

The Impact of Misinformation in Social Media That Caused Panic Behavior On Covid-19 Pandemic Among University Students in Ipoh, Perak

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ABSTRACT

Social networking has become a regular part of everyone's life. Nowadays, practically everyone uses social media and messaging platforms for communication, especially university students who frequently use smartphones and other devices for social interaction and communication. Due to this, university students began to believe the information shared on social media without verifying its accuracy. The veracity of the information shared on social media is unconfirmed for a number of reasons. Some of the false information spread has led to students at the university behaving panicked. As a result, the focus of this study will be on the effect of misleading news on Covid-19 among Malaysian university students. This will help to ensure that the study's goals, which include determining how social media misinformation influences university students' behaviour and fostering the spread of fear about COVID-19 in Malaysia, are successfully attained. In due to that the study uses quantitative methodology as its main research approach. Information was gathered by the researcher from university students using online surveys. The findings of this study indicated that disinformation disseminated via social media platforms, particularly the amplifying of dread that resulted in increased worry and anxiety, was likely to have an impact on university students in Ipoh, Perak. In order to discover the trends that may spread to other new consumers, particularly with the increased adoption of mobile connectivity, this study should be continued by focusing on the behavioural patterns and attitudes of this news consumption segment.

Keywords: Misinformation, social media, panic behaviour, Covid-19, university students



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1. INTRODUCTION

Nowadays social media has become part of everyone's daily life. With the existence of social media and messaging communication platforms, it is now used by almost everyone, especially university students who use smartphones and other devices to interact and communicate with others. Thus, spread of news through shares, retweets or likes on social media platform such as Twitter, Facebook, Instagram

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and etc., hence, those news are always exposed to an being capable of being controlled type of information especially information that is coming from independent social media news authors (Apuke & Omar, 2020). Misinformation as concocted content that copycat legitimate news, presented subtly to lure the public into believing it is legitimate and can be defined as the information and news that has been prudence fabricated and disseminated with the intention to mislead and deceive others receiver into doubting and believing false information and unverified facts (González-Padilla & Tortolero-Blanco, 2020). Consequently, the increase of misinformation on social media's is becoming an international issue and happened in every country worldwide (Apuke & Omar, 2020). The popularity of social media which allows permits of interaction and transfer of new ideas within social media users just in a second and easily. Through misinformation on social media's platforms, which now cause worrisome to the users especially youngsters, because youngsters spending most time on scrolling social media's as compare with others age segment of users. The COVID-19 pandemic implementation of public health ministration to control the spread of the corona virus, which involving hand washing poster at every restaurant and toilets, social distancing at public area and also set of SOPs at every public area. Unfortunately, the spread of misinformation on social media without the confirmation by the heath of ministry in Malaysia has resulted in creating public panic, fear and anguish (Ahmad & Murad, 2020).

In the year of 2020, the news and information reports about the COVID-19 were continuously shared and reported on social media and social networking platform. Thus, this study was focus on the impact of social media misinformation which has been referred to as social media has spread panic and affected the behaviour of university student's users. The emergence of the novel coronavirus (SARS-CoV-2) in December of 2019 has quickly led to a global pandemic claiming hundreds of thousands of deaths worldwide already (Kumar & Shah, 2018). In the absence of an effective treatment or vaccine, researchers have pointed out that managing the pandemic response will require leveraging insights from the social and behavioural sciences, particularly with regard to non-pharmaceutical interventions and containing the spread of false information about COVID-19 (Linden et al., 2020). In fact, the spread of misleading information about the virus has led the World Health Organization (WHO) to warn of an on-going "infodemic" or an overabundance of information, especially misinformation during an epidemic (Fotis, 2015). Thus, this makes it harder for University's students to find trustworthy and reliable information when they need it. While its prevention and treatment require practices based on scientific evidence, there are myriad sources of incorrect information circulating on the internet about what prevents and cures COVID-19. This is critical because relying on such misinformation can bring about detrimental health outcomes by encouraging people to engage in panic behaviour (Kim et al., 2020).

2. LITERATURE REVIEW

2.1 Social Media in Delivering Information

The term Social Media refers to the use of web-based and mobile technologies to turn communication into an interactive dialogue. Social media takes on many different forms including magazines, Internet forums, weblogs, social blogs, microblogging, wikis, podcasts, photographs or pictures, video, rating and social bookmarking. With the world in the midst of a social media revolution, it is more than obvious that social media like Facebook, Twitter, Orkut, myspace, skype etc., are used extensively for the purpose of communication (Baruah, 2012). The rise of the Internet as an influential communication medium has substantially changed the existing models of information and news consumption. The growing number of available information channels and sources, as well as greater possibilities for interaction and co-creation among consumers of information, has fundamentally affected the consumption of news (Pentina & Tarafdar, 2014). First, adverse effects on well-established print and broadcast mass media have transpired from loss of advertising news, consumers curate news for their social networks, selecting and sharing those most worthy of attention, and filtering out irrelevant stories and items (Pentina & Tarafdar, 2014).

The advent of social media has brought about significant impacts on daily life, not only changing the ways in which people stay connected but also presenting considerable opportunities and challenges for librarians and educators (Kim et al., 2020). In addition to affecting communication, marketing, and instruction, social media seem to have changed students' information-seeking behaviours. Some studies suggest that students may be using various social media platforms to satisfy their academic and everyday-life information needs. Such changes in information-seeking behaviour make it increasingly urgent to understand students' evaluation and use of information obtained from social media (Kim et al., 2014). Social media tools help people to interact with one another within the shortest possible time. Social media have the potential to fundamentally change the character of our social lives, both on an interpersonal and a community level. Changes in information patterns and social connections are already evident among young people, who are the heaviest users of social media (Baruah, 2012). Among different social media platforms, the use of Wikipedia has received a lot of attention. Research shows that Wikipedia is often consulted for academic tasks, usually in the early stages of the research process. There is some evidence that students are consulting Wikipedia for everyday-life information tasks as well. (Kim et al., 2014).

Social media have the great advantage of rapid dissemination of educational content in the COVID-19 era. A recent study by Halpern et al. evaluated the 100 most viewed videos on YouTube with the word "coronavirus", these together had more than 165 million views as of March 5, 2020, 85% of them belonging to news channels (2019). It was found that less than 1/3 of the videos mentioned the recommended prevention measures, less than half mentioned the most frequent symptoms, however, almost 90% commented on deaths, anxiety, and the quarantine status (González-Padilla & Tortolero-Blanco, 2020). During sudden outbreaks, the public needs access to timely and reliable information about the disease symptoms and its prevention. Social media serves to provide an important informal source of data to identify health information that has not been reported to medical officers or health departments and to uncover or share perspectives on any life-threatening health-related issues (Wang et al., 2011). But this channel of disseminating knowledge sometimes mixed with scare tactics, discrimination, misleading reports and conspiracy theories related to the origin of the virus, its spread and mass buying of face masks, all closely connected to the modern 21st century "info media" social media networks. Despite the importance of rapid access to information in these critical situations, poor comprehension or inaccurate or false information in the format of rumours or unreliable news can lead to misunderstanding in the community, which makes the situation worse (Sahni, 2020).

2.1.1 Social Media in Delivering Information

Social media are increasingly popular and emerging as important information sources. Recent sociotechnological development has opened up a wide range of channels for information seeking and. Social media platforms such as Facebook and Twitter, for example, are popular among younger generations (Hashim et al., 2019). As social media become increasingly popular, a number of studies have been conducted to examine college students' social media use. Most of those studies, however, investigated social media use for socialization or marketing purposes rather than for information seeking. The latter is a promising area for information behaviour and information literacy research, as there is beginning evidence that individuals often turn to social media for finding information. About 50% of online teens and over 80% of college students use social media for their academic as well as everyday life research (Kim & Sin, 2015).

Social media would normally search first, expected to find what they were looking for via search, and were happy with what they found. Using a search engine provides the information seeker with control over the search process, such as response timing. One reason why participants preferred Web search to ask their social network was that they found answers faster with Web search (Morris et al., 2010). There are many ways a person can satisfy an information need, including visiting a library, calling someone on the phone, or searching digital resources. Increasingly the Internet has become a key information source, and people find information online by browsing web pages, posting a question to a Q&A site, or using IM or email to contact someone directly. Search engine use is the most popular approach to online information seeking. However, the recent rise in popularity of social networking

sites, such as Facebook, MySpace, and LinkedIn, has introduced a new option for finding information online posing a question to one's network (Morris et al., 2010).

The main purpose of using different social media platforms was drawn from uses and gratifications literature, four different purposes for using media information seeking, personal identity, social interaction and integration, and entertainment (Kim et al., 2013). It was found that most of the social media platforms were used for information seeking, although Wikipedia was the most frequently used for this purpose. On average, Wikis were used at least a few times a week for information seeking, whereas others were used more than a few times a month. Social networking sites and Microblogs (e.g., Twitter) were used mainly for social interaction and integration and for nurturing personal identity. For entertainment, SNS, Media-sharing sites (e.g., YouTube), Microblogs, and Social bookmarking were among the ones frequently used (Kim et al., 2013).

2.1.2 Information Sharing using Social Media

Information sharing and decision making in a policing context, focusing on the mediating influence of social media. Research in information science has a growing body of literature exploring the role of technology within work environments such as policing. However, it focuses on technological devices to aid work tasks rather than the changing information practices taking place. Since these studies emerged, technology, in particular social media, has become more interactive with communications taking place in real-time. Not only has this changed the way we seek, retrieve, share and use information in everyday life, it has also transformed information practices in organisational settings (R et al., 2020).

Research on information sharing has typically focussed on collaborative information behaviour. Research in professional settings by Sonnenwald and Pierce (2000) highlighted the complex interplay between social interactions. They also found that interwoven situational awareness and social networks were important for information sharing and task completion. Although these studies shed light on collaboration within organisations, they do not explore the sharing of information between agencies nor between individuals and organisations (Casero-Ripollés, 2020).

2.2 Social Media among University Students

Apparently, social media is being used increasingly by university students. It is promoting virtual communities and virtual learning environments (VLEs) for expanding distributed learning among users. The students interact in their virtual communities freely with members of the community. They can share information and study experiences, research projects and job opportunities with each other. Various factors contribute to the use of social media for educational purposes. Armstrong & Franklin (2008) compiled a comprehensive report in 2008. The report indicated that the students used social media in different manners to enhance and strengthen their learning, through reflection and collaborative activities in virtual environments. However, they depended upon infrastructure including and the skill of using social media (Hussain, 2012). Keeping this reality in view, researchers in academic and professional institutions have studied the use of these social media applications among students in recent years. A review of the literature reveals that these emerging technologies are increasingly being implemented in academic institutions and may have a major effect on existing teaching and learning practices (Shafique et al., 2010).

Every day, many students are spending countless hours immersed in social media, such as Facebook, Myspace, World of Warcraft, or Sim City. At first glance this may seem like a waste of time; however, it also helps students to develop important knowledge and social skills, and be active citizens who create and share content (Wang et al., 2011). At present, whether social media is favourable or unfavourable, many students utilize these sites on a daily basis. As social media sites continue to grow in popularity it is our belief that technology is a vital part of today's student success equation. Many researchers have been diving into a considerable amount of research on how social media influences student retention at

colleges. Many parents are worried that their college students are spending too much time on Facebook and other social media sites and not enough time studying (Lee et al., 2020).

2.2.1 General Misinformation Belief among University Students

In this cross-sectional survey of Korean adults, more than two-thirds of the respondents reported COVID-19 misinformation exposure between the end of January 2020 and the end of April 2020, as COVID-19 evolved into a global pandemic. Existing studies reported that younger people, including university students, preferred to obtain health information via online means and perceived themselves as having a high level of digital health literacy (Lee et al., 2020). Such characteristics would expose young people to more COVID-19 misinformation and information. However, contrary to their perceptions, they lacked the skills to evaluate health resources and apply gathered information to health-related decisions. This indicates that despite their proficiencies in using technology and the internet, effective interventions are required to improve young people's digital health literacy, which is the ability to search for, understand, and critically evaluate health information through electronic sources, then apply gained knowledge to health issues (Lee et al., 2020). This includes the circulation of conspiracy theories that prevail at times of fear and uncertainty. Conspiracy theories regarding the origins of COVID-19 might be a way for the public to make sense of this pandemic. However, dangerous speculations about the virus might diminish the efforts in controlling the spread of infection. Thus, it is important to assess the misconceptions and misbeliefs among the public which can reveal defects that should be targeted by awareness tools (Sallam et al., 2020).

The potential negative effects of COVID-19 misinformation have been the subject of active research since the onset of the pandemic, with results pointed to an association between the belief in a conspiracy regarding the origin of the virus and a lower COVID-19 knowledge accompanied with higher anxiety level (Sallam et al., 2020). COVID-19 misinformation belief was negatively associated with COVID-19 knowledge and preventive behaviours, while it was positively associated with misinformation exposure. Moreover, frequent use of SNSs, which propagate more misinformation than any other media, for COVID-19 information was associated with having conspiracy beliefs. Conspiracy beliefs, in turn, showed a negative relationship with COVID-19 preventive behaviours (Lee et al., 2020).

2.2.2 Impact of Social Media towards University Students

University students have a great interest in social media. For the purpose of this study, social media was defined as Facebook, YouTube, Blogs, Twitter, MySpace or LinkedIn. Although, providing a detailed perspective on social media use among university students and underscoring that such use can produce both positive and negative consequences (Wang et al., 2011). The positive aspect of online communities is that youths can utilize them for academic assistance and support (Akram & Kumar, 2017). Due to the ability of social media to enhance connections by making them easily accessible, social media can yield many benefits for the young, including providing virtual space for them to explore their interests or problems with similar individuals, academic support, while strengthening online communication skills and knowledge (Wang et al., 2011).

The popularity of social media applications and social networking sites have increased precipitously during the last decade. Typically, the reason for this rapid increase is that teenagers and college and university students are using social media applications to gain global access. These social media sites, such as Facebook and Twitter, are becoming the craze in our society for everyone these days (Abbas et al., 2019). Today, students are relying increasingly on information and data that is easily accessible on social networking sites and the internet. This is the reason why students' learning skills and research capabilities are decreasing in certain situations, as their engagement with these sites reduces their focus, which causes them to dedicate less time to their studies and results in a decline in their academic performance (Abbas et al., 2019).

2.3 Misinformation in Social Media caused Panic Behaviour

Misinformation sharing has become rampant in today's digital world. This suggests that even some government officials and individuals engage in the proliferation of misinformation to a large audience to suit their agenda (Destiny & Omar, 2020). In which, information is a fundamental resource for citizens in the society. It is a valuable mechanism for guiding people, especially in highly complex situations such as the one generated by the Covid-19 pandemic. In this sense, information is a tool that can help reduce uncertainty and anxiety. Conversely, it might increase panic and chaos (Casero-Ripollés, 2020).

However, with misinformation in the context of COVID-19 can include inaccurate information regarding the virus and its transmission, conspiracy theories, and fabricated reports regarding methods of prevention and treatment. Some of its consequences include the panic-buying and hoarding of goods, taking ineffective and potentially harmful remedies, ignoring advice from health authorities, and engaging in behaviour that increases the risk of virus transmission (Lee et al., 2020). ABC News reported a poll claiming that in the age of social media, anxiety about the coronavirus spreads faster than the virus itself, resulting in public panic worldwide. On the other hand, social media is also a practical platform for the spreading of public health messages to audiences (Gul et al., 2020).

In a contemporary discussion on the effects of media, one researcher stated that in some countries, social media impacted the buying crisis, when many people tried to buy toilet paper and other items because of the spreading fear of COVID-19 on social media (Ahmad & Murad, 2020). According to the newspaper The Star, social media is responsible for much of the panic surrounding COVID-19, internationally leading to a situation where social media companies tried to eradicate posts about COVID-19 from their platforms (Star, 2020).

3. METHODOLOGY

The study is being undertaken to investigate the impact of misinformation in social media caused panic behavior on COVID-19 pandemic towards university's students in Malaysia. This study examined the research problems and objectives using quantitative research method. Quantitative approach consisted of conducting surveys among University students in Ipoh, Perak Malaysia. As a result of this, the primary source of information for the researcher was university's students in Malaysia and the primary data were collected through questionnaires form provided by Google administered to randomly respondents representing a sample of university students.

During the lockdown period COVID-19 pandemic in almost every country in the globe, including Malaysia, survey data collection using online media is best suitable, so did the current research. Social media and e-mail networks were used for the data collection which involved 52 respondents from universities in Ipoh, Perak. Choosing survey as the research method is beneficial for this study as it allows researcher to obtain direct answers from a large pool of research subjects at a much lower budget and with significantly higher efficiency compared to other methods. Survey nowadays are easy to create and distribute with the help of Internet and online survey tools, thereby making surveys one of the most cost-effective data collection methods.

3.1 Theoretical Framework

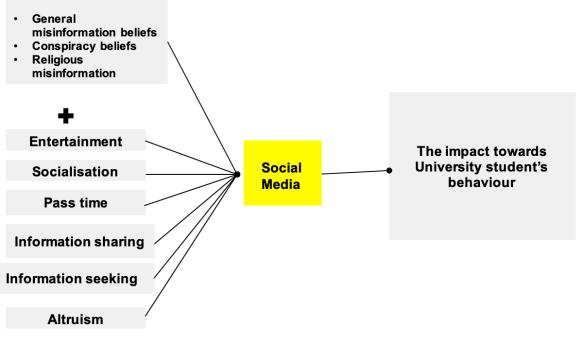


Figure 1 Theoretical Framework

The current study's model was formulated using the Stimulus-response theory, also known as Hypodermic Needle Theory. In communication research, Hypodermic Needle Theory is one of the dominant theory, which is cogitated as one of the first general thoughts explaining on the effects of media (Barua et al., 2020). The Hypodermic Needle Theory was developed in the year of 1920s and 1930s by combining the available psychological and sociological theories after the researchers observed the effect of propaganda during the events like broadcast of Orson Welles War and World War One. Thus, events like these were suggest that media have the power to influence and impact on their audiences, researchers were staring to think and realize people were getting influence and impact by the media was kind of inadequate. As a result, the Hypodermic Needle Theory is to describe influence by media and communication. For this study purpose, the 'misinformation' and also called false news as stimuli that can generate panic behaviour and unfavourable responses regarding COVID-19. On the other words, the Hypodermic Needle Theory indicates that audience lead isolated and distinct lives with limited social control each other because audience are from distinct origins and their values, norms and beliefs are not shared as a unifying set.

Taking the knowledge and past research from previous investigators, the Uses and Gratification Theory perspective showed that social communication and socialisation is positively related to knowledge sharing behaviour. Hence, we can contend that gratifications was gained while using social media platforms could result of sharing false news due to the features of social media platform has the ability of advertise unsupervised content and the users was hight interactivity on social media platform. Therefore, the Uses and Gratification which is well suitable in this study and allow us to understanding more on Uses and Gratification Theory with the focus of false news sharing about COVID-29 on social media.

4. ANALYSIS AND FINDING

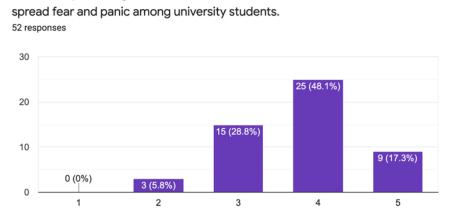
4.1 The false news caused panic behaviour among the University's students

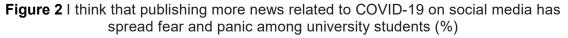
University's students are using social media channels to gain latest news and information about COVID-19 during the lockdown in Malaysia. Thus, they could not get enough facts and official information about COVID-19, due to they also depended on social media and widely shared their information, photos, and videos, sometimes inaccurately. As a results, anxiety about false news of COVID-19 coronavirus spreads faster than the coronavirus itself, which resulting University's students panic in Malaysia. Therefore, the purpose of this section E survey questionnaire is to determine what is the panic behaviours has affected them and caused by spreading the false information on social media by using the Hypodermic Needle Theory. This survey item for section E were designed as statement measured on five-point Liker-scale where 1 represents "strongly disagree"; 2 represents "disagree"; 3 indicates "somewhat agree"; 4 represents "Agree"; and 5 indicates as "strongly agree".

4.1.1 To describe the impact of false news on Covid-19 towards the university's students which causes panic behaviours.

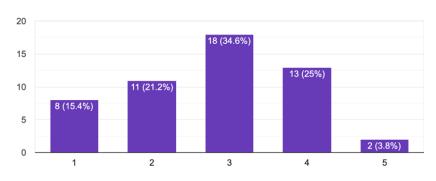
In order to determine the impact of false information about COVID-19 on the university's students, hence this survey questionnaire section E is to find out what are the panic behaviours on them by using the Hypodermic Needle Theory.

I think that publishing more news related to COVID-19 on social media has





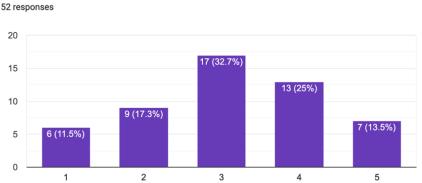
In the table above, the highest percentages of 48.1% participants is at agree standpoint that they think publishing more news related to COVID-19 on social media has spread fear and panic among university students and the second highest of 28.8% participants is at neutral standpoint. The rest of 5.8% and 17.3% of participants is at disagree and strongly agree point of view and none of the participants are strongly disagree on this part of the survey question.



I panic on buying and stock up with emergency supplies after seeing news related to COVID-19 on social media platforms. 52 responses

Figure 3 I panic on buying and stock up with emergency supplies after seeing news related to COVID-19 on social media platforms (%)

In the table above, the highest percentages of 34.6% participants is at neutral standpoint that they panic on buying and stock up with emergency supplies after seeing news related to COVID-19 on social media platforms. There are relatively equal percentages of 21.2% and 25% of participants is at disagree and strongly agree. The rest of 15.4% of participants is at strongly disagree point of view and only the less subset of 3.8% of participants are strongly agree on this part of the survey question.



I panic on rushing back hometown from my hostel after seeing news related national lockdown during MCO period on social media platforms.

Figure 4 I panic on rushing back hometown from my hostel after seeing news related national lockdown during MCO period on social media platforms (%)

In the table above, the highest percentages of 32.7% participants is at neutral standpoint that they panic on rushing back hometown from their hostel after seeing news related national lockdown during MCO period on social media platforms and the second highest of 25% of participants are at agree standpoint. There are relatively equal percentages of 17.3% and 13.5% of participants is at disagree and strongly agree. The rest of 11.5% of participants is at strongly disagree point of view.

I panic on my health situation after receiving news about COVID-19 from

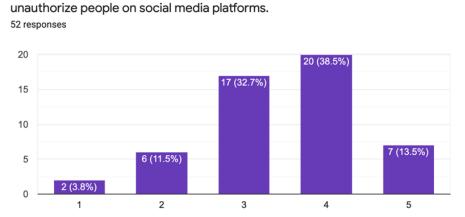


Figure 5 I panic on my health situation after receiving news about COVID-19 from unauthorize people on social media platforms (%)

In the table above, the highest percentages of 38.5% participants is at agree standpoint that they panic on their health situation after receiving news about COVID-19 from unauthorize people on social media platforms and the second highest of 32.7% of participants are at neutral standpoint. There are relatively equal percentages of 11.5% and 13.5% of participants is at disagree and strongly agree. The rest of less subset 3.8% of participants is at strongly disagree point of view.

5. CONCLUSION

The results shown in present study indicated that there was significant effect of misinformation in social media have cause panic behaviour on COVID-19 pandemic towards the University students, thus social media have many negative effects on university students' social and mental behaviour. Thus, building on Hypodermic Needle theory and Uses and Gratification theory, this study has been demonstrated factors that predict false news sharing and receiving on social media platforms. Researcher drew the samples from the university students in Malaysia society. Based on the result of this research, researcher conclude that altruism is the most importance predictor of misinformation sharing among university students in Malaysia. In this study also conclude that information sharing, information seeking, socialisation and pass time predict false news sharing and receiving.

On the other hand, entertainment was not significantly associated with misinformation sharing and receiving in this study. Hence, it should be stated that this study conclusion is based on the analysed selective constructs. Moreover, the other attributes of false news spreading and receiving such as unawareness, attention-seeking, ignorance, and also pressure. As a results, based on the results of this study and the increasing mental risk on panic behaviour, the misinformation spreading in social media platforms is causing during the outbreak of COVID-19 pandemic in Malaysia, thus we feel that there is need for social media filter and authenticate to confirm the authenticity of the information publishing and sharing on social media channels.

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AUTHOR CONTRIBUTIONS

All authors contributed equally to this research study.

CONFLICT OF INTEREST

The author(s) declared no potential conflicts of interest with respect to the research, authorships or publication of this article.

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