

## TWO

### ***Franca Attoh, Samuel Ojima Adejoh & Temitope J. Owolabi:*** **Beliefs about Covid-19: Some insights from the market square in Lagos and Ibadan, Nigeria**

#### **Abstract**

This paper on beliefs about Covid-19 disease in Nigeria, shows how the belief or disbelief of the existence of the disease in Nigeria affected the health seeking behaviour of Nigerians especially as regards the non-pharmaceutical guidelines established by the Nigeria Centre for Disease Control (NCDC). Data for the paper were generated using the indepth interview method to elicit responses from market men and women from selected markets in Lagos and Ibadan, Nigeria. The sample size was 30, 15 respondents comprising men and women from selected markets in Lagos and Ibadan. The instrument used to generate data was the interview guide which contained numerous questions including a section on beliefs about Covid-19 in Nigeria. The generated data were analysed with the aid of NVivo (12 plus). Anchoring the analysis on the Sociology of illness, the results showed that many Nigerians were sceptical about the existence of Covid-19 disease. This scepticism is because of factors such as cultural belief, religion, corruption and the inherent distrust in orthodox medicine as deficient in curing certain diseases. The paper concludes that Nigerians have become consumers of health and therefore do not trust handing their health seeking decisions to a third party especially for certain illnesses such as Covid-19 which they believe could not be cured by orthodox medicine. The paper recommends various forms of enlightenment and sanction to enforce compliance of the NCDC guidelines to stem the rising cases of infection.

**Keywords:** Covid-19, non-pharmaceutical guidelines, orthodox medicine, health-seeking behaviour and Scepticism

## **Croyances sur le Covid-19: quelques aperçus de la place du marché à Lagos et Ibadan au Nigeria**

### **Résumé**

*Cet article sur les croyances concernant la maladie Covid-19 au Nigeria, montre comment la croyance ou l'incrédulité de l'existence de la maladie au Nigeria a affecté le comportement de recherche de soins des Nigériens, en particulier en ce qui concerne les directives non pharmaceutiques établies par le Nigeria Center for Disease Control ( NCDC). Les données de l'article ont été collectées à l'aide de la méthode d'entretien approfondi pour obtenir des réponses au près des hommes et des femmes des marchés sélectionnés à Lagos et Ibadan, au Nigeria. La taille de l'échantillon était de 30 et 15 répondants comprenant des hommes et des femmes des marchés sélectionnés à Lagos et Ibadan. L'outil utilisé pour collectionner des données était le guide d'entretien qui contenait de nombreuses questions, dont une section sur les croyances concernant le Covid-19 au Nigeria. Les données collectionnées ont été analysées à l'aide de NVivo (12 plus). Ancrant l'analyse sur la sociologie de la maladie, les résultats ont montré que de nombreux Nigériens étaient sceptiques quant à l'existence de la maladie Covid-19. Ce scepticisme est dû à des facteurs tels que la croyance culturelle, la religion, la corruption et la méfiance inhérente à la médecine orthodoxe comme déficiente pour guérir certaines maladies. Le document conclut que les Nigériens sont devenus des consommateurs des produits de la santé et ne font donc pas confiance au fait de confier leurs décisions de recherche de santé à un tiers, en particulier pour certaines maladies telles que Covid-19 qui, selon eux, ne pourraient pas être guéries par la médecine orthodoxe. Le document recommande diverses formes d'éclaircissement et de précaution pour faire respecter les directives du NCDC afin d'endiguer l'augmentation des cas d'infection.*

*Mots-clés: Covid-19, directives non pharmaceutiques, médecine orthodoxe, comportement de recherche de soins et scepticisme*

## **Background**

Coronavirus disease also called (COVID-19) is caused by a new strain corona virus known as (SARS-CoV-2) first identified in Wuhan, China, in December 2019. Not much is known about the virus because it has not been previously identified in human beings but scientists are doing various researches to build knowledge about the virus. Although most people who have COVID-19 have mild symptoms but it can also cause severe illness and even death especially among older adults and people with underlying medical conditions.

The aim of this paper is to show how belief or unbelief of some Nigerians in the existence of Covid-19 during the lockdown in 2020 shaped their actions and health seeking behaviour. Many Nigerians were sceptical of the Covid-19 disease as most saw it as a ploy by the government to attract financial aid from the developed countries where the pandemic was truly raging. This unbelief is due to the distrust of Nigerians in their government and also their belief in God and distrust of orthodox medicine as cure for certain diseases.

The Federal Ministry of Health confirmed the first index case of Covid-19 on the 27<sup>th</sup> of February, 2020. Thereafter, Nigerians went about their normal business without paying any attention to the health implications of the index case in the population. By the 30<sup>th</sup> of March, 2020, two states-Lagos and Ogun and the federal capital territory, Abuja were put on lockdown by the Federal Government because of the rising number of infections. In spite, of the lockdown and the guidelines put out by the Nigerian Center for Disease Control (NCDC) to stem the rising infections, many Nigerians refused to believe the existence of the disease in

Nigeria. For instance, some of the guidelines approved by the NCDC include using a face mask, frequent washing of hands or the use of hand sanitizers, maintaining physical distance and avoiding crowded spaces but most Nigerians treated the guidelines with levity. The few who believed observed the guidelines to avoid getting infected. Some others believed that Covid-19 was an advanced form of malaria which could be cured with traditional herbal brew known as –agboll. Even, amongst the educated elites who were aware of the pandemic and its devastating effects in other countries, the refrain was that the hot temperature in Nigeria, will kill off the virus and thus, there was no need to panic. This narrative encouraged many Nigerians to carry on their normal activities oblivious of the disease. Currently, Nigeria, has a total of over 90, 000 cases of Covid-19 with a total of 1,311 deaths and with rising numbers as the country enters the second wave of the pandemic.

This expressed unbelief by many Nigerians in the existence of Covid-19 disease necessitated a qualitative survey amongst market men and women in some selected markets in Lagos and Ibadan, Nigeria, to ascertain the reasons for this unbelief and its implications on reducing the rising infections in Nigeria.

Some scholars argued a relationship between belief and reality in Africa as the basis for social action. For instance, studies on religious behaviour show a relationship between fear and religious beliefs. Fear evokes faith and belief in the supernatural thereby mitigating fear (see Jong et al. 2017, Jackson et al. 2017). The belief in the supernatural mitigates the fear and anxiety associated with the unknown. The belief in religion or the supernatural stems from the cultural ethos of the average Nigerian and this was fully evident during the corona virus pandemic as shown by the results of the survey carried out in Lagos and Ibadan, Nigeria.

### **Earlier studies**

The COVID-19 pandemic caused by coronavirus represents a global health crisis, and up until second half of April 2021 the pandemic has caused or is associated with almost three million deaths worldwide (World Health Organisation, 2021a). At the very beginning of the pandemic, the Nigerian government responded quickly by issuing evidence-based prevention guidelines and numerous restrictions, such as enforcing social distancing measures, closing public transport, schools, restaurants, shopping centres and other public places. Although compliance with government guidelines and public health recommendation is crucial in reducing transmission rates during the COVID-19 pandemic, it has been reported that a minority of people do not comply with the governmental guidelines.

When considering the reasons why some people do not follow self-isolation instructions, it is worth noting that different socio-demographic factors have been shown to play a significant role. For example, Atchison et al. (2021) reported that adoption of social-distancing measures was higher among people aged 70 and over compared to younger adults, possibly because they are the most vulnerable group. Furthermore, people with low household incomes, and ethnic minority groups were less likely to self-isolate. In addition, Zhang et al. (2020) found that married people were more likely to follow self-isolation measures.

Aside from socio-demographic factors related to compliance with the health guidelines, previous studies have shown that different psychological variables predict pandemic-related behaviours. For example, Plohl and Musil (2021) found that COVID-19 risk perception and trust in science predicted compliance with COVID-19 preventive measures. When considering trust in science, it is important to take into account a wide and rapid spread of various beliefs and misinformation related to the current pandemic. Director-General of the World Health Organization noted that experts are now fighting an infodemic along with the

epidemic, as it is clear that belief in COVID-19 conspiracy theories could potentially influence people's behaviour and increase distrust in governmental preventive measures.

In modern society, conspiracy theories are a widespread phenomenon that can be defined as a belief that a group of people secretly works to achieve some malevolent goal (Bale, 2007). An important aspect of conspiracy theories is that they are more likely to occur during social crisis (van Prooijen & Douglas, 2017), and COVID-19 pandemic, with global health, political, and economic consequences, represents such a situation.

The importance of examining how belief relates to people's behaviour during the COVID-19 pandemic is demonstrated by studies conducted prior to the COVID-19 pandemic, which have shown that agreement with conspiracy theories was associated with disregarding public health advice in several areas. For example, Jolley and Douglas (2014a) found a negative relationship between anti-vaccine conspiracy beliefs and vaccination intentions. In addition, participants exposed to climate change conspiracy theories report a decreased intention to reduce their carbon footprint (Jolley & Douglas, 2014b). Regarding the relationship between epidemic-related conspiracy beliefs and behaviour, studies have shown that the likelihood of having unsafe sex is higher among AIDS conspiracy believers (Bogart & Thorburn, 2005; Grebe & Nattress, 2012).

These findings imply that belief in conspiracy theories may pose a threat to public health and highlight the importance of investigating them further in the context of the ongoing pandemic. The content and characteristics of conspiracy theories about COVID-19 are not much different from those related to previous epidemics (e.g., Zika virus, Wood, 2018). Most theories include the belief that the coronavirus is man-made virus created to control population. Some also include the belief that COVID-19 is no more dangerous than regular flu because mortality rates are

lower than those reported by government officials and health care providers. Research on how conspiracy beliefs relate to the behaviour has shown that people high in conspiracy mentality are less likely to comply with preventive behaviours recommended by the government (Marinthe et al., 2020). Furthermore, Allington and Dhavan (2020) found a negative relationship between belief in COVID-19 conspiracy theories and compliance with public health recommendations.

Erceg et al. (2020) showed that endorsement of COVID-19 unfounded beliefs led to less responsible behaviour. Similar findings were reported by Teovanović et al. (2020). Moreover, the belief that COVID-19 was a hoax was found to negatively predict containment-related behaviours, such as hand washing and maintaining physical distance (Imhoff & Lamberty, 2020) or face mask wearing and social distancing (Hornik et al., 2021). In a similar vein, Freeman et al. (2020) concluded that coronavirus conspiracy beliefs were associated with lower adherence to all government guidelines. Furthermore, other researchers found that COVID-19 conspiracy beliefs were negatively associated with adherence to social distancing guidelines (Biddlestone et al., 2020; Bierwiazzonek et al., 2020). It has been also reported that the COVID-19-related conspiracy beliefs were inversely related to the taking of preventive actions, including wearing a face mask and intention to be vaccinated against COVID-19 (Romer & Jamieson, 2020). However, some studies have produced inconsistent results. For example, Čavojeová et al. (2020) and Alper et al. (2020) found no correlation between coronavirus specific conspiracy beliefs and recommended behaviour against COVID-19, which calls for further, more nuanced exploration of this subject.

Based on the finding from earlier studies, the spread of these beliefs can potentially lead to disregard of official medical recommendations and government restrictions. Therefore, this study aims to unravel the beliefs related to COVID-19 in

explaining the level of compliance with official COVID-19 recommendations. In this way, this study further explores the mechanisms by which conspiracy beliefs can lead to undesirable social and medical outcomes.

### **Theoretical orientation**

The theoretical explanation for this paper is anchored on the sociology of illness. There are a number of reasons why people seek alternative practices to heal diseases. Some people perceive orthodox medicine as deficient and incapable of relieving certain forms of illness. Giddens (2001) argued that the role of the *‘passive patient’* does not grant them enough input into their own treatment or healing. According to him some individuals take this route due to religious belief or philosophical objection to orthodox medicine. The fact of this postulation is that individuals are becoming *‘health consumers’* that is adopting an active stance towards their own well-being. People are taking charge of their lives rather than depending entirely on a third party hence the growth of alternative medicine. The outbreak of the corona virus and concomitant Covid-19 disease in Nigeria, has shown the extent to which people disbelieve the existence of a disease because of their belief or philosophical disposition towards taking charge of their well-being. Many Nigerians including educated elites still believe in the efficacy of Nigerian traditional medicine hence the scepticism that trailed the Covid-19 disease. A good number of Nigerians are of the belief that if at all it exists in Nigeria, a good dose of herbal brew known as *‘agbo iba’* plus the steam inhalation for some days will destroy the disease in a number of days. Herein lies the dilemma of the government in convincing people to observe the NCDC guidelines to reduce the rising numbers of Covid-19 infections.

### **Methods**

#### ***Design***

The cross-sectional survey was carried out using a qualitative tool. A tool of 30 respondents were purposively selected and



interviewed from selected markets in Lagos metropolis and Ibadan, Nigeria. A total of 15 respondents were interviewed from each of the two cities from June to July, 2020.

### ***Instrument, Data Management and Analysis***

the qualitative tool deployed to elicit responses from the respondents was the indepth interview guide. Information gathered from the respondents include demographic characteristics such as age, the age of business, religion, family size, marriage type and average monthly income. The data generated were analysed using NVivo software (version 12+).

### ***Ethical issues***

Before beginning the inquiry, informed consent was gained from participants in a manner that was both voluntary and free from any form of coercion. This ensured that research ethics were adhered to in a rigorous manner. In addition, the confidentiality requirement was satisfied because the researchers guaranteed that the identity of the people who took part in the study would not be disclosed.

### **Result**

The study involved both males and females the combined market squares of Lagos and Ibadan. From these two study locations, 17 females and 13 males formed the respondents who participated in this study. By implication, representing 56.7% and 43.3% for females and males respectively. As noted earlier in the method section, 15 respondents each were represented for Lagos and Ibadan market squares. The results of the qualitative survey deal with the belief of Nigerians on the existence of Covid-19 in Nigeria. The study discovered three strands to the beliefs in COVID-19. That is, from the point of view of respondents who believed in the virus, and also, others did not believe, while the remaining were indifferent. A summary of the responses is given below.

***Responses of respondents who believed the existence of the virus***  
*Yes, I believe there is corona, most people even in this market done believe covid-19 is real, my prayer is that it won't come close to us*  
- **Female-35-Lagos-2**

*I believe it is here in Nigeria because so many prominent Nigerians have died due to the disease. Unfortunately, many Nigerians doubt its existence because we don't trust our government. They believe that government is looking for ways of making money from the international community.* - **Female-36-Lagos-13**

*We all know the virus is in the country. The number of cases discovered everyday speaks in itself. Everybody knows it is true now. People are dying* - **Female-37-Ibadan-11**

*It's in Nigeria. it's obvious. We lost a prominent politician to it* - **Female-41-Ibadan-9**

*Initially, I had a doubtful mind about the virus but the way the virus is being propagated and presented to us through Radio and TV stations made me believe that the virus is real and existing in Nigeria. And also, we have to consider how the virus has been pervaded across the globe which actually shaped my orientation towards false believe about the virus* - **Female-42-Lagos-11**

*I really can't say much. But the virus is in the country. Someone was picked very close to us in medina estate last week. That's all I can say. The virus is real.* **Female-45-Lagos-15**

*I believe it is in Nigeria but it is for big people that travel outside the country and mix with Oyibo (white people).* **Male-30-Ibadan-15**

*I believe corona virus is real and it is not like the government is using it to embezzle money. Even if we don't know who has been infected in person, we see them on the television. We see the people*

*who treats them wearing clothes that cover them from head to toe. If the Corona is not real, there won't be this much activity about it. I don't think there should be anybody that will not believe - **Male-45-Lagos-4***

*I believe it is in Nigeria. We have seen many big men who lost their lives as a result of the sickness. Look at the number of politicians who died - **Male-45-Lagos-9***

*It is real. I actually thought it was made up. Until recently - **Female-33-Ibadan-16***

***Responses of participants who did not believe in the existence of the virus***

*I did not believe about Covid-19 in Nigeria because I have not seen anybody that have it but I heard - **Female-29-Lagos-12***

*I do not believe about this virus in Nigeria particularly this market that we are, as we are many in this Bodija, Ibadan market there is nobody that can prove the existence. The truth is that we use to cover our nose and wash our hands at the same time but I have not seen anybody that claim that they have a relative or friends that have been - **Female-35-Ibadan-4***

*I did not believe about Covid-19 in Nigeria because I know that government are just using that opportunity to swallow our money. But the truth is that either we believe it or not, we are going to be forced to comply with everything they are asking us to do - **Female-38-Ibadan-8***

*See, the fact is that there is nothing like Covid-19 anywhere. The virus does not exist at all, they are just deceiving us with their propaganda shouting that people have contacted the virus in Kano, Maiduguri, Sokoto, Zamfara etc. all of this information about the virus is a big lie, they are not genuine. Government, should just circle a single person that truly have this virus as to figure out how the virus is being transmitted and the symptoms then after that I*

*may believe of its existence. We understand that HIV/AIDS exist through is symptoms such as cough but for Covid-19, I don't know its symptoms at all. They are just given us false information on Facebook and WhatsApp - **Female-39-Lagos-14***

*Nobody knows. But I also believe it is political - **Female-54-Lagos-5***

*What I believe about COVID-19 in Nigeria is that I don't think it exist here, we don't really have it here apart from those that brought it from abroad because we don't have it her heeeee, we don't have it here - **Female-55-Lagos-3***

*What I believe about this virus in Nigeria, is all about hearsay (that Covid-19 exist in Nigeria). But what I descried is that covid-19 is not real in Nigeria and the only thing I can say about the existence of this virus even if I am to disclaim and/or disregard the information and the update given by Nigeria government is to look at the virus from global context whereby information is reaching us through media such as CNN and other cable channels concerning the pandemic and infection overseas. - **Male-45-Ibadan-10***

*It is not what the Nigeria government proclaims it to be. America and China cannot lie about it. But here in Nigeria, it is made up. Politicians are going to use it as a means to commit crime in high places - **Male-48-Ibadan-6***

*They are just using it to steal money from people, when they are bringing goods for us, there are more check points on the road and police and soldiers collect money at every check point. I don't believe there is Corona in Nigeria - **Male-50-Lagos-1***

*The problem that we have in this country is that, the government is not honest, there is a gap between the governed and the government, they are not reliable and that everything government says is a lie, it's not like there is no covid-19 in Nigeria, people are*

*saying maybe it's another way to siphon our money -* **Male-60-Ibadan-17**

***Responses of respondents who were indifferent***

*I can say I believe and I can also say I don't believe. Because I have not seen anybody affected with and I pray not to see anybody affected but from the news on the tv, one would be shocked -*

**Female-25-Ibadan-14**

The Italian man who tested positive for the virus made contact with certain number of people. So, there is possibility that the virus is in the country already. You never know. But even the NCDC cannot lie about it. Though, people still have their doubt as to the reported cases in Nigeria – **Male- 37-Lagos**

**Discussion**

The results from the survey show that many Nigerians are sceptical of the existence of Covid-19 in the country. This scepticism stems from three main factors, the first is cultural, the second is the disconnect that exists between government and the people. The third is the health seeking behaviour of most Nigerians.

Culturally, Nigerians have implicit belief in God and his omnipotence over their affairs and thus, they believe that God will protect them from being infected with Covid-19. It is obvious from the responses that the respondents from the selected markets in Lagos and Ibadan see themselves as being under the banner of God and therefore would be free from being infected with the virus.

There is a palpable distrust of politicians and government officials in Nigerians. This distrust is not unconnected with the failure of the government to fulfil the social contract and the endemic corruption that exists in government. Evidence from the survey show that most of the respondents do not trust government's data on Covid-19. Many people believe that government manipulates

the data to attract aid from the developed countries. For many of the respondents such aids will once more be embezzled by government officials and therefore ordinary Nigerians should not enable them to attract such aid.

Finally, the respondents do not trust government enough to handle their diseases and illnesses. For a fact, the average Nigerian believes in the potency and efficacy of traditional medicine prepared with roots and herbs. As seen from the responses they believe that Covid-19 is an advanced form of malaria (iba) which could easily be cured with the use of herbal brew and for the reason do not want to accord Covid-19 with the kind of status it has earned in orthodox medicine. They do not trust handing their health seeking decision to a third party especially given the palpable fear associated with Covid-19 globally. This health seeking behaviour is in tandem with the Sociology of illness which argues that people seek alternative practices to heal diseases because they perceive orthodox medicine as deficient and incapable of relieving certain forms of illness. In addition, such distrust could also be due to religious belief or philosophical conviction.

The present findings are consistent with previous studies showing that beliefs are associated with disregarding public health advice in other health domains (Bogart & Thorburn, 2005; Grebe & Natrass, 2012), and during the current COVID-19 pandemic (e.g., Allington & Dhavan, 2020; Biddlestone et al., 2020; Bierwiazzonek et al., 2020; Erceg et al., 2020; Hornik et al., 2021; Kowalski et al., 2020; Latkin et al., 2021; Marinthe et al., 2020; Oleksy et al., 2020). When it comes to the mediating role of trust in government officials in the present study, beliefs decreased the level of trust and consequently the level of compliance with governmental protective measures. Marietta and Barker (2018) noted that people who endorse these beliefs and conspiracy theories generally doubt government and scientific information. This makes them prone to disregarding government restrictions

and adherence to public safety guidelines. Of course, it could be that people with a generally lower trust in government would actively seek out the contrary and alternative information on how to deal with the crisis, thus showing a greater tendency to believe in conspiracy theories.

This finding highlights the importance of government communication of information about COVID-19 to combat, not only the spread of the coronavirus, but also the spread of misinformation. The current pandemic represents a situation in which it is critical to follow recommendations from trusted scientific sources. At the same time, these beliefs and conspiracy theories are on the rise in social crisis situations like the current pandemic. Not only are they on the rise, but they are also very easy to spread through social media platforms. In fact, studies have shown a positive correlation between COVID-19 conspiracy beliefs and the use of social media as a source of information about the pandemic (Allington et al., 2020). As a result, social networking services such as Facebook, Twitter, and TikTok have come together to help disseminate scientific information by encouraging people to search for trusted sources (Wiederhold, 2020).

## **Conclusion**

Contrary to the expectations of the authors that there would be variation in responses between traders in Lagos and traders in Ibadan, because of the differences in the contexts. However, the results from the survey showed no variation but rather uniformity as both female and male traders from the two contexts shared similar views in terms of religious belief, distrust of the government and its officials as to the veracity of the existence of Covid-19 in Nigeria. All the respondents were distrustful of handing their health seeking decision to a third party especially one represented by orthodox medicine. This is significant because of their firm belief that orthodox medicine is deficient in the healing of certain illnesses. Their belief is that Covid-19 is an

advanced form of malaria which could be cured with the herbal brew known as ‘*agbo iba*’ hence the continuous scepticism and failure to adhere to NCDC non-pharmaceutical guidelines which incidentally has resulted in the second wave of the pandemic in Nigeria.

In view of the foregoing, the paper makes the following recommendations:

- There is an urgent need for government to commence enlightenment campaigns to sensitize Nigerians of the existence of Covid-19.
- Churches, Mosques and market leaders should be incorporated in the fight against Covid-19.
- The mass media have a critical role to play to enlighten the public on the need to comply with NCDC guidelines to stem the rising cases of infection.
- Government may consider the use of sanctions to enforce compliance as Nigeria enters the second wave.



## References

- Allington, D., & Dhavan, N. (2020). *The relationship between conspiracy beliefs and compliance with public health guidance with regard to COVID-19*. Centre for Countering Digital Hate.
- Allington, D., Duffy, B., Wessely, S., Dhavan, N., & Rubin, J. (2020). Health-protective behaviour, social media usage and conspiracy belief during the COVID-19 public health emergency. *Psychological Medicine*, 1–7. 10
- Alper, S., Bayrak, F., & Yilmaz, O. (2020). Psychological correlates of COVID-19 conspiracy beliefs and preventive measures: Evidence from Turkey. *Current Psychology*, 1–10.
- Atchison C, Bowman LR, Vrinten C, Redd R, Pristerà P, Eaton J, Ward H. (2021) Early perceptions and behavioural responses during the COVID-19 pandemic: A cross-sectional survey of UK adults. *BMJ Open*; 11(1)
- Attoh, F. and Adejoh, S.O. (n.d.). Field work from Lagos and Ibadan.
- Bale, J. (2007). Political paranoia v. political realism: On distinguishing between bogus conspiracy theories and genuine conspiratorial politics. *Patterns of Prejudice*. 41:45–60
- Biddlestone M, Green R, Douglas K. (2020) Cultural orientation, powerlessness, belief in conspiracy theories, and intentions to reduce the spread of COVID-19. *British Journal of Social Psychology* ;59(3):663–673
- Bierwaczzonek K, Kunst JR, Pich O. (2020) Belief in COVID-19 conspiracy theories reduces social distancing over time. *Applied Psychology: Health and Well-Being*. 12(4):1270–1285.
- Bogart LM, Thorburn S. (2005) Are HIV/AIDS conspiracy beliefs a barrier to HIV prevention among African Americans? *JAIDS Journal of Acquired Immune Deficiency Syndromes*. 38(2):213–218.
- Bogart LM, Thorburn S. (2005) Are HIV/AIDS conspiracy beliefs a barrier to HIV prevention among African Americans? *JAIDS Journal of Acquired Immune Deficiency Syndromes*. 38(2):213–218.
- Čavojová, V., Šrol, J., & Mikušková, E. B. (2020). How scientific reasoning correlates with health-related beliefs and behaviors during the COVID-19 pandemic? *Journal of Health Psychology*. DOI: 10.1177/1359105320962266.

- Erceg, N., Ružojčić, M., & Galic, Z. (2020). Misbehaving in the corona crisis: The role of anxiety and unfounded beliefs. *Current Psychology*.10.
- Freeman, D., Waite, F., Rosebrock, L., Petit, A., Causier, C., East, A., Jenner, L., Teale, A. L., Carr, L., Mulhall, S., Bold, E., & Lambe, S. (2020). Coronavirus conspiracy beliefs, mistrust, and compliance with government guidelines in England. *Psychological Medicine*, 1–13.
- Giddens, A. (2001). *Sociology*, 4<sup>th</sup> Edition. Oxford, Blackwell Publishing Ltd.
- Grebe E, Natrass N. (2012) AIDS conspiracy beliefs and unsafe sex in Cape Town. *AIDS and Behavior*; 16(3):761–773
- Hornik R, Kikut A, Jesch E, Woko C, Siegel L, Kim K. (2021) Association of COVID-19 misinformation with face mask wearing and social distancing in a nationally representative US sample. *Health Communication*. 36(1):6–14.
- Imhoff R, Lamberty P. (2020) A bioweapon or a hoax? The link between distinct conspiracy beliefs about the coronavirus disease (COVID-19) outbreak and pandemic behavior. *Social Psychological and Personality Science*. 11(8):1110–1118.
- Jackson J, Jong J, Bluemke M, Poulter P, Morgenroth L, Halberstadt J (2017) Testing the causal relationship between religious belief and death anxiety. *Religion, Brain & Behavior* 8(1):57–68. <https://doi.org/10.1080/2153599X.2016.1238842>
- Jolley D, Douglas KM. (2014) The social consequences of conspiracism: Exposure to conspiracy theories decreases intentions to engage in politics and to reduce one's carbon footprint. *British Journal of Psychology*. 105(1):35–56
- Jong J, Ross R, Philip T, Chang SH, Simons N, Halberstadt J (2017) The religious correlates of death anxiety: a systematic review and meta-analysis. *Religion, Brain & Behavior* 8(1):4–20. <https://doi.org/10.1080/2153599X.2016.1238844>
- Kowalski J, Marchlewska M, Molenda Z, Górska P, Gawęda Ł. (2020) Adherence to safety and self-isolation guidelines, conspiracy and paranoia-like beliefs during COVID-19 pandemic in Poland: associations and moderators. *Psychiatry Research*. 294
- Latkin, C. A., Dayton, L., Moran, M., Strickland, J. C., & Collins, K. (2021). Behavioral and psychosocial factors associated with

- COVID-19 skepticism in the United States. *Current Psychology*, 1-9.
- Marietta, M., & Barker, D. C. (2018). Conspiratorial thinking and dueling fact perceptions. In J. E. Uscinski (Ed.), *Conspiracy theories and the people who believe them* (pp. 214–225). Oxford University Press.
- Marietta, M., & Barker, D. C. (2018). Conspiratorial thinking and dueling fact perceptions. In J. E. Uscinski (Ed.), *Conspiracy theories and the people who believe them* (pp. 214–225). Oxford University Press.
- Marinthe G, Brown G, Delouvé S, Jolley D. (2020) Looking out for myself: Exploring the relationship between conspiracy mentality, perceived personal risk and COVID-19 prevention measures. *British Journal of Health Psychology*. 25(4):957–980.
- Oleksy T, Wnuk A, Maison D, Łyś A. (2020) Content matters. Different predictors and social consequences of general and government-related conspiracy theories on COVID-19. *Personality and Individual Differences*; 168:
- Plohl N, Musil B. (2021) Modeling compliance with COVID-19 prevention guidelines: The critical role of trust in science. *Psychology, Health & Medicine*; 26(1):1–12.
- Teovanović, P., Lukić, P., Zupan, Z., Lazić, A., Ninković, M., & Žeželj, I. (2020). Irrational beliefs differentially predict adherence to guidelines and pseudoscientific practices during the COVID-19 pandemic. *Applied Cognitive Psychology*, 1–11.
- van Prooijen JW, Douglas KM. (2017) Conspiracy theories as part of history: The role of societal crisis situations. *Memory Studies*. 10(3):323–333.
- Wiederhold BK (2020). Social media use during social distancing. *Cyberpsychology, Behavior and Social Networking*. 23(5):275–276.
- Wood MJ. (2018) Propagating and debunking conspiracy theories on twitter during the 2015–2016 Zika virus outbreak. *Cyberpsychology, Behavior and Social Networking*. 21(8):485–490
- World Health Organization. (2021a). Coronavirus disease (COVID-19): Weekly Epidemiological Update. <https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19%2D%2D-20-april-2021>

Zhang X, Wang F, Zhu C, Wang Z. (2020) Willingness to self-isolate when facing a pandemic risk: Model, empirical test, and policy recommendations. *International Journal of Environmental Research and Public H*