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REVIEW ARTICLE

HOW THE INFODEMIC HAS FUELLED STIGMATIZATION DURING THE COVID-19 PANDEMIC

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Summary

At the same time as the world was shaken by the Covid-19 pandemic, another pandemic emerged, the "infodemic". This article explores how the infodemic, through misinformation and disinformation, fueled the stigmatization of social groups during the pandemic and the consequences that followed. Stigmatization of individuals and groups in relation to infectious diseases has led to social exclusion, discrimination, and hate speech. This article highlights the history of stigmatization in connection to previous infectious disease outbreaks and calls attention to the role of the media and political leaders in fueling stigma. Consequences of stigmatization in relation to the infodemic have led to people not seeking timely medical care, an increase in mental health problems for the affected individuals, and a decrease in the well-being of healthcare workers. This article concludes by emphasizing the importance of accurate and clear information from the scientific community and public leaders to prevent exaggerating an already dangerous situation.

Key words: infodemic; pandemic; misinformation; disinformation; Covid-19

Introduction

An outbreak of unknown pneumonia was reported in December 2019 in Wuhan in the Hubei Province in China (1). The cases were originally linked to the Huanan Seafood Market. The virus has since spread all over the world. As of May 10, 2023, the World Health Organization (WHO) reported that there have been 765 903 278 confirmed cases of Covid-19 (2). 6 927 378 Covid-19-related deaths have been reported, and a total of 13 350 312 122 vaccine doses have been administered (2).

At the same time the Covid-19 pandemic came into full force, another "pandemic" emerged. This has been the so-called "infodemic". The term was first coined by Gunther Eysenbach, and later adopted by the World Health Organization (3). WHO defines an infodemic as online and offline information that "includes deliberate attempts to disseminate wrong information to undermine the public health response and advance alternative agendas of groups or individuals" (4). Mis- and disinformation can be harmful. It can increase stigmatization, amplify hate speech, and heighten the risk of conflict and violence (4).

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The Covid-19 "infodemic" had several different consequences. This article will focus on the stigmatization endured by individuals and groups in connection to the misinformation and disinformation spread through media platforms and by public leaders. Furthermore, the article will analyze some of the consequences this type of stigmatization has had for individuals and groups. As a review article grounded in existing research, its purpose is to show that stigma related to the Covid-19 pandemic is not confined to a particular country or region but rather manifests as a universal phenomenon. Because of the wide-ranging impact of pandemic-related stigma, the article aims to emphasize the need to address the implications of this phenomenon.

Infodemic

2020 was considered the year of online disinformation (5). This included both political and scientific misinformation, which often reinforced one another. The World Health Organization pointed out that the Covid-19 pandemic is the first pandemic in history where technology and social media are being used to keep people safe, informed, and connected (4). At the same time, as technology has made the flow of information more accessible, it has also made the flow of mis- and dis-information easier. The World Health Organization´s Director-General, Tedros Adhanom Ghebreyesus, said at the Munich Security Conference that "We´re not just fighting an epidemic; we're fighting an infodemic" on February 15th, 2020 (6). At the same time, United Nations Secretary-General Antonio Guterres stated that the enemy is not only the coronavirus, "but our enemy is also the growing surge of misinformation" about the disease (7). He urged all nations to "stand up against the increase in hate crimes targeting individuals and groups perceived to be associated with the coronavirus" (7).

As mentioned, an infodemic consists of misinformation and disinformation, and there is a small difference between the two. Misinformation refers to false information that is not created with the intent of causing harm. In contrast, disinformation is false information intended to harm a person, social group, or the bigger community or country (5).

Gisondi *et al*., (2022) defined the COVID-19 infodemic as "the overwhelming amount of complex and often contradictory information available about COVID-19, inclusive of substantial fake news about the origins of the virus, treatment options unsupported by rigorous clinical data, and baseless claims regarding adverse effects of lifesaving vaccines; these false narratives may be spread by authoritative institutions or influencers who are otherwise thought to be trustworthy, and they play a substantial role in shaping views and influencing human behavior that can lead to poor health outcomes" (5).

An infodemic can trigger discrimination and stigma in connection with the disease. Fear is often the main cause of stigma, which can lead to hatred or stigmatization of a particular subgroup in the population (8).

Stigma

The term stigma was first introduced by the Canadian sociologist Erving Goffman. The term refers to certain characteristics of an individual that make society devalue or consider the individual unfit to be included in mainstream society (9).

The World Health Organization defines social stigma in relation to Covid-19 as "the negative association between a person or group of people who share certain characteristics and a specific disease" (4). This stigmatization does not only include the people directly affected by the disease but also their caregivers, family, friends, and communities. This is often referred to as "stigma by association" (10). People who share certain characteristics with the stigmatized group or individual may also face stigmatization based on these characteristics (4). This means that stigmatization in connection with infectious diseases affects a large number of people.

Stigma is an evolutionary response, according to Earnshaw (2020). Humans are wired to physically distance themselves from others that could infect them. This is part of a reaction called "parasite avoidance" which prevents us from having contact with others who may be infected with a disease (11). There is also a moral component to this reaction; humans tend to believe that bad things happen to bad people and therefore believe that infected people, in some instances, "deserve" to be infected (11).

Stigma exists in a variety of cultures. Minorities, place of living, sexual orientation, and gender are some of the characteristics of individuals and groups at the highest risk of being stigmatized during almost all outbreaks of infectious diseases (12). Stigma creates a barrier between the stigmatized and the rest of society (13). This can lead to feelings such as blame, shame, isolation, social exclusion, and discrimination.

History of stigmatization in connection to infectious diseases

Mis- and dis-information that has led to the stigmatization of certain individuals and social groups during health emergencies is not a new phenomenon that came along with the Covid-19 pandemic. This has happened before. From the Smallpox outbreak in the 19th century to Covid-19 in the 21st century, epidemics, and pandemics have always been linked to stigmatization (12).

During the HIV epidemic, misinformation was widespread (14). There were a lot of conspiracy theories, rumors, and misinformation that had fatal consequences. An example is the Mbeki South African government that denied HIV in the early 2000s and rejected the efficiency of HIV medicine. This led to more than 300,000 people dying from the virus (14).

Fear and anxiety about contracting the SARS virus in China in 2002 and 2003 caused social stigma against Asian people (15). Stigmatization of people in connection to this virus emerged early in the outbreak as global media (television and the internet) reported dramatic stories that linked people from Asia to the virus (16). During this outbreak, numerous people became fearful and suspicious of people from Asia and of Asian descent, regardless of their actual ethnicity or nationality, and expected them to be quarantined (16).

During the 2009 H1N1 pandemic, the media played a huge role in conveying information. Even though the media coverage served as a platform to educate the public, it also brought fear, leading to stigmatization (13). This was especially directed toward people from Mexico or people of Mexican descent, where the origins of the virus were perceived to come from. In April 2009, terms such as “swine flu” and “Mexican flu” were used by the media in connection to H1N1, which had a stigmatizing effect (13). The media coverage amplified the stigmatization rather than giving the public the correct information, which could lead them to take appropriate steps to protect themselves from being infected by the virus (13).

Misinformation was linked to violence, targeted attacks on healthcare providers, and mistrust among communities during the Ebola outbreak in the Democratic Republic of Congo in 2019 (15). A study from Sierra Leone showed that stigma related to Ebola during the West African Ebola outbreak was primarily based on community fear that survivors of the disease were still contagious (17). This fear resulted in survivors being discriminated against by their communities, losing their jobs, and being evicted from their homes.

Stigmatization during the Covid-19 pandemic

Although stigma about infectious diseases is not a new phenomenon, its contextual nature, and the way it unfolds might vary depending on the context and existence (9). UNICEF describes three reasons why stigma is associated with Covid-19; 1) the disease is new, and therefore there are many unknown factors, 2) people are naturally often afraid of the unknown and 3) it is easy to associate this fear with “others” (18).

Racism and discrimination against Asian communities were some of the first signs of Covid-19-related stigma, which took place at the beginning of the pandemic. These communities were perceived as the “origin groups” of the virus (19). At this time, at the beginning of late January 2020, the pandemic was still mainly limited to China. Soon verbal and physical attacks against Chinese people or people from Asia were documented in multiple places (20). The Guardian reported on January 31, 2020, that Chinese people in multiple Western countries had been the target of racist abuse (21). The Italian director of the Santa Cecilia Conservatory in Rome, Roberto Giuliani, had stated that his students from China, Japan, and South Korea were not allowed to come to class until they had been checked by a doctor to prove that they were not infected by the virus. Other reports from Italy stated that parents were not sending their children to school if they had Chinese classmates, and numerous people avoided going to Chinese shops and restaurants (21).

The type of language and wording by media, newspapers, and political leaders can sometimes contribute to fueling stigma (20). Donald Trump, the President of the United States at the time, explicitly and frequently described the coronavirus as the "Chinese virus" (20). On March 16, 2020, the president referred to the virus using such a term on Twitter. After this tweet, there was a profound increase in the use of the terms "Chinese virus" and "China virus" on Twitter, both at the national and state level (22). Secretary of State, Mike Pompeo, referred to the virus as the "Wuhan virus", while some of the staff in the White House referred to it as "Kung flu" (23). Senator John Cornyn linked the virus directly to China by saying in a press conference on March 18th that China was to "blame" for the spread of Covid-19. Bella *et al*. (2021) state in their article that statements and attitudes given by politicians to polarized populations have a big chance of providing an infodemiological effect (3). Some political figures prioritize their political agenda over giving the public the necessary information. This behavior strengthens the mis-and dis-information given to the public and undermines the scientific voices (3). "Hate incidents" toward Asian Americans reported by the media increased after the use of such language by public officials (23). Even though President Trump retracted his use of such terms on March 23, 2020, he refused to apologize for it. For many victims of hate crimes connected to his use of these terms, the apology came too late, and the damage had already been made (23). Some argue that the language employed by the American leadership in the initial stages of the pandemic played a crucial role in shaping the narrative of how the pandemic was talked about (23). Evidence showed that the number of hate crimes towards Asians increased by as much as 149% in March 2020, and continued to rise throughout 2021 (24).

Such language was not exclusive to the United States. Numerous Italian newspapers used terms such as "Chinese virus" and "Chinese syndrome" when describing Covid-19 (20). Some politicians in Italy accused the Chinese people of poor hygiene and unhealthy practices and used this to blame the spread of the virus. As the virus spread to more and more countries, the stigmatization was redirected to different groups. It affected not only different ethnic groups, but also healthcare workers and ambulance crews (20). Also, survivors of Covid- 19 had to deal with and cope with stigmatization. The shortage of testing kits and overwhelmed laboratories in the early stages of the pandemic led to difficulties in re-testing individuals who had survived the infection (20). Without any evidence to assure the rest of the community that they were no longer contagious, these individuals were isolated and avoided due to the fear of being infected (20).

Consequences of stigmatization

Stigmatization of individuals and groups in connection to an infectious disease outbreak can have multiple and serious consequences. One of these consequences may be the failure to seek medical care. The fear of being socially stigmatized as a result of being infected with the disease may lead people to deny symptoms and fail to seek timely medical care (16). This behavior can spread the virus, especially among people with mild symptoms who behave as usual. The stress of hiding symptoms may lead to additional psychological and physiological problems (10). Evidence suggests that stigma in connection to Covid-19 can lead to mental distress (25). The infected individual may internalize stigma, which means that the individual believes that they did something wrong, or that they are a bad person because they got infected. Anticipating stigma from other people can lead to mental and physical distress in people (11).

A study from 2020 underlined the impact of anxiety in relation to a pandemic. Individuals with low anxiety regarding an infectious disease outbreak are less likely to engage in hygiene practices, such as handwashing and public distancing. People with excessive anxiety, on the other hand, are more likely to exhibit disruptive behaviors (27). The same study conducted during the early stages of the pandemic in Canada and the United States, revealed that 28% of the general population in both countries had elevated anxiety symptoms, while 22% were experiencing significant depressive symptoms (27). They also concluded that individuals who have experienced stigma and discrimination face an increased risk of developing mental health issues, such as depression, post-traumatic stress disorder, and thoughts of suicide (28).

The consequences of stigmatization goes beyond the infected individuals. It also affects those who have connections with the infected person, such as healthcare workers, family, and friends. Dye *et al*. (2020) state in their article how stigma and harassment against healthcare workers could constitute a human rights violation (28). Another study showed how doctors and nurses from Mexico were denied access to public transport, insulted

on the streets, and evicted from their apartments due to fear of infection (26). The same evidence was found in India, where media reports revealed that doctors and other medical staff were being stigmatized because of their connection with Covid-19 patients. Many of them were also evicted from their homes and attacked (26). Dye *et al*. (2020) demonstrated in their study that healthcare workers around the world were statistically more likely to experience Covid-19-realted discrimination and harassment than other groups (28). Fears of rumors and stigmatization have resulted in higher rates of stress and burnout among frontline healthcare workers, social workers, and volunteers (25). Evidence of stigma-related stress, anxiety, and depression was found among these groups, which seriously impacted their well-being (25).

This is highly problematic and distressing because this could potentially lead to a lack of interest in fighting the outbreak from among these groups whom we all were, and still are, so dependent on throughout the pandemic.

Conclusion

An infodemic accompanied the Covid-19 pandemic. This article attempts to show how the infodemic fueled the stigmatization of different groups during the pandemic and the consequences of this stigmatization.

Media is one of the driving forces of information to the public. However, when this information is incorrect or uses a specific language that has an effect of stigmatization, it can be dangerous and a distraction from the public health crisis (13). As shown through multiple examples, the use of language, especially by policies and public officials, has a significant impact on the perception of the population. This type of language fueled the infodemic, such as seen with the language used by former U.S. President Donald Trump, in connection with the virus.

We must be aware of the impact the use of information and language have during public health emergencies. The Covid-19 pandemic is not the first infectious disease outbreak where mis- and dis-information have been used to fuel the stigmatization of certain individuals and social groups. The Covid-19 pandemic will most certainly not be the last in human history, and it is therefore important that we learn from our previous mistakes. Stigmatization has numerous and serious consequences for individuals, groups, societies, countries, and the world. And such stigmatization prevents us from effectively hindering the spread of the virus. When people fear being stigmatized, they deny their symptoms and fail to seek timely medical care. This leads to the virus's spreading and can lead to death, such as seen during the HIV outbreak. In addition, stigmatization has a severe psychological impact on individuals through depression and anxiety.

It is also important to remember that stigmatization goes beyond the infected individual. It also affects friends, family, communities, and healthcare workers. Especially the effect on healthcare workers, social workers, and volunteers is crucial because this leads to the delay of an effective response against the virus. As Earnshaw (2020) stated, “Stigmatizing anyone during a pandemic poses a threat to everyone” (11).

But what can be done? One of the most effective strategies in the approach to Covid-19 related stigma is to call it out (12). Evidence from the HIV epidemic shows that launching anti-stigmatizing campaigns, encouraging community activities, and having a unifying symbol of the disease have a good effect. The messages from authorities need to be unified to hinder confusion among the population. Clarity, simple words, reassurance, and communication from the scientific community are crucial (12). Promoting that we are all in this crisis together is essential for being able to fight it.

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There is no conflict of interest to be disclosed.

Adherence to Ethical standards

No conflict with ethical standards.

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