



Poor Adherence to Covid-19 Regulations and Protective Measures at Oshakati Open Market, Oshakati, Oshana Region

Elalia M Mupwedi¹, Jacob Sheehama^{2,3*} & Lusia Pinehas²

¹School of Public Health, Faculty of Health Sciences and Veterinary Medicine, University of Namibia

²School of Nursing Sciences, Faculty of Health Sciences and Veterinary Medicine, University of Namibia

³School of Medicine, Faculty of Health Sciences and Veterinary Medicine, University of Namibia

***Corresponding Author:** Jacob Sheehama, School of Nursing Sciences, Faculty of Health Sciences and Veterinary Medicine, University of Namibia.

Submitted: 20 October 2025

Accepted: 27 October 2025

Published: 03 November 2025

Citation: Mupwedi, E. M., Sheehama, J., & Pinehas, L. (2025). Poor Adherence to Covid-19 Regulations and Protective Measures at Oshakati Open Market, Oshakati, Oshana Region. J of Clin Case Stu, Reviews & Reports 4(5), 01-06.

Abstract

An outbreak of Covid-19 was reported in Namibia in March 2020. The transmission of Covid-19 is said to happen mostly through respiratory droplets, therefore regulations and protective measures were set up to lower the spread of the virus. Many Namibians specifically the Oshakati open market users are said not to follow these regulations and procedures set up for preventing a rapid spread of Coronavirus. This research was done to confirm that effective protective practice is being used and to identify how to reduce the risk of Covid-19 on the Oshakati open market user's considering their knowledge, attitude, and preventive practices (KAP). Method: The researcher used a scoping review and explanatory study design with a qualitative method of data collection because they have ability to map new concepts, types of existing literature about factors that contributes to poor adherence to Covid-19 regulations and protective measures, to identify the existing and missing information about it. Results Poor adherence to Covid-19 protective measures was mainly determined by the awareness of Covid-19 proper information, ignorance and willingness of individuals, religions peer pressure and misinformation that have been spreading on mass media. Conclusion: Giving health education and spreading awareness in public places or where people gather must be prioritized so that the population will have enough awareness and knowledge on protecting themselves against these infections. The government and NGOs must also prioritize correcting fake information and rumours that area spread on mass media. People who create and share this information must get penalties so this type of issues can be avoided.

Keywords: COVID-19, Transmission, Risk, Adherence, Regulations

Introduction

Coronaviruses are a very big family of different viruses. Some of them are common cold in people, while others infect animals, including camels, bats and cattle. A novel coronavirus (nCoV) is a new strain that has never been identified in human previously. Coronavirus disease is an infectious disease caused by a newly discovered SARS (severe acute respiratory syndrome)-CoV-2 virus that started in China 2019. This new virus was then subsequently named Covid-19 virus [1]. The first confirmed Covid-19 case in Namibia was reported on the 14th March 2020. The number of confirmed cases increased to 11 by the end of the same Month. "The transmission of Covid-19 is primarily through respiratory droplets via, direct and indirect, or close contact with

an infected person, when the infected person is asymptomatic [2]. Its other mode of viral transmission is when a person touches a contaminated surface with the virus and then touches her or his nose, mouth, and eyes. The incubation period for Covid-19 is supposed to be in 14 days, with most cases happening approximately five to six days after exposure. Covid-19 symptoms last for weeks or months after first being infected with the virus. The symptoms can be Tiredness, fast-beating of the heart, headache and a lot to mention.

Covid-19 regulations and protective measures were introduced to prevent the fast spreading of the virus. To protect yourself and people around you, you have to know the fact, take the appropri-

ate precautions and follow the protective measures provided by the local health authority. To confirm effective protective practice and reduce the risk of Covid-19, data on knowledge, attitude, and preventive practices (KAP) are essential [3]. Most of the Oshakati open market users were said not to be adhering to the protective measures implemented. Some of the open market users use to follow the implemented protective measures at the beginning but started getting ignorant as time went on. This research was done to explore the perceptions of poor adherence to Covid-19 protective measures the researcher, she has researched and focused on reasons for poor adherence to Covid-19 protective measures [4]. This research was focused on the knowledge and behaviours of the Oshakati open market users as contributing factors to poor adherence to Covid-19 protective measures [5].

Methods

The researcher used explanatory study with a qualitative method of data collection to assess the knowledge, attitude and practice of Oshakati open market vendors and their customers [6]. Oshakati open market is estimated to get about 400 users per day, whereby about 20% of them are vendors of different products and the remaining are their customers. This is the population that was focused on during the assessment [7-10].

Results

Age

According to the results of this study adults and elderly people have been adhering to the regulations, but the youth was not really adhering to the COVID 19 regulations [11-15]. Young people were in a difficult time whereby they were easily influenced by peer and sometimes want to be seen as cool or seeking validation in their preferences, for example that they cannot be controlled by new rules, during the new normal and they were not willing to change their behaviours to adhere to Covid-19 regulations [16-18].

Youth are Likely Not to Follow the Regulations Most of the youth were not follow the regulations because they are afraid of what may their peer label them, as weak and frightened by pandemic [19-22]. They were interested to appear health and fearless, toward Covid-19 pandemic, which not cause a disease even if infect them, as will just recover with no signs and symptoms and they will be back to normal [23-25].

One participants indicated that “Elders were following regulations, but young aged people are not following because they think Covid-19 is only infecting and killing people with other comorbidities and elderlies.”

“It is mostly the youth that are not following the regulations.” Majority of the participants stated that. There’s No other evidence that have supported this position.

Peer pressure

In this study it was demonstrated that, the desire for young people to fit in among others and the peer pressure associated with

resistance to comply with new COVID 19 regulations, is a phenomenon, that developed among from their children days and these attitudes continues throughout their life. In the context of COVID-19 pandemic new normal, there are many instances in which youth might feel that peer pressure strongly [26]. This part of the study demonstrated that, young, aged people are most likely to be influenced by things that people around them do especially friends and things they see and read from social media. They also be giving each other wrong advices.

“Sometimes a person wants to put on a mask, but because his/her friends are not wearing masks s/he will also not wear it, due peer pressure” Stated one participant Two of the participants stated that “Some people just be doing things they see on social media” Other’s stated stated that “Some do things because others are doing it”

Many study demonstrated that adolescents are particularly susceptible to peer influence for several reasons. First, and foremost adolescents look to their peers to understand social norms, acceptance. They align their behaviour over time with the norms of their group orientation and influence or the group they want to belong to, a process known as peer socialisation.

Ignorance

Despite the decreasing of Covid-19 cases every day later, everyone has witnessed the growing of ignorance of Covid-19 preventive measures among community members. For instance, physical distancing is not strictly implemented at high risk places including open marketplaces. Even access to hand washing and sanitizing facilities around the open marketplace, which were readily accessible during the early panic stage of the outbreak are now disappearing one by one. The study has shown that some people are ignoring the regulations, mostly because they are not being supervised or monitored when they enter the open market premises for shopping or business.

Ignorance because there is no Supervision

Since there is no dedicated person in the open market to supervise and ensure that people are adhering to the new COVID – 19 regulations people tend to be ignoring these practices.

Many participants said “It is up to me to decide whether I should follow these regulations or not because nobody will punish me here, nobody is controlling us.”

“There was no one here to control us, so adhering is up to me” One participant stated. No evidence was found to support this position

Being Ignorant, Thinking that it is Not a Threat

Some people have started being ignorant because the virus have been getting better and it was no longer considered dangerous as it was in the beginning of the pandemic, therefore it was not a big threat as it was before. “We became a little bit more relaxed, when the virus got better, even though we know Corona have killed a lot of our beloved ones” Stated the participants No evi-

dence was found to support this.

Side Effects of Regulations and PPE

Participants of the study demonstrated knowledge that, Covid-19 regulations were set up to prevent further spreading of the virus and protect them, from this infection but some of them have side effects as it was indicated by the participants in the following subthemes.

Suffocating in Masks

A number of participants stated that, they cannot put on the mask for the whole day because they hardly breathe properly in the masks, they feel that there is no sufficient air in the masks.

"I cannot put on the mask for a long time because, I cannot breathe well in these masks." Stated some of the participants. Some participants stated that, "I hardly breathe in these masks" With the Centers for Disease Control and Prevention (CDC) recommendation to wear a face mask to help prevent the spread of COVID-19, some people felt that wearing a mask reduced their intake of oxygen or forced them to breathe in their own carbon dioxide [26]. A certain study also stated that, "masks aren't always the most comfortable: they fog up your glasses, they're not the easiest to breathe in, and speaking through the fabric can be frustrating [27]".

Fear of Side Effects Vaccination

Most of the participants have indicated that they are not willing to get vaccinated at all because they have seen and heard people who got vaccinated and got side effects, for example tiredness, headache, fever and unbearable pain where the shot was given. They also feel like the government is forcing people to get vaccinated and that is way too suspicious.

One woman stated "My daughter got that vaccination so she applies for NDF in take, and she have been in bed for two consecutive days, not eating, swollen on the arm where she was vaccinated." One vaccinated participant stated that "I got vaccinated and I can tell how painful is that injection, first I felt so dizzy and have been feeling that until the next day. My neck has also been paining until today." This is confirmed by the Centers of disease control that Systematic adverse effects, including headache and fatigue, have affected fewer than one in four people and were less common in the community than expected trials [28].

Fear of Skin Problems Resulting from Disinfectants

Since sanitizers and disinfectants have become widely used due to the COVID-19 global health crisis, most people have been having fear that the sanitizers and the disinfectants that they have been applying almost every time and everywhere may cause skin problems one day, for example cancer or other skin irritation problems. "We cannot be sanitizing our hands always because one day you may wake up with the top skin peeling off" Repeated use of sodium hypochlorite bleach with inappropriate concentrations can cause damage to the skin of the hands and respiratory problems for these people [29].

Knowledge and Awareness

Poor knowledge and awareness are one of the factors that the researcher found in the research she conducted. During the interview, the researcher was able to assess the knowledge of the participants according to how they answer the general knowledge questions. Awareness is a significant factor affecting the level of compliance [30].

Subtheme:

No awareness was spread in this site

One needs to be aware of something and have knowledge on it for him/her to be able to act on it. A number of people from Oshakati open market were not aware Covid-19 mode of transmission and how to keep themselves protected according to the nature of their market area [31-33]. "No one has ever come here to spread awareness on Coronavirus ever since it started" "I also expected that the government will send people to spread awareness on how to handle ourselves in different areas." Awareness is significant factor affecting the level of compliance [34].

Only Have General Knowledge

Some of the users only have general knowledge about Covid-19 that they hear from radios and other modes of communications that they are exposed to, but they needed knowledge on how to protect themselves in this open market natured area. "I only hear Corona from the radio or from people talking" Lack of knowledge and inadequate infection control training among HCWs delay diagnosis of new cases and are conducive to the spread of infection among HCWs (31). A retrospective national Saudi study revealed that 12.5% of all COVID-19 cases were among HCWs, and that 17.3% of these cases were asymptomatic.

Willingness

Not Willing to Adhere

One participant said, "I don't put on my mask when I don't feel like doing so" "Sometimes customers do not just want to adhere and you can't do anything about it." A multiple number of participants stated that. Although the coronavirus appears to pose a low risk to adolescents themselves, their willingness to follow social distancing guidelines is essential to reduce the risk for other people.

Religions

The religious beliefs, attitudes, practices and myths have also contributed to poor adherence because most people that goes to spiritual churches believed that it's not by the regulations and protective measures that they will survive through Covid-19 outbreak but it is by their faith.

Personally; Believes and Trust More in God than in Covid-19 regulations

There are those participants that indicated that they can do everything through Christ and they believe that it is only God that can save them but not the regulations. They only prayed and believed in God. "It is only God who have control over everything, so it not by regulations but it is by the grace of God that we made it." The researcher has found no evidence to support this.

Told to Focus More on God than Regulations by Church Leaders
Some people were told by their church leaders to focus more on prayers than on the regulations.

“Sometimes you’ll tell a customer to put on their masks and they will start preaching to you on how their pastors told them to be more on God than on protective measure.” The researcher has found no evidence to support this.

Availability of PPE

The participants indicated that there was once a time when a certain organization brought them PPEs that includes hand sanitizers and masks. The tailor participants use to sew their own masks while others use to buy masks from them and from other masks sellers. There are those they always have their PPEs but some of them struggles because the masks are expensive to buy and be changing frequently. They also indicated that they have not been really using disinfectant because it was expensive so they used water that is usually cheap and readily available.

Affordability of PPE

Participants have indicated that there are times when they find themselves not affording PPE, not to mention disinfectants that they all indicated it was way too expensive. “Most of the time we only use water to wash our hands because sanitizers are expensive.” “I cannot use one mask each day because they are expensive also” No evidence was found to support this

Shortage of Vaccines

Misinformation

Information is the “factual data” that entails the knowledge that flows through society and guides individuals in their choice of choices, actions, efforts or lack of thereof (34). Throughout the pandemic, misinformation via rumours, conspiracy theories, and stigma led to the public’s distrust of recommendations from various international health organisations, governmental public health policies and vaccine recommendations [35]. The matter of spreading fake information in the public mostly on mass media have been a big danger when it comes to poor adherence to poor adherence.

Spreading Rumours About Covid-19 Vaccines

Most of them also believe that Covid-19 vaccine is meant to kill people, it makes people sick and that it does not really work and this is the reason why most people have not taken their vaccines until today. “People said that vaccination will make you sick with Corona because you are being injected with Corona” “I read on Facebook that the vaccination reduce fertility, and JOHNSON is infecting people with HIV” Health information-seeking behaviour on online platforms puts users at risk of being exposed to misinformation that could potentially threaten public health [36].

Covid-19 is a Bio-Weapon

Some people believe that Covid-19 is a Bio-weapon set up by the government, and the reason of compulsory masks is to kill people by suffocating them in masks. A number of participants indicated that; “Coronavirus is just a game that the government

is playing, because they can even estimate when one wave is coming, there have not been any estimation made before” Palestinian media argued that SARS-CoV-2 was a biological weapon being used by the US and Israel against China and Iran [37].

Nature of the Open Market

Oshakati open market is designed in a way that there is no really sufficient space to keep the social distance. People also have to be exchanging cash and items and there are those that people that sell clothes and their clients have to fit in clothes before deciding to buy or not.

Close Contact During Exchange of Items and Cash

Vendors and customers have to get in close conduct by exchanging goods and cash during the trade and that is one mode whereby Covid-19 can spread from one to the next person. “Sometimes when I remember I sanitize the money but not always” “We just have to take the risk of exchanging goods because that is how we survive”

No evidence to support this because the study was not conducted before in Namibia

Fitting in Clothes

In Oshakati open market, there are vendors that sell clothes, customer have to search by physical touching the clothes and fit in the clothes to ensure they fit in before buying. “Most customers would not want to buy things they are not sure they look good on them, so they have to fit in and we just allow them to do because what we want here is money”

No evidence to support this

Social Distancing was Not Really Possible Because of the Limited

space in the area.

Oshakati open market have a very limited area so keeping a distance of 1 metre between people was really difficult. “As you can see the area you can see that keeping a distance there is very impossible” Though mobility and social distancing are difficult in small living spaces, it is still mandatory that precautionary measures against COVID-19 as advised by the WHO are implemented at home [38].

Conclusion

The study showed evidence that that poor adherence to Covid-19 protective measures was mainly determined by the awareness of the virus’s mode of transmission, how to protect most of them yourself and how to protect people around you, it can also be determined by age and peer-pressure, the knowledge and understanding about it. Ignorance and willingness have also been contributing to poor adherence to Covid-19 protective measures and that was difficult to control since no one is capable of doing anything about it. Religions have also been determinants of non-adherence to protective measures, and the worst thing that the spread of fake information on social media need to be stopped too because it is some of the major things that have misled the society. Few of the open market users have better level

of knowledge on Covid-19 regulations but most of them have very low understanding mostly the uneducated ones. Recommendations It is highly recommended from the study findings that, government prepare and allow the public to make use of both modern and indigenous knowledge and practices for preventions of diseases, mostly when some traditional practices are known to work in prevention and people have been practicing them and worked for them. This study recommends giving of health education and spreading awareness in public places or where people gather must be prioritized so that the population will have enough awareness and knowledge on protecting themselves against these infections. The study also recommends government and NGOs to prioritize correcting fake information and rumours that area spread on mass media. People who create and share this information must get penalties so this type of issues can be avoided. More attention should be on adolescents to be warned from home and made aware of what are the effects of not adhering to such rules. A fine for those that are not adhering must also be set up. It is recommended that government must provide this kind of areas with PPEs because not everyone can afford them.

Recommendations

It is highly recommended from the study findings that, government prepare and allow the public to make use of both modern and indigenous knowledge and practices for preventions of diseases, mostly when some traditional practices are known to work in prevention and people have been practicing them and worked for them.

This study recommends giving of health education and spreading awareness in public places or where people gather must be prioritized so that the population will have enough awareness and knowledge on protecting themselves against these infections.

The study also recommends government and NGOs to prioritize correcting fake information and rumours that area spread on mass media. People who create and share this information must get penalties so this type of issues can be avoided.

More attention should be on adolescents to be warned from home and made aware of what are the effects of not adhering to such rules. A fine for those that are not adhering must also be set up. It is recommended that government must provide this kind of areas with PPEs because not everyone can afford them.

References

1. euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/novelcoronavirus-2019-ncov#:~:text=On%2031%20December%202019%2C,2019-nCoV".
2. Ghinai I, McPherson TD, Hunter JC, Hannah L Kirking, Demian Christiansen, et al. (2020) FiSome of these open market users use to follow the measures at the beginning but started getting ignorant as time went on.rst known person-to-person transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in the USA. The Lancet. 395: 1137-1144
3. Getu M, Gosaye M, Lemma B, Gosaye Mekonnen Tefera, Biruk Mosisa et al. (2020) COVID-19 Knowledge, Attitudes, and Prevention Practices Among People with Hypertension and Diabetes Mellitus Attending Public Health Facilities in Ambo, Ethiopia. Department of Pharmacy, College of Medicine and Health Sciences, Ambo University, Ambo, Ethiopia. 13: 4203-4214.
4. Nasinyama GW (1992) Study on Street Foods in Kampala, Uganda. Rome and Kampala: FAO and Makerere University. Study on Street Foods in Kampala, Uganda. Rome and Kampala: FAO and Makerere University.
5. Siewe Fodjo JN, Pengpid S, Villela EFdeM, Vo Van Thang D, Mohammed Ahmed et al. (2020) to contain COVID-19 and exit lockdown in low- and middle-income countries. JInfect 81: e1-e5.
6. Miller LC, Joshi N, Lohani M, Beatrice Rogers, Shubh Mahato, et al. (2017) Women's education level amplifies the effects of a livelihoods-based intervention on household wealth, child diet, and child growth in rural Nepal. Int J Equity Health 16: 183-83.
7. Acharya P, Khanal V (2015) The effect of mother's educational status on early initiation of breastfeeding: further analysis of three consecutive Nepal demographic and health surveys. BMC Public Health 15: 1069-1069.
8. Yazew BG, Abate HK, Mekonnen CK (2021) Knowledge, Attitude and Practice Towards COVID-19 in Ethiopia. A Systematic Review; 2020. Patient Preference and Adherence 15: 337-348.
9. Bob O, Lilian B, Elizabeth K, Alex R, Joseph N. Siewe Fodjo (2020) Level and Determinants of Adherence to COVID-19 Preventive Measures in the First Stage of the Outbreak in Uganda. Int J Environ Res Public Health 17: 1-14.
10. Agegnehu B, Abera M, Azene T, Behailu T, Shitaye Shibiru, et al. (2021) Adherence with COVID-19 Preventive Measures and Associated Factors Among Residents of Derashe District, Southern Ethiopia This article was published in the following Dove Press journal: Patient Preference and Adherence 3: 237-249.
11. Agegnehu B, Abera M, Azene T, Behailu T, Shitaye Shibiru, et al. (2021) Adherence with COVID-19 Preventive Measures and Associated Factors Among Residents of Derashe District, Southern Ethiopia This article was published in the following Dove Press journal: Patient Preference and Adherence 3: 237-249.
12. Zhong BL, Luo W, Li HM, Zhang QQ, Liu XG, et al. (2020) Knowledge, attitudes, and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak: a quick online cross-sectional survey. Int J Biol Sci 16: 1745-1752.
13. Khader Y, Al Nsour M, Al-Batayneh OB, Saadeh R, Bashier H, et al. (2020) Dentists' awareness, perception, and attitude regarding COVID-19 and infection control: cross-sectional study Among Jordanian dentists. JMIR Public Health Surveill 6: e18798.
14. Creswell J W (2012) Educational research: Planning, con-

- ducting, and evaluating quantitative and qualitative research (4th ed.). Boston, MA: Pearson. <https://www.scirp.org/reference/ReferencesPapers?ReferenceID=757162>
15. Peters Micah, M Godfrey, Christina McInerney P, Hanan Khalil, Patricia McInerney, et al. (2015) The Joanna Briggs Institute Reviewers' Manual 2015: Methodology for JBI scoping reviews. Joanne Briggs Inst. 13: 141-146.
 16. Bertram C, Christiansen I, Understanding research (4th ed) Pretoria, SA: Van Schaik Publishers Cross, A. (2019). An overview of qualitative research methods. Retrieved from <http://www.thougle.com>
 17. Godfred YA (2019) Research Instruments For Data collection, Retrieved 10 May 2020 from https://www.academia.edu/36865594/RESEARCH_INSTRUMENTS_FOR_DATA_COLLECTION_UPDATED https://www.academia.edu/44351834/RESEARCH_INSTRUMENTS_FOR_DATA_COLLECTION_Updated_
 18. Bertram C & Christiansen, I., Understanding research (4th ed) Pretoria, SA: Van Schaik Publishers Cross, A. (2019). An overview of qualitative research methods. Retrieved from <http://www.thougle.com>
 19. Peters Micah, M Godfrey, Christina McInerney P, Hanan Khalil, Patricia McInerney, et al. (2015) The Joanna Briggs Institute Reviewers' Manual 2015: Methodology for JBI scoping reviews. Joanne Briggs Inst. 13: 141-146.
 20. Wright L, Steptoe A, Fancourt D (2021) Predictors of self-reported adherence to COVID-19 guidelines. A longitudinal observational study of 51,600 UK adults. The Lancet Regional Health-Europe 4: 100061.
 21. Wright L, Fancourt D (2021) Do predictors of adherence to pandemic guidelines change over time? A panel study of 22,000 UK adults during the COVID-19 pandemic. Preventive Medicine. 153: 106713.
 22. Usman IM, Ssempijja F, Ssebuufu R, Lemuel AM, Archibong VB, et al. (2020) Community drivers affecting adherence to WHO guidelines against covid-19 amongst rural Ugandan market vendors. Frontiers in public health. 8: 340.
 23. Graupensperger S, Lee CM, Larimer ME (2021) Young adults underestimate how well peers adhere to COVID-19 preventive behavioral guidelines. The Journal of Primary Prevention. 42: 309-318.
 24. Junaedi A, Ong KIC, RachmatullahF, Shibnuma A, Kiriya J, et al. (2022) Factors influencing physical distancing compliance among young adults during COVID-19 pandemic in Indonesia: A photovoice mixed methods study. PLOS Glob Public Health 2: e0000035.
 25. Henneberger AK (2020) Peer influence and adolescent substance use: a systematic review of dynamic social network research. Adolesc. Res. Rev. 6: 57-73. <https://www.health.com/condition/infectious-diseases/coronavirus/does-wearing-facemask-increase-co2-levels> <https://www.verywellmind.com/how-to-deal-with-peer-pressure-post-covid-5180244>
 26. Polack FP, Thomas SJ, Kitchin N (2020) Safety and efficacy of the BNT162b2 mRNA COVID-19 vaccine. N Engl J Med 383: 2603-2615.
 27. Parnes CA (1997) Efficacy of sodium hypochlorite bleach and "alternative" products. J Environ Health 59: 14.
 28. Shon JA, Yang Y, Park JH (2016) Factors influencing Compliance for Influenza Infection Control by NURSES. J Korean Acad Fundam Nurs 23: 161-171.
 29. Suwantarat N, Apisarnthanarak A (2015) Risks to health-care workers with emerging diseases: lessons from MERS-CoV, Ebola, SARS, and avian flu. Curr Opin Infect Dis 28:349-61.
 30. Alsofayan YM, Althunayyan SM, Khan AA, Hakawi A, Assiri AM (2020) Clinical characteristics of COVID-19 in Saudi Arabia: a national retrospective study. J Infect Public Health. 13: 920-925.
 31. Maxwell KA (2002) Friends: the role of peer influence across adolescent risk behaviors. J. Youth Adolesc 31: 267-277.
 32. Information Definition & Meaning. Dictionary.com. 2021 Available from: <https://www.dictionary.com/browse/information>.
 33. Love JS, Blumenberg A, Horowitz Z (2020) The parallel pandemic: medical misinformation and COVID-19: Primum non nocere. J Gen Intern Med. 35: 2436.
 34. Waszak PM, Kasprzycka-Waszak W, Kubanek A (2018) The spread of medical fake news in social media—The pilot quantitative study. Health Policy and Technology 7: 115-118.
 35. Palestinian writers: the coronavirus is a biological weapon employed by U.S., Israel against their enemies. <https://www.memri.org/reports/palestinian-writers-coronavirusbiological-weapon-employed-us-israel-against-their-enemies>. Updated March 24, 2020. Accessed December 1, 2020.
 36. Islam MS, Sarkar T, Khan SH, Abu-Hena Mostofa Kamal, S M Murshid Hasan, et al. (2020) Covid-19-related infodemic and its impact on public health: a global social media analysis. Am J Trop Med Hyg 103: 1621-1629.

Copyright: ©2025 Jacob Sheehama. et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.