news':

"[Presenter] MINUSCA is intensifying the fight against the coronavirus in the CAR. It distributed last Saturday more than hundreds of radio posters to the inhabitants of Bouar and Bandoro to follow the information on the preventive measures against this pandemic." (translation from the original in French).

One of the citizens later interviewed said:

"[Voz Populi] So that Radio Guira is really making an effort to reach the rights for the entire population. So, I am very, very touched by this gesture." (translation from the original in French).

Biomedical

The Biomedical permeated all the structure of the ten newscasts analyzed, being most of the time the main narrative line, but also being present even when there were other predominant frames. It had six subcodes that appeared 144 times in the analysis. This frame is led by the subcode 'Pathway of response: prevention' (coded 84 times), followed by 'Nature and spread of the disease - risk of contamination' (30 times); and 'Shortage of (health/ medical/ material/ general) resources' (coded 19 times). 'Health system;' 'Pathway of response: treatment' and 'Suffering of patients' were inexpressive being coded only 8, 2 and 1 time, respectively.

One example of the segment with the subcode 'Pathway of response: prevention' is on 6 April, on a pre-recorded interview with the minister in charge of hydraulics where he emphasized the need for water to prevent the infection. In this interview, he announced the drilling works in the capital:

"[Interviewee]: Today the issue of prevention against COVID-19, water is at the center of it all. We are doing work in the sense that the population ... and its surroundings have access to drinking water. So, several actions are being done ... right now at the level of SODECA [Société de Distribution d'Eau en Centrafrique]. We are in the process of installing all the... pumps that have already been shipped to Bangui." (translation from the original in French).

As well as in the Q&A from 7 April when the Red Cross field delegate in Bouar:

"[Interviewee]: It must be said that this virus attacks everyone, there is no distinction of ethnicity, social class and if we do not respect the precautions emanated by the government, no one will be spared. Therefore, more than ever, the people that we attend on a daily basis need all the help possible right now and after the end of the pandemic. It is not only a health crisis, the COVID-19, but it is a crisis which touches all the facets of the society therefore we really invite everyone to be responsible for respecting the preventive measures put in place by the government." (translation from the original in French).

Rights

The Rights framing had three subcodes, the one of 'Safeguarding rights (prisoners/ workers/ citizens/ etc)' coded 33 times; whereas 'Impact on women and children' appeared 28 times and 'Humanitarian dimensions' only five times. Since there was no particular subcode for Sports, it was coded 20 times under the general 'Rights frame.'

'Safeguarding rights' is present in all the newscasts having appeared with more prominence at the first and at the final third of each emission. 'Impact on women and

children' was mainly remarked in the half portion of each emission and pointing towards the end of the newscasts. 'Humanitarian dimensions' had overall little appearance.

The subcode 'Safeguarding rights' appeared on 17 April when the presenter announced:

"[Presenter]: Prevention against the coronavirus, a team of technicians from the Justice Department and partners is reflecting on the possibility of releasing a certain number of prisoners. The goal is to unclog prisons as part of the fight against the spread of the coronavirus. Explanations with (...) Director General of Legal Services." (translation from the original in French)

'Impact on women and children' was detected on 17 April when the presenter announced an awareness campaign with women offered by MINUSCA:

"[Presenter]: Fight against the coronavirus always, this time, in Bria. Twenty women leaders are committed to fighting this pandemic. They were formed yesterday by the Gender section of MINUSCA. (...) They were informed on the origin, transmission and barrier measures to prevent this pandemic. During these two sessions, the issue of gender-based violence was also addressed" (translation from the original in French)

The subcode 'Humanitarian dimensions' appeared on the 13 April Q&A with the humanitarian coordinator and deputy special representative of the UN Secretary General in the Central African Republic:

"[Interviewee]: The UN is there, we stand in solidarity with the government, we stand in solidarity with the population and do not leave the CAR, we are going to stay and lead in this fight against the coronavirus." (translation from the original in French)

Economic

The Economic framing had five subcodes and in total 59 coded segments. 'Need for investment' was coded 23 times, followed by 'Lost productivity, loss of jobs, lack of workforce' (15 times), 'Warning to economic impact to development' (10 times). 'Reduced investment in areas affected by the disease' and 'Travel/ mobility restrictions' were not much coded, 6 and 5 times, respectively.

Particularly the subcode 'Need for investment' was detected on 16 April when the presenter announced:

"[Presenter]: The European Union grants more than thirty million euros to the country to fight against the coronavirus. The partners of the CAR are more than mobilized." (translation from the original in French)

Regarding 'Lost productivity, loss of jobs, lack of workforce,' it appeared on 7 April on a Vox Populi where sellers in the central market criticized the non-involvement of the municipality in the fight against the pandemic:

“[Vox Populi]: The coronavirus phenomenon on our activities has really overtaken us, because people do not come to buy our goods and it weighs heavily on our daily income. (...) what used to be 15 to 30 thousand francs and now it's difficult to expect 10 thousand francs as revenue per day.” (translation from the original in French)

On 'Warning to economic impact to development,' the first headline of 16 April announced by the presenter was:

“[Presenter]: Welcome to this edition, here are the titles. Rise in prices of basic necessities due to coronavirus (...) the Central African consumer continues to suffer.” (translation from the original in French)

Security

And finally, the Security framing had four subcodes coded 40 times. 'Threat to peace,' 'Transparency (holding Government accountable),' and '(against) Rumors, misinformation, fake news' were coded, 13, 12 and 11 times, respectively. 'Risk of state failure/ outbreak of violence' only appeared four times. The framing of security was detected in some of the questions posed by the journalist to the humanitarian coordinator and deputy special representative of the UN Secretary General in the CAR interviewed on 13 April:

“[Reporter]: The protection of the civilian population remains a priority for the mission, but we note that several regions of the country are today under the control of armed groups, how do you ensure the protection of this population in this context of Covid-19?”

“[Interviewee]: (...) we must not forget that the sixteen prefects are in place, the deputy prefects are in place, the general sectors are being deployed, so it's not an empty ground, we can see the presence of armed groups, but they are also armed groups that are signatories to the peace agreement that are there. It is true that there is some difficulty, especially in the North East with some armed groups that the government is managing with the ... peace agreement facilitators.” (translation from the original in French).

II – Language and Structure of the Newscasts

This section is devoted to a closer look at headlines as well as the code group of 'Knowledge' as a way of scrutinizing the structure of the narratives of the newscasts.

- **Headlines**

There were in total 54 headlines distributed in ten newscasts. Fifteen headlines depicted as the main topic the need to adopt preventive measures against the disease. In association with International and UN and related issues of Humanitarian, Politics and Economic Impact, there were 24 headlines with this approach. On the label 'preventive measures', the phrases prevention, propagation, sensitization and fight against the pandemic were very common. An example dates from 7 April, three headlines out of six in that day presented this topic:

“Coronavirus prevention at the central market in Bangui. The traders request from the town hall the suspension of tax.”

“The Bangui markets are not closed, but measures are being taken to prevent the spread of this virus in the various markets of the capital.”

“In Bria, where the head of the prefectural department for animal husbandry and health raised awareness in the city.” (translation from the original in French).

Some headlines exclusively on UN issues:

“Yao Agbetse, independent expert of the UN on human rights in CAR calls for opposition, armed groups, the national and international media are responsible for the interests of the Central African group. The content of this message in this edition.” (8 April)

“Speech Antonio Guterres, Secretary General of the UN”. (10 April)

“MINUSCA is intensifying the fight against the coronavirus in the CAR. It distributed last Saturday more than hundreds of radio posters to the inhabitants of Bouar, Bandoro to follow the information on the preventive measures against this pandemic.” (13 April)

“MINUSCA for the fight against the coronavirus in the prefecture of Mbomo. It distributed hundred [post] receivers last Saturday to the authorities and the people of Bangassou.” (13 April).

Noting that there were nine headlines outside the pandemic issue that broadcasted violence, agriculture stories, accident and social dissatisfaction that accounted for nine headlines.

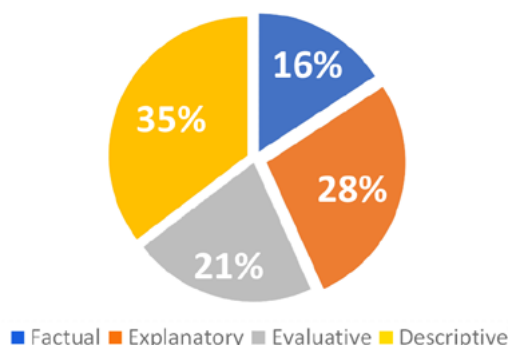
- **Knowledge**

This group had four subcodes being coded in total in 557 segments (Tab. 7). The 'Descriptive' was the most coded with 197 times, representing more than one third (35%)

of the narrative structure. The 'Explanatory' was the second most coded with 153 times. And the 'Evaluative' was detected 119 times. 'Factual' was the least coded with 88 times, as shown below (Tab. 7) (Fig. 7):

Tab. 7: Coded Segments and proportion of 'Knowledge' throughout the newscasts

	Frequency	Percentage
Knowledge\Descriptive - what was it like to be involved in what happened?	197	35,37
Knowledge\Explanatory - Why did it happen?	153	27,47
Knowledge\Evaluative - moral, asking was what happened good or bad?	119	21,36
Knowledge\Factual - what happened?	88	15,80
Total	557	100,00



1 – Biomedical / 2 – Rights / 3 – Economic / 4 – Security

Fig. 7: Visual graphic on coding types of knowledge.

The subcode 'Factual' appeared in the beginning of each newscast and sometimes at the end. The 'Explanatory' usually appeared throughout the whole newscasts intercalated closer to the middle and towards the end of each emission, as well as the 'Descriptive' that was usually detected in the middle part of the newscast structure. The 'Evaluative' appeared in one fifth of the structure of the newscasts.

Interpreting Risk in Radio Guira

This section answers to the research questions relating to the concepts of risk communication. What was Guira's news coverage during the COVID-19 pandemic in CAR?

1.1 What were the main headlines about?

The two weeks of the newscasts were practically entirely dedicated to broadcasting information associated with the pandemic, the warning of an imminent crisis and how to avert the spread of the infection. The terms 'prevention,' 'propagation,' 'sensitization' and 'fight against the pandemic' prevailed. There was little space for extra pandemic stories – connected to daily facts, such as accidents with victims, a strike by civil servants, and difficulties in the agricultural sector. Since CAR is mainly a rural country, agriculture is seen as a factor of national reconciliation and for reintegration of ex-combatants. It is not surprising that this issue receives attention by the UN radio broadcast besides the pandemic.

1.2 Who were the main actors in the newscasts?

Government, official authorities and political parties were the main actors in seven out of ten newscasts. Only in two occasions actors from civil society were predominant. The citizen's voice was seldom detected. As Neuwirth (2008) had indicated, it is precisely during moments of crisis that society and citizens see themselves in a level of dependency on mediated communication. As we have seen, media are likely to be more supportive and cooperating with the authorities in order to maintain a "social consensus" and even to silence any possible criticism (NEUWIRTH, 2008).

The predominance of official sources in the radio might indicate the close cooperation among the UN mission and the government related to the handling of the risk of the pandemic. Little space was offered to dialogue, social participation or to airing uncertainties about the unknown risks of the virus.

Two unexpected results pointed to the low presence of UN voices and the operation of armed groups. UN actors and representatives were initially expected to be more frequently quoted. Additionally, the little presence of representatives of armed groups and armed forces was observed. Only the Central African Armed Forces (FACA) were portrayed in joining efforts in the campaigning with the population to prevent the coronavirus, no other armed group (even demobilized) was mentioned.

1.3 What was the construction of the newscasts and how did the newscasts inform about halting the spread of the virus?

Throughout the general structure of the newscasts, the descriptive dimension combined with explanatory were prominent. The factual dimension was observed mainly at

the headlines and the announcement of events. The evaluative dimension appeared particularly in reportage and interviews related to the UN issues.

The main message aired in the newscasts were instructions on how an individual could act and behave in order to prevent infection. Recommendations both from the interviewed (mainly official actors) and journalists suggesting what could be done in relation to the Covid-19 were predominant among the news.

Following what academics had pointed as the three phases of risk communication (NIHLÉN FAHLQUIST, 2019; POWELL; LEISS, 1997) – education, marketing and participatory practice –, the newscasts embraced a combination of what would be seen as a first and second phase. That is to say, an attempt to educate the audience and to advertise unilaterally towards the convincement of people, and not giving much relevance to participation. The airtime was focused in opening space to the authorities serving as a platform to propagate their quotes and speeches. Questioning and interrogating the way the authorities were handling the crises was not detected in the content analysis.

It is possible to infer that there might be a level of close cooperation between the editorial line of the UN broadcast and the authorities. Considering that the UN radio is included in the mandate of the peacekeeping mission hosted by the country, it is likely to assume that such cooperation is not exclusive for the event of the pandemic, it may touch other editorial decisions of the radio's broadcast.

Shaping a risk message may embrace two important decisions, if it should aim at convincing people to behave in a certain way or whether it should offer options for action with “pros and cons” (NIHLÉN FAHLQUIST, 2019). The idea of supplying the citizens with alternative or complementary options on how to act was not corroborated by the analysis. The language used in order to build trust with the listeners or stress the intention to connect authorities and people and promote more participation was poorly detected.

Although there have been plenty of information on preventive measures, the duty of not being infected falls exclusively on the citizen's shoulders, since there are not sufficient conditions that the state may offer to the citizens for testing, treatment and rehabilitation in case patients need to be hospitalized. The lack of material and physical resources (such as intensive care units or medicine to alleviate the symptoms) is practically absent from the broadcast. It is notorious that any information on the country's health system, treatment or regarding the suffering of patient was inexpressive or majorly absent.

Considering the roles of news media in risk communication identified by Lundgren and McMakin (2018), the one of reporting of existing official information was predominant. It was not observed in the content any move or attempt from the broadcast to independently raise the public's attention or to propose through its coverage possible solutions to a risk-related decision "including taking a stand on an issue". It was not observed any endeavor to adopt a firm or critical position about any issue concerning the pandemic.

1.4 What were the main frames of the news coverage?

Within the distinction of four risk frames, the Biomedical one has been dominant coupled with Rights. Less prominent but also important was the Economic and the least remarkable one was the Security frame. As discussed regarding the limited appearance of the armed actors, it influenced on the narrow presence of the risk frame as Security. It was notable that the risk frame focusing on security have not emerged with more consistency from the analysis. The information related to threat to an already unstable peace in some parts of the country and the risk of state failure or the outbreak of violence were touched isolated.

All in all, the content analysis of Guira FM evening newscasts during the Covid-19 pandemic in the Central African Republic allows to infer that the United Nations sponsored radio has communicated the health crisis relying extensively on official sources, rendering its coverage with a major institutional character with little space for the citizens' voice. There was practically no criticism or critical perspectives aired in relation to questioning or offering plural and diverse voices regarding the management of the pandemic and the shaping of public policies. It is possible that any existing criticism among the society regarding the government's attitude might have been silenced or not offered space on air. The radio does not challenge what Godwyll and Ngumbi had mentioned concerning the top-down conventional method of disseminating health information. On the contrary, the radio's communication through its newscasts adopts and reinforces a unilateral and unidirectional dissemination of information. It does not offer a glimpse of striving to build space for a more culturally sensitive and bottom-up approach attempting to reflect its messages regarding the audiences' needs and realities, so that the audience can relate to and identify the threatening issues.

At this point it is important to underline the limits of the research and its methodological approach. The analysis of the content broadcasted on the evening newscast during April 2020 allows to describe how Guira FM approached its coverage in the beginning of the health crisis and offers an indication of the type of communication adopted by the UN-sponsored radio station. It does not allow, however, to generalize how this coverage has evolved or developed throughout the later months of the pandemic, nor it can expand these conclusions as being the entire radio's communication approach applying to the whole programming grid – for this, more programs from the grid should be analyzed. Additionally, it does not permit to apprehend the efficacy and effectiveness of this type of communication, since the analysis does not assess the media effects on the audiences' attitudes and behaviors and how they receive such content that is broadcasted. Further research on these aforementioned layers would be necessary to understand the broader panorama of the media influence during the health crisis.

Final Remarks: Towards a Pandemic Sensitive Journalism

Risk communication has had a dominant position in the public debate amid emergencies. This study problematized the challenges of doing radio in societies under peace-keeping missions and the importance of a responsible public communication by looking at the Covid-19 news coverage of the United Nations Radio Guira FM in the Central African Republic.

Professional journalism should not only notify the public on the latest official information, but also create an open and trustful space for the population to express their concerns, doubts and fears. Such space may be created either through roundtable radio programs aiming at debating with different civil society actors, but also airing reportage at the primetime news hour that offer different realities of impacted communities.

This paper supports the outline of a pandemic sensitive journalism that would mean a more horizontal space for shared concerns towards a more participatory and inclusive debate. This debate would ultimately include official voices but also embrace how the public as citizens may see themselves as responsible for not only taking preventive measures, but also for inquiring the power and authorities about the best actions and policies. Creating a space through the radio to raising citizen's voice would also mean a

counterbalance to power, as citizens and journalists could endeavor to hold power accountable for the decisions made. A more participatory space on the radio could enhance the effectivity of risk communication amid health crisis and become a basis for an ethical responsible journalism during pandemics and catastrophes.

References

ABROMS, L. C.; MAIBACH, E. W. The Effectiveness of Mass Communication to Change Public Behavior. **Annual Review of Public Health**, v. 29, n. 1, p. 219–234, 2008.

AGHA, S. The impact of a mass media campaign on personal risk perception, perceived self-efficacy and on other behavioural predictors. **AIDS Care**, v. 15, n. 6, p. 749–762, dez. 2003.

AL-HASSAN, S.; ANDANI, A.; ABDUL-MALIK, A. The Role of Community Radio in Livelihood Improvement: The Case of Simli Radio. **Field Actions Science Reports**. The journal of field actions, n. Vol. 5, 19 abr. 2011.

AMNESTY INTERNATIONAL. **Everything you need to know about human rights in the Central African Republic**. Disponível em: <<https://www.amnesty.org/en/countries/africa/central-african-republic/report-central-african-republic/>>. Acesso em: 3 jul. 2020.

BARNARD, S. **Studying radio**. London : New York: Arnold ; Co-published in the United States of America by Oxford University Press, 2000.

BECK, U. **Risk society: towards a new modernity**. London ; Newbury Park, Calif: Sage Publications, 1992.

BECK, U. Living in the world risk society: A Hobhouse Memorial Public Lecture given on Wednesday 15 February 2006 at the London School of Economics. **Economy and Society**, v. 35, n. 3, p. 329–345, ago. 2006.

BETZ, M. Capacity-building, institutional change and theories of change : Creating an enabling environment for journalists in post-conflict environments. In: HOFFMANN, JULIA; HAWKINGS, VIRGIL (Eds.). . **Communication and Peace: Mapping an emerging field**. NY: Routledge, 2015. p. 219–232.

BOUTROS BOUTROS GHALI. **An Agenda for Peace: Preventive diplomacy, peacemaking and peace-keeping: Report of the Secretary-General**. Disponível em: <<https://www.un.org/ruleoflaw/blog/document/an-agenda-for-peace-preventive-diplomacy-peacemaking-and-peace-keeping-report-of-the-secretary-general/>>. Acesso em: 18 mar. 2020.

BURES, O. Wanted: A Mid-Range Theory of International Peacekeeping. **International Studies Review**, v. 9, n. 3, p. 407–436, 2007.

CHENG, V. C. C. et al. Severe Acute Respiratory Syndrome Coronavirus as an Agent of Emerging and Reemerging Infection. **Clinical Microbiology Reviews**, v. 20, n. 4, p. 660–694, out. 2007.

CRISELL, A. **Understanding radio**. 2nd ed ed. London ; New York: Routledge, 1994.

DEPARTMENT OF GLOBAL COMMUNICATION, UNITED NATIONS. **UN peacekeeping radio wears multiple hats in fight against COVID-19**. Disponível em: <<https://www.un.org/en/coronavirus/un-peacekeeping-radio-wears-multiple-hats-fight-against-covid-19>>. Acesso em: 14 set. 2020.

DW. **Central African Republic in disarray after coup** | DW | 25.03.2013. Disponível em: <<https://www.dw.com/en/central-african-republic-in-disarray-after-coup/a-16698161>>. Acesso em: 4 jul. 2020.

ENTMAN, R. M. Framing: Toward Clarification of a Fractured Paradigm. **Journal of Communication**, v. 43, n. 4, p. 51–58, 1 dez. 1993.

EPSTEIN, J. B.; MAGROWSKI, W. D.; MCPHAIL, C. W. B. The Role of Radio and TV Spot Announcements in Public Health Education. **Canadian Journal of Public Health / Revue Canadienne de Sante'e Publique**, v. 66, n. 5, p. 396–398, 1975.

ERICSON, R. V.; BARANEK, P. M.; CHAN, J. B. L. **Representing order: crime, law, and justice in the news media**. Milton Keynes: Open University Press, 1991.

FRÈRE, M.-S.; MARTHOZ, J.-P. **The media and conflicts in Central Africa**. Boulder, Colo: Lynne Reinner Publishers, 2007.

GODWYLL, F. E.; NGUMBI, E. K. Problematic Recipe: Alternatives to Public Health Education to Reduce the HIV Pandemic. **Nordic Journal of African Studies**, v. 18, n. 1, p. 73–90, 2009.

HANSEN, A.; MACHIN, D. **Media and communication research methods**. Basingstoke, Hampshire: Palgrave Macmillan, 2013.

HOBFOLL, S. E. et al. Five Essential Elements of Immediate and Mid-Term Mass Trauma Intervention: Empirical Evidence. **Psychiatry: Interpersonal and Biological Processes**, v. 70, n. 4, p. 283–315, dez. 2007.

HOWARD, L. **Power in Peacekeeping**. 1. ed. [s.l.] Cambridge University Press, 2019.

HUGELIUS, K.; ADAMS, M.; ROMO-MURPHY, E. The Power of Radio to Promote Health and Resilience in Natural Disasters: A Review. **International Journal of Environmental Research and Public Health**, v. 16, n. 14, p. 2526, 15 jul. 2019.

INTERNEWS. **Media and Global Health - From Information to Action**. [s.l.: s.n.]. Disponível em: <<https://internews.org/resource/media-and-global-health>>. Acesso em: 13 set. 2020.

ISS. **How rebels became kingmakers in the Central African Republic**. Disponível em: <<https://www.iiss.org/blogs/analysis/2019/04/central-african-republic-armed-groups>>. Acesso em: 3 jul. 2020.

JANES, M. W.; MARQUES, M. C. DA C. A contribuição da comunicação para a saúde: estudo de comunicação de risco via rádio na grande São Paulo. **Saúde e Sociedade**, v. 22, n. 4, p. 1205–1215, dez. 2013.

KÄIHKÖ, I.; UTAS, M. The Crisis in CAR: Navigating Myths and Interests. **Africa Spectrum**, v. 49, n. 1, p. 69–77, 2014.

KARP, I. Agency and Social Theory: A Review of Anthony Giddens. **American Ethnologist**, v. 13, n. 1, p. 131–137, 1986.

LATOUR, B. On technical mediation—philosophy, sociology, genealogy. **Common Knowledge**, v. 3, n. 2, p. 29–64, 1994.

LATOUR, B. On actor-network theory: A few clarifications. **Soziale Welt**, v. 47, n. 4, p. 369–381, 1996.

LATOUR, B. **Reassembling the social: an introduction to Actor-Network-Theory**. Oxford: Oxford Univ. Press, 2007.

LEHMANN, I. A. **Peacekeeping and Public Information: Caught in the Crossfire**. 1. ed. [s.l.] Routledge, 1999.

LEISS, W. Effective risk communication practice. **Toxicology Letters**, v. 149, n. 1–3, p. 399–404, 1 abr. 2004.

LUNDGREN, R. E.; MCKIN, A. H. **Risk communication: a handbook for communicating environmental, safety, and health risks**. Sixth edition ed. Hoboken, New Jersey: IEEE Press : Wiley, 2018.

MACLEAN, R.; MARKS, S. 10 African Countries Have No Ventilators. That's Only Part of the Problem. **The New York Times**, 18 abr. 2020.

MAMUN-UR-RASHID. **Community Radio in Family Health and Nutrition Awareness Building among the Listeners**. [s.l.] Patuakhali Science and Technology University, Bangladesh, 2019. Disponível em: <https://www.researchgate.net/publication/337112125_Community_Radio_in_Family_Health_and_Nutrition_Awareness_Building_among_the_Listeners>. Acesso em: 13 set. 2020.

MCINNES, C.; ROEMER-MAHLER, A. From security to risk: reframing global health threats. **International Affairs**, v. 93, n. 6, p. 1313–1337, 1 nov. 2017.

MINISTÈRE DE LA SANTÉ ET DE LA POPULATION. **Rapport de Situation Journaliere de Covid-19 en Republique Centrafricaine**. République Centrafricaine, 3 jul. 2020. Disponível em: <<https://pbs.twimg.com/media/EcF5lhqWsAAVAX3?format=jpg&name=medium>>. Acesso em: 5 jul. 2020

MINUSCA. **Guira FM**. Disponível em: <<https://minusca.unmissions.org/guira-fm>>. Acesso em: 2 jul. 2020a.

MINUSCA. **Guira FM**. Disponível em: <<https://minusca.unmissions.org/en/guira-fm>>. Acesso em: 2 jul. 2020b.

MYERS, M.; HARFORD, N. **Local Radio Stations in Africa: Sustainability or Pragmatic Viability?** [s.l.] Center for International Media Assistance (CIMA), 18 jun. 2020. Disponível em: <<https://www.cima.ned.org/publication/local-radio-stations-in-africa-sustainability-or-pragmatic-viability/>>. Acesso em: 15 set. 2020.

MYERS, M.; HARFORD, N.; SSEMAKULA, M. **Local Radio Stations in Africa Prove Resilient Amid COVID-19** Center for International Media Assistance, 19 maio 2020. Disponível em: <<https://www.cima.ned.org/blog/local-radio-stations-in-africa-prove-resilient-amid-covid-19/>>. Acesso em: 13 set. 2020

NEUWIRTH, KURT. 'Risk, Crisis, and Mediated Communication' (Chapter 20). In: **Handbook of Risk and Crisis Communication**. Robert L. Heath, and H. Dan O'Hair (ed) ed. [s.l.] Taylor & Francis Group, 2008. p. 398–411.

NIHLÉN FAHLQUIST, J. **Moral responsibility and risk in society: examples from emerging technologies, public health and environment**. London ; New York: Routledge, Taylor & Francis Group, 2019.

NOAR, S. M. A 10-Year Retrospective of Research in Health Mass Media Campaigns: Where Do We Go From Here? **Journal of Health Communication**, v. 11, n. 1, p. 21–42, jan. 2006.

NORDLING, L. 'A ticking time bomb': Scientists worry about coronavirus spread in Africa. Disponível em: <<https://www.sciencemag.org/news/2020/03/ticking-time-bomb-scientists-worry-about-coronavirus-spread-africa>>. Acesso em: 5 jul. 2020.

NRC. **Just three ventilators to cope with Covid-19 in Central African Republic**. Disponível em: <<https://www.nrc.no/news/2020/march/just-three-ventilators-to-cope-with-covid-19-in-central-african-republic/>>. Acesso em: 2 jul. 2020.

NYAWASHA, T. S.; CHIPUNZA, C. Radio broadcasting in the era of HIV/AIDS: Can this be the magic bullet? **International Social Work**, v. 58, n. 2, p. 223–237, mar. 2015.

ORME, W. **Broadcasting in UN Blue: The Unexamined Past and Uncertain Future of Peacekeeping Radio**, Center for International Media Assistance (CIMA). US: CIMA, 16 fev. 2010. Disponível em: <http://www.cima.ned.org/wp-content/uploads/2015/01/CIMA-UN_Radio.pdf>.

POWELL, D. A.; LEISS, W. **Mad cows and mother's milk: the perils of poor risk communication**. Montreal: McGill-Queen's University Press, 1997.

RAMSBOTHAM, O.; WOODHOUSE, T. **Encyclopedia of international peacekeeping operations**. Santa Barbara, Calif: ABC-CLIO, 1999.

SADATI, A. K.; B LANKARANI, M. H.; BAGHERI LANKARANI, K. Risk Society, Global Vulnerability and Fragile Resilience; Sociological View on the Coronavirus Outbreak. **Shiraz E-Medical Journal**, v. In Press, n. In Press, 7 mar. 2020.

SCHROEDER, K. Radio as a Tool for Health Education: What Makes for an Effective HIV/AIDS Radio Campaign in Sub-Saharan Africa? **Intersect: The Stanford Journal of Science, Technology, and Society**, v. 9, n. 3, 15 jun. 2016.

SINGH, M. B.; RABINDRANATH, D. M.; SINGH, D. N. P. COMMUNITY RADIO FOR EFFECTIVE HEALTH COMMUNICATION IN MANIPUR. **International Education and Research Journal**, v. 3, n. 5, 26 maio 2017.

UN. **United Nations Peacekeeping Operations: Principles and Guidelines**. NY: United Nations Department of Peace Keeping Operation, 2008. Disponível em: <https://peacekeeping.un.org/sites/default/files/capstone_eng_0.pdf>.

UNESCO. **International Charter of Physical Education, Physical Activity and Sport**. Disponível em: <http://portal.unesco.org/en/ev.php-URL_ID=13150&URL_DO=DO_TOPIC&URL_SECTION=201.html>. Acesso em: 3 jul. 2020.

UNRIC. **Peacekeeping radio stations provide COVID-19 information to vulnerable communities in conflict-affected countries**. Disponível em: <<https://unric.org/en/peacekeeping-radio-stations-provide-covid-19-information-to-vulnerable-communities-in-conflict-affected-countries/>>. Acesso em: 14 set. 2020.

UNSCR. **Security Council Resolution 2149 - UNSCR**. Disponível em: <<http://unscr.com/en/resolutions/2149>>. Acesso em: 4 jul. 2020.

WATERS, D.; JAMES, R.; DARBY, J. Health promoting community radio in rural Bali: an impact evaluation. **Rural and Remote Health**, v. 11, n. 2, p. 1555, 2011.

WHO. **Constitution of the World Health Organization**.: Forty-fifth edition. [s.l.] WHO, out. 2006. Disponível em: <https://www.who.int/governance/eb/who_constitution_en.pdf?ua=1>. Acesso em: 2 jul. 2020.

WHO. **Central African Republic: a silent crisis**. Disponível em: <https://www.who.int/hac/crises/caf/features/silent_crisis/01_en.html>. Acesso em: 5 jul. 2020.