



GNOSI: An Interdisciplinary Journal of Human Theory and Praxis

Volume 5, Issue 1, January - June, 2022

ISSN (Online): 2714-2485

Perceptions of COVID-19 Mask Use in Mozambique: A Call for Effective Community Education

Germito de Castro Alexandre*

Lecturer, Department of Languages, Culture and Sports

Faculty of Social and Human Sciences,

Universidade Lúrio,

Rua. Pedro Alvares Cabral-Ilha de Moçambique,

Nampula, Mozambique.

Email: galexandre@unilurio.ac.mz*

Ninla Carlos Tipanoa

Lecturer, Department of Tourism and Economics,

Faculty of Social and Human Sciences,

Universidade Lúrio,

Rua. Pedro Alvares Cabral- Ilha de Moçambique,

Nampula, Mozambique.

Email: ntipanoa@unilurio.ac.mz

(**Received:** November -2021; **Accepted:** May-2022; Available **Online:** May-2022)



This is an open access article distributed under the Creative Commons Attribution License CC-BY-NC-4.0 ©2022 by author (<https://creativecommons.org/licenses/by-nc/4.0/>)

ABSTRACT

Masks have been essential since COVID-19's emergence. Face masks are often stigmatised and misunderstood by Mozambique's natives. To fight the myths and stigma in Mozambique's communities, comprehensive community education is needed. This research explored the natives' views of face masks' usage to prevent COVID-19 in Mozambique. Descriptive quantitative research was used to carry out this research. A total of 361 Mozambique islanders were sampled. This research also adopted random probability sampling. Data collection was done through the use of a questionnaire. To ensure validity, the study instruments were reviewed by the Center for Cultural and Religious Studies of the Indian Ocean and other specialists from Universidade Lúrio's Faculty of Social and Human Sciences. This research reveals that people on the island of Mozambique used face masks because they feared police arrest; there was no effective community education to convince them to do so. The research suggests some recommendations that will help improve the use of masks to prevent the spread of COVID-19 infection as well as future unforeseen pandemics.

Keywords: COVID-19; Community Education; Perceptions; Mask; Mozambique Island.

INTRODUCTION

COVID-19 is a respiratory disease that can be transmitted via droplets from someone who is infected with COVID-19 to others. According to the World Health Organisation (2020), COVID-19 is primarily a respiratory disease and the spectrum of infection with this virus can range from people with very mild, non-respiratory symptoms to severe acute respiratory illness, including sepsis with organ dysfunction and death. Some people infected have reported no symptoms at all. The novel coronavirus 2019-nCoV has been recognised as a highly pathogenic virus that infects the human respiratory tract and has high morbidity and mortality. The novel coronavirus 2019-nCoV has been recognised as a highly pathogenic virus that infects the human respiratory tract and has high morbidity and mortality. The 2019-nCoV is a huge burden on healthcare, causing approximately 2.1% mortality so far (Ngonghala *et al.*, 2020).

Ever since the outbreaks of coronavirus disease 2019 (COVID-19) and its rapid spread, and consequently its harrowing effects, face masks have been recommended by clinicians, policymakers, and health authorities as an integral preventive strategy or means that can slow down the transmission of COVID-19 on large scales since masks can prevent an infected person, whether symptomatic or asymptomatic, from infecting others. Although the use of masks alone is insufficient to provide an adequate level of protection or source control, it has proven to be an indispensable technique to slow down the disease, for many state nations have conspicuously enforced the use of masks in the community to suppress the disease.

The use of face masks in the community may primarily serve as a means of source control. This measure can be particularly relevant in epidemic situations when the number of asymptomatic but infectious people in the community can be assumed to be high (European Centre for Disease Prevention and Control, 2020). According to the *World Health Organisation* (2020), masks can be used either for the protection of healthy people (worn to protect oneself when in contact with an infected individual) or for source control (worn by an infected individual to prevent onward transmission). Moreover, Cheng *et al.* (2020) posit that community-wide mask wearing may contribute to the control of COVID-19 by reducing the amount of emission of infected saliva and respiratory droplets from individuals with subclinical or mild COVID-19.

Previous authoritative research on the use of face masks has concentrated on the use of face masks to suppress or avert the spread of coronavirus on a large scale for the sake of the community, but it has not explored a little further on the perceptions of the community on the use of masks and the call for effective community education. In the world we live in, there are a lot of misconceptions and stigmatisation towards the use of face masks, and this may hinder the containment of the COVID-19 pandemic, mainly when the public is not well-informed, persuaded, and shown the importance that the masks have to protect them from being infected with this deleterious disease.

It is a commonplace assertion that the use of face masks can protect one from getting infected by COVID-19 and other respiratory diseases. However, it is extremely preoccupying to see how people on the island of Mozambique walk unmasked and freely without the hysteria of being infected or infecting others with COVID-19. This study sought to investigate perceptions of the use of masks to prevent COVID-19: A Call for Effective Community Education, on the Island of Mozambique, simply because the failure to use masks can thwart the government's and health system's efforts to slow or suppress the spread of this disease.

REVIEW OF RELATED LITERATURE

Effective Community Education

According to Williams (1986), community education is an indispensable tool for community engagement and public policy implementation, for without community education, it is very hard to acquire compliance from society when a policy is to be implemented. Therefore, it is more important than ever to effectively educate the community in order to attain success in the implementation of a policy.

For Kowalski and Fallon (1986), community education is a process that concerns itself with everything that affects the well-being of all citizens within a given community. Moreover, the Department of Land and Water Conservation (2001) posits that effective community education requires a good understanding of the issue of concern, being clear about who we are trying to reach, knowing what behaviour we are trying to change, and investigating the best ways to make this happen.

Heneveld and Craig (1996) recognises parents and community support as one of the key aspects in determining educational effectiveness in Sub-Saharan Africa. They identify five categories of schools and community support that are relevant to the region: (1) Children arrive at school ready to learn; (2) the community supports the school financially and materially; (3) communication between the school, parents, and community is frequent; (4) the community and schools play an important role in educating the public; and (5) community members and schools assist with instruction.

Bray Mark (2003), in his article entitled "Community Initiatives in Education: Goals, Dimensions, and Linkages with Government", highlights the different dimensions of community participation with experiences from a wide range of countries. For Mark, the school is a political entity and therefore reflects the community it is in. The failure of policy and its implementation lies in the government's way of providing a uniform baseline for all schools and society.

Anokye (2004) conducted a study on community participation in the Gama district of Ghana. Based on empirical data, the study found that community or parent-teacher cooperation in educational provision significantly contributes to improvement in the enrolment and retention of pupils, maintenance facilities, learning atmosphere, and overall quality of education and awareness in those localities.

Negash (2007) investigates the connection between community and education. In his study, he pointed out that community participation is playing an important role in improving access to education and awareness in the Hadiya Zone of Ethiopia. The study's findings revealed that the majority of stakeholders, such as school teachers and the local community, contribute various inputs to schools and society.

Singh (2009) studied community response towards development and structural changes in the education sector in the era of globalisation and observed that the role of the government in the education sector is very significant. Most of the respondents have been of the view that the retreat of the government from the crucial sector is not desirable. It is contrary to the spirit of the constitution. Educating the populace should be the priority area of the government. Only the government's responsibility in the provision of education can facilitate equal opportunities for all people. In a democratic society, the government cannot shred all its responsibilities and leave the people at the mercy of the market. Instead of focusing on the needs of corporations, the direction of education should be geared toward the needs of the majority of people who need affirmative action.

Sharma *et al.* (2018) looked at the effects of community education and engagement interventions on family planning effectiveness. Sixteen electronic databases were searched for research published between March 2011 and April 2016 that was relevant to a priori specified inclusion and exclusion criteria in high development contexts. This update to a previous systematic review confirms that community education using traditional methods has a positive effect on short-term family planning outcomes. It also shows that community education using methods like text messaging and web-based education has a positive effect on long-term family planning outcomes.

Baptiste *et al.* (2018) discovered that communities play an important role in successful health systems, particularly in terms of monitoring health care quality and providing the public a voice. The research found that implementing community-led monitoring mechanisms enhanced facility-level service delivery, health system-wide infrastructure, and health outcomes among care receivers. Community-led, collaborative, continuous, and systematic methods that included advocacy and community education were successful. Identifying and replicating effective community-led monitoring practises is also an important step in achieving equitable access to HIV and health care in general.

The Sabiq *et al.* (2021) research sought to create an empowerment programme via community education to combat the COVID-19 epidemic in Indonesia. Informants were purposefully chosen from the village administration, Posdaya administrators and members, community and youth leaders, and entrepreneurial organisations using the qualitative case study technique. Data was gathered via observation, interviews, discussions, and document analysis. Triangulation was utilised to validate the data acquired. The results showed that responsive, productive, and innovative empowerment programmes based on local resources are needed for community education. This is especially important during the COVID-19 pandemic, when the health and welfare of families and village communities is at risk.

Mbah *et al.*, (2021), conducted research on community health education for health crisis management, using Cameroon as a case study. The research looks at how community health education on the Covid-19 virus was carried out, where gaps exist, and what more action should be taken. According to the results indicates that there is need for proper COVID-19 community health education; maximising multilingualism and indigenous cultural assets; refuting pandemic myths; and stigmatisation. The report concludes by emphasising the need for an integrated strategy of community education to deal with the epidemic. The work addresses the need to solidify community health education architecture on COVID-19 that incorporates input from many stakeholders, including indigenous knowledge holders, for communal well-being.

From the articles reviewed above, it is important to note that if COVID-19 is to be suppressed, there is a need to effectively educate the community so that they will consider themselves part and parcel of the effort against the disease. In order to raise awareness about things that really matter to the community, there is a need to involve the community itself as an active agent that will militate together with the government in order to achieve a common good. The public's knowledge of how to deal with highly contagious respiratory diseases is a key part of stopping the disease from spreading, especially in middle-income and low-income countries where health systems can only respond to outbreaks in a moderate way (Abdelhafz *et al.*, 2020).

The Use of Face Mask to Prevent COVID-19

According to the European Centre for Disease Control (2020) a face mask may help reduce the spread of infection in the community by minimising the excretion of respiratory droplets from infected individuals who may not even know they are infected and before they develop any symptoms. In this respect, mask use by asymptomatic persons can be regarded as an extension of the current practice of face mask use by symptomatic individuals.

In Wuhan, China, Liu and Zhang (2020) investigated the transmission of the new coronavirus (SARSCoV2) that causes coronavirus illness 2019 (COVID19). The research looked at some of the situations when face masks were utilised to prevent the spread of COVID-19 infection. The study described a typical example of a cluster outbreak induced by public transportation exposure; during the COVID-19 outbreak, one patient from Chongqing, China, did not use a face mask. The study indicated that before using long-distance public transportation, one should assess his or her personal health problems. If a person has any symptoms, such as a fever or cough, such a person should avoid the trip and go to a clinic as soon as possible, using a face mask. The paper advised people to wear face masks when outdoors or indoors with other people.

According to Eikenberry *et al.* (2020), the use of face masks by the general population to prevent the spread of the COVID-19 pandemic is contentious but increasingly suggested, and the potential of this intervention is not fully recognised. The study created a compartmental model to examine the community-wide effect of mask usage by the general, asymptomatic populace, a subset of whom may be asymptotically infected. Model simulations based on data relevant to COVID-19 dynamics in the US states of New York and Washington reveal that widespread use of even very inefficient face masks may minimise community transmission of COVID-19 and peak hospitalizations and fatalities. Also, mask use reduces the effective transmission rate in a way that is nearly linear with the product of mask effectiveness (as a fraction of potentially infectious contacts blocked) and coverage rate (as a fraction of the general population). However, the effect on epidemiologic outcomes (death, hospitalizations) is highly nonlinear, which suggests that masks could work well with other non-drug measures.

In the study by Feng *et al.* (2020), face mask usage guidelines from several health agencies were compared. The study discovered that, despite the suggestion that symptomatic people and those in health-care settings use face masks, inconsistencies were found in the general public and community settings. For example, the United States Surgeon General, Dr. Jerome Adams recommended against purchasing masks for healthy individuals to use. According to the study, one significant rationale for preventing broad usage of face masks is to conserve the limited supply for professional use in healthcare settings. The study says that using face masks is very important and is a good way to avoid getting a coronavirus infection.

According to Tso and Cowling (2020), significant disagreements concerning the general public's use of face masks for protection against coronavirus illness (COVID-19) came from divergent perspectives held by health officials. Misconceptions and stigma surrounding the use of face masks may impede COVID-19 pandemic control. The study addressed the argument by analysing guidance on the community use of masks from various trustworthy health authorities; nations that encouraged mask usage recognised that masks are useful but also stressed the need for their correct use in conjunction with other hygiene measures. In contrast, authorities that advised against community usage of

masks mostly cited a lack of supply, the notion that the general population has the necessary skills to use them, or that wearing masks would impede compliance with other key behaviours. The authors propose that instead of just stating "do's and don'ts," effective behavioural changes in personal preventive measures be promoted by imparting microbiological knowledge of the use of face masks.

According to Liao *et al.* (2021), since the beginning of the COVID-19 pandemic, most nations have advised their residents to maintain social distance, practise hand hygiene, and wear face masks. Many residents in most European countries, however, have not taken to wearing face masks. While the causes are multifaceted, there is a widespread belief that the evidence to support the use of face masks is weak, particularly for the general population in a community environment. Through the efforts of colloid and interface science, wearing a face mask may prevent or filter airborne virus-carrying particles. This study evaluates existing information about the design and operation of face masks by analysing material selection, mask requirements, pertinent laboratory testing, and respiratory virus transmission studies, as well as an outline of future development of reusable masks for the general public. Wearing a face mask, according to this study, is an excellent way to avoid contracting COVID-19.

Effective Use of Mask

According to Albertina Health Service (2020), it is a commonplace assertion that the use of masks has been encouraged by many countries throughout the world as a way to slow and contain the novel coronavirus. Community mask use is now either encouraged or mandatory in over 80 countries, with many jurisdictions encouraging but not mandating the use of cloth masks. However, some countries, such as Australia and New Zealand, continue to not recommend community masking and have achieved low rates of COVID activity despite the lack of this particular intervention. As important as the community campaign to get people to wear masks is, the community also needs to be taught how to use masks properly to stop the spread of COVID-19 by accident.

According to the European Center for Disease Prevention and Control (2020), there is a risk that improper removal of the face mask, handling of a contaminated face mask or an increased tendency to touch the face while wearing a face mask by healthy people might actually increase the risk of transmission.

According to Wang *et al.* (2020), there is a lack of agreement across cultures in the context of Coronavirus Disease (2019) (COVID-19) cases worldwide on whether wearing face masks is an effective physical intervention against disease transmission. The study 1) depicts the transmission routes of the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2); 2) addresses controversies surrounding the mask from the standpoints of attitude, effectiveness, and necessity of wearing the mask with evidence that the use of the mask would effectively interrupt the transmission of infectious diseases in both hospital settings and community settings; and 3) suggests that the public wear the mask during the outbreak. To achieve this aim, the research recommends that the government develop a risk-adjusted mask usage plan to scientifically publicise mask use, ensure an adequate supply of masks, and collaborate to eliminate health resource imbalances.

According to Esposito and Principi (2020), asymptomatic people can spread the novel coronavirus illness 2019 (COVID-19) and become key COVID-19 sources. In addition to hand cleanliness and safety distance, universal use of face masks seems particu-

larly beneficial in reducing the involvement of asymptomatic or weakly symptomatic patients in COVID-19. As a result, training children to use face masks is critical. This research suggests that to achieve maximum compliance, the reasons for wearing the mask without attempting to remove it must be carefully communicated. Furthermore, a child's will should not be coerced. Based on clinical data, the research posits that the ubiquitous use of face masks is required when individuals go out in their daily lives. In addition to the availability of masks of various sizes capable of precisely fitting the face, the use of masks in children must be preceded by strong parental effort and school lectures on this and other hygiene themes, with the primary goal of getting child participation.

According to Abboah-Offei *et al.* (2021), the initial purpose of face masks was to shield surgical incisions from staff-generated nose and oral germs. A comprehensive review was done to assess the influence of face mask usage on limiting the spread of respiratory viral infections. Five electronic databases (CINAHL, Embase, Medline, PsycINFO, and Global Health) were searched using pre-defined search phrases from database creation to present. Data were retrieved on sample characteristics, research design, respiratory viruses under control, face mask type, and efficacy. The inclusion criteria were satisfied by 58 out of 84 research, with 13 classed as systematic reviews and 45 as quantitative studies. According to the research, wearing a face mask has a high potential for avoiding respiratory virus transmission, particularly COVID-19. It goes on to say that, regardless of the kind, situation, or user, a face mask has a dual preventative purpose: it protects the wearer from viral infection while simultaneously safeguarding others. As a result, wearing a face mask in public provides a twofold barrier against COVID-19 transmission.

According to Wang *et al.* (2021), the key clinical features of COVID-19 are respiratory symptoms that might lead to substantial cardiovascular damage and severe aggravation of other medical diseases. One of the primary measures in COVID-19 readiness and response is the proper use of personal protective equipment (PPE), with masks of various types topping the list, particularly for operations in public spaces. However, the underlying processes of masks in reducing viral transmission remain unknown, and existing experimental data indicates conflicting results that may mislead the public. Wang's review contains the most new data on the COVID-19 virus's droplet and aerosol transmission mechanisms. The study reveals that masks' contributions to disease prevention and transmission reduction are assessed based on their diverse forms, structures, and functions. The research finds that inhalation protection using masks is especially crucial for reducing the transmission of viruses carried by droplets and aerosols. The mask requirement has already been proven successful, and it has recently been imposed in all states throughout the United States.

It is axiomatically conspicuous that there are many scholarly documents and articles espousing the use of masks as a counter-action to prevent infection with the novel coronavirus. However, there are few or no articles that discuss the perceptions of COVID-19 mask use, specifically in Mozambique. This research was carried out to ascertain the Mozambicans' perceptions of COVID-19 mask usage.

METHODOLOGY

A quantitative research paradigm was adopted with a descriptive research design. The sample consisted of 361 Mozambique islanders. A simple random probability-sampling technique was used. A structured questionnaire was also used as a research instrument

in this study. The researchers chose the quantitative research approach because it offers consistent, reliable, and repeatable information and it can immaculately generalise or infer findings from a study. Creswell (2014) defines quantitative research as a method for testing objective theories by examining the relationships between variables. These variables can in turn be measured, typically on instruments, so that numbered data can be analysed using statistical procedures. Quantitative approaches to research centre on achieving objectivity, control, and precise measurement (Leavy, 2017).

DATA PRESENTATION, ANALYSIS AND DISCUSSION

This section is meant to present the analysis and discussion of the data gathered from the questionnaires in order to answer the research questions.

Table 1: Use of Face Masks

		Frequency	Percent	Percent valid	Percent cumulative
Validity	YES	321	88,9	89,9	89,9
	NO	20	5,5	5,6	95,5
	NO ANSWER	16	4,4	4,5	100,0
	Total	357	98,9	100,0	
Missing system		4	1,1		
Total		361	100,0		

Question 1: When to Use Face Mask

This question was made in order to explore the perceptions of the participants on the appropriate time to use the mask. From this question, the researcher believed that they could determine the participants' perceptions on the time and circumstances that the face mask is usable. The answer to this question, is well presented on the below table.

The table 4.1 above revealed that the majority of the participants (89.9%) used face masks to prevent the coronavirus against 20 participants, which corresponds to 5.6% saying they did not use face masks. However, 16 participants, which corresponds to 4.4%, did not answer this question. Therefore, from the above table, it can be concluded that the majority of people on the island of Mozambique do use face masks, but what is not revealed here are the motives behind the use of the masks.

Table 2: When to Use Face Mask

		Frequency	Percent	Percent valid	Percent cumulative
	DURING THE DAY	8	2,2	2,3	2,3
	IN THE EVENING	1	,3	,3	2,5
	ALL THE TIME	36	10,0	10,1	12,7
	ONLY WHEN WE GO OUT	232	64,3	65,4	78,0
	NO	9	2,5	2,5	80,6

	NO ANSWER	69	19,1	19,4	100,0
	Total	355	98,3	100,0	
Missing System		6	1,7		
Total		361	100,0		

As it has been alluded to above, 65.4% of the participants said they used masks when they went out, compared to 10% who said they used masks all the time. However, 2.3% of the participants said they use masks during the day. Thus, from the above table, it can be concluded that the majority of the participants (65.4%) use masks when they go out, and this is in accordance with the European Center for Disease Prevention and Control (2020) when it posits that face masks have been extensively used in the public in Asian countries and have been linked to a slightly lower risk of SARS among people without known contact with SARS patients during the 2003 SARS epidemic. Moreover, studies conducted in community or health care settings found facemasks to be generally effective against influenza-like illness (ILI) or even against severe acute respiratory syndrome (SARS), but their effectiveness against respiratory infections at MGs remains unknown (Barasheed *et al.*, 2016).

Question 3: Motives for Face Mask Use

This question was designed to elicit participants' thoughts on using face masks to protect themselves against the novel coronavirus. The researcher believed that this would be an important question that would lead him to explore the participants' perceptions of the importance of the face masks in the circumstances they are found in.

Table 3: Motives for Face Mask Use

	Frequency	Percent	Percent valid	Percent cumulative
POLICE	208	57,8	57,8	57,8
PREVENT INFLUENZA	18	5,0	5,0	62,8
PREVENT COVID-19	134	37,2	37,2	100,0
Total	360	100,0	100,0	

The table above reveals that 208 participants, which corresponds to 57.8%, said they used face masks because they were afraid of the policemen jailing them. 134 participants, which corresponds to 37.2%, said they used masks because they were preventing COVID-19. However, 18 participants, which corresponds to 5.0%, said they used face masks to prevent influenza.

It is more than axiomatic that the above data reveals that there was no effective community education on the island that would hook and cajole the community into using the masks as a way to protect them rather than the hysteria of being imprisoned that permeates the island. Effective community education requires a good understanding of the issue of concern, being clear about who we are trying to reach, knowing what behaviour we are trying to change, and investigating the best ways to make this happen (Department of Land and Water Conservation, 2001). Moreover, Kowalski and Fallon

(1986) posit that community education is a process that concerns itself with everything that affects the well-being of all citizens within a given community.

From the above, we can infer, therefore, that if the COVID-19 pandemic is something that affects the whole community, there is a need to effectively educate the community to help curtail the infection.

CONCLUSION

The research found that residents on the island of Mozambique wore face masks not because they were concerned about the mortality caused by COVID-19, but because many of them are terrified of the law enforcement officers who would arrest them. Furthermore, individuals only use face masks when they go out (to the market, hospital, school, etc.), so they do not use them while they are at home, irrespective of who is around them. As a result, it can be assumed that most islanders only wore masks when they went out because they were terrified of the cops, and this is due to poor or ineffective sanitary community education.

RECOMMENDATION

1. Due to the uniqueness that characterises the islanders, the district health authority is called upon to effectively educate the community on the seriousness of COVID-19 and the importance that the mask has in preventing COVID-19 and other diseases;
2. The district health authority should include or use the local community chiefs as a bridge for community sanitary education.

REFERENCES

- Abboah-Offei, M., Salifu, Y., Adewale, B., Bayuo, J., Ofosu-Poku, R., & Opare-Lokko, E. B. A. (2021). A rapid review of the use of face mask in preventing the spread of COVID-19. *International journal of nursing studies advances*, 3, 100013.
- Abdelhafiz, A. S., Mohammed, Z., Ibrahim, M. E., Ziady, H. H., Alorabi, M., Ayyad, M., & Sultan, E. A. (2020). Knowledge, perceptions, and attitude of Egyptians towards the novel coronavirus disease (COVID-19). *Journal of community health*, 45(5), 881-890.
- Albertina Health Service (2020) *what is the effectiveness of wearing medical masks, including home-made masks, to reduce the spread of COVID-19 in the community*. COVID-19 Scientific Advisory Group
- Alvi, M. (2016). *A Manual for Selecting Sampling Techniques in Research*. Karachi
- Anokye, B (2004). Participation in basic education: A study of community participation in primary schools in the Gama district of Ghana (Master's thesis). University of Bergen, Norway
- Baptiste, S., Manouan, A., Garcia, P., Etya'ale, H., Swan, T., & Jallow, W. (2020). Community-led monitoring: When community data drives implementation strategies. *Current HIV/AIDS Reports*, 17(5), 415-421.
- Barasheed, O., Alfelali, M., Mushta, S., Bokhary, H., Alshehri, J., Attar, A. A., ... & Rashid, H. (2016). Uptake and effectiveness of facemask against respiratory infections at mass gatherings: a systematic review. *International Journal of Infectious Diseases*, 47, 105-111.

- Cheng, V. C. C., Wong, S. C., Chuang, V. W. M., So, S. Y. C., Chen, J. H. K., Sridhar, S., ... & Yuen, K. Y. (2020). The role of community-wide wearing of face mask for control of coronavirus disease 2019 (COVID-19) epidemic due to SARS-CoV-2. *Journal of Infection*, *81*(1), 107-114.
- Creswell, J. W. (2013). *Educational research: Planning, conducting, and evaluating*. W. Ross MacDonald School Resource Services Library.
- Department of Land and Water Conservation (2001) *What We Need Is A Community Education Project*. Sydney Information Centre
- Eikenberry, S. E., Mancuso, M., Iboi, E., Phan, T., Eikenberry, K., Kuang, Y., ... & Gumel, A. B. (2020). To mask or not to mask: Modeling the potential for face mask use by the general public to curtail the COVID-19 pandemic. *Infectious disease modelling*, *5*, 293-308.
- Esposito, S., & Principi, N. (2020). To mask or not to mask children to overcome COVID-19. *European journal of pediatrics*, *179*(8), 1267-1270.
- European Centre for Disease Prevention and Control (2020). *Using face masks in the community*. Stockholm: ECDC
- Feng, S., Shen, C., Xia, N., Song, W., Fan, M., & Cowling, B. J. (2020). Rational use of face masks in the COVID-19 pandemic. *The Lancet Respiratory Medicine*, *8*(5), 434-436.
- Kowalski, T. J., & Fallon, J. A. (1986). *Community Education: Processes and Programs. Fastback 243*. Phi Delta Kappa Educational Foundation, Eighth and Union.
- Liao, M., Liu, H., Wang, X., Hu, X., Huang, Y., Liu, X., ... & Lu, J. R. (2021). A technical review of face mask wearing in preventing respiratory COVID-19 transmission. *Current Opinion in Colloid & Interface Science*, *52*, 101417.
- Liu, X., & Zhang, S. (2020). COVID-19: Face masks and human-to-human transmission. *Influenza and other respiratory viruses*, *14*(4), 472.
- Mbah, M., Bang, H., Ndi, H., & Ndzo, J. A. (2021). Community health education for health crisis management: the case of COVID-19 in Cameroon. *International Quarterly of Community Health Education*, 0272684X211031106.
- Muleya, C. (2018). *Financial Management in Education Has Been Called to Question; A Case of Binga North Secondary Schools in Binga District, Matabeleland North Province, Zimbabwe*. Unpublished M. Ed. Thesis. Solusi University, Bulawayo, Zimbabwe
- Negash, B. (2007). Community participation for improving access in primary education: The case of Hadia zone (Master's thesis). Addis Ababa University, Addis Ababa.
- Ngonghala, C. N., Iboi, E., Eikenberry, S., Scotch, M., MacIntyre, C. R., Bonds, M. H., & Gumel, A. B. (2020). *Mathematical assessment of the impact of non-pharmaceutical interventions on curtailing the 2019 novel Coronavirus*. *Mathematical biosciences*, *325*, 108364.
- Sabiq, A., Sulaiman, A. I., & Sugito, T. (2020). Designing Family Empowerment Program: Community Education in Times of Covid-19 Pandemic. *International Educational Research*, *3*(3), p22-p22.
- Scott, B. J. (1977). *An adult education model for surveying perceived roles and needs of rural women*. Kansas State University.
- Sharma, A. E., Frederiksen, B. N., Malcolm, N. M., Rollison, J. M., & Carter, M. W. (2018). Community education and engagement in family planning: updated systematic review. *American journal of preventive medicine*, *55*(5), 747-758.

- Singh, K. (2009). Community response to development of education in Punjab in the era of globalization: An evaluation study (Unpublished Ph.D. thesis in Education). Punjabi University, Patiala.
- Tso, R. V., & Cowling, B. J. (2020). Importance of face masks for COVID-19: A call for effective public education. *Clinical Infectious Diseases*, *71*(16), 2195-2198.
- Wang, J., Pan, L., Tang, S., Ji, J. S., & Shi, X. (2020). Mask use during COVID-19: A risk adjusted strategy. *Environmental Pollution*, *266*, 115099.
- Wang, Y., Deng, Z., & Shi, D. (2021). How effective is a mask in preventing COVID-19 infection?. *Medical Devices & Sensors*, *4*(1), e10163.
- Williams, L. S. (1986). AIDS risk reduction: A community health education intervention for minority high risk group members. *Health Education Quarterly*, *13*(4), 407-421.
- World Health Organization. (2020). *Advice on the use of masks in the context of COVID-19: interim guidance, 5 June 2020* (No. WHO/2019-nCoV/IPC_Masks/2020.4). World Health Organization.