

## **Global realities of COVID-19 death toll and perceived covid-19 existence: Psychological implications**

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### **ABSTRACT**

*The daily news about COVID-19 has become a major headline in international, local and social media for over eight months. Such information includes but are not limited to; origin and cause, contending measures and compliance to the measures, possible vaccine/cure/solution, politics, belief, myths and coping with the virus, as well as infections, recovery and death toll. More worrisome is the daily global reports of frightening death tolls. The purpose of this study is to x-ray the possible psychological implications of COVID-19 death toll, perceived existence of COVID-19 and to examine whether these are facts or illusions. The study adopted a qualitative-phenomenological approach and sampled nine participants including four females and five males who voluntarily accepted to participate in interviews on their feelings about the realities, prevalent perceptions of COVID-19 and the possible psychological implications. The study was guided by the theory of terror management. Results showed that most people do not doubt the existence of COVID-19 but find the reports of COVID-19 death tolls across the globe as irrational and unacceptable. Also, the finding showed that the non-concrete information given to affected individuals is associated with poorer mental health. Hence, the increasing reported level of fear, anxiety and panic, boredom, withdrawal, cognitive decline, etc. in the people. The study concluded that measures taken to ascertain the accuracy COVID-19 death tolls across the globe be made known to people. It is recommended that government and other healthcare agencies should prioritize psychological care as part of the holistic healthcare for COVID-19 victims.*

**Keywords:** COVID-19, Death Tolls, Global Realities, Perceived COVID-19 Existence, Psychological Implications.

## **INTRODUCTION**

### **Background to the Study**

The Covid-19 whose aetiology is shrouded in mystery is a debilitating and devastating disease (Adams & Walls, 2020). Covid-19 has brought about thought-provoking challenges and inexplicable changes across the globe. It has a cartload of psychological implications. People all over the world have been confronted with the health issues as well as the psychic trauma associated with the pandemic (Greenberg, Wallick, & Brown, 2020). The bane of this disease has held the whole world at ransom and people are afraid of the next unknown. The disease has brought about a lot of socio-economic difficulties. Researchers in all walks of life are wadding every nook and cranny of their expertise to proffer solution to this pandemic. Yet nothing tangible has been discovered apart from face mask, maintenance of social and physical distances, regular washing of hands and compulsory stay at home order. In addition, what baffles the authors of this work and motivated this study is the toll of deaths displayed daily through the social media across the globe, and varying perception of it. One wonders if the pandemic alone is responsible for such numbers of deaths, or other hidden illness that may have similar symptoms and have their quotas in the death tolls; better still, we also wonder whether or not the number of death tolls is politically minded. The reality is that one should not doubt about the existence of COVID-19 but the daily reports of the death tolls and individual differences of its perception seems to have orchestrated heightened panic and other psychologically related implications.

### **The reality of Covid-19 Death Tolls**

The fact is that the number of deaths is quite alarming since the emergence of the pandemic in the human environment and have devastated and still devastating human life (Berhan, 2020). The aetiology of the disease is not known yet and it has some symptoms like other illness, such as malaria or like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness. People affected by COVID-19 can also develop intestinal symptoms like diarrhea (Kolstoe, 2020; Brahima & Payce, 2020). The COVID-19 pandemic has brought tremendous challenges and changes across the universe with resultant psychological discomfort and traumatic experiences. People across the world have been

confronted with the health crisis as well as the associated difficulties, while researchers comb every nook and cranny to proffer solution that will remedy the situation.

The sorry situation is that since December 31<sup>st</sup>, 2019 to date, this pandemic has been tormenting human life and human activities. But the question that comes to mind is, this new type of corona virus what is its aetiology? Most people infected with the COVID-19 virus experience mild to moderate respiratory illness and recover when given some special treatment (Mbah, 2020; Eboh, 2020). Older people and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness (Otto, 2020). The most worrisome aspect of this pandemic is associated with the death tolls from COVID-19 displayed daily on the dashboard/screens across the globe (Jamil, Alam, Gojobori, & Duarte, 2020). One wonders whether the death estimates are facts or mere illusion. For instance, the current global and Nigerian COVID-19 statistics as at August 27<sup>th</sup>, 2020 according to Nigeria Center for Disease Control (NCDC, 2020) and World Health Organization (WHO, 2020), is illustrated in Table 1 below:

**Table1: The Current Global and Nigerian COVID-19 Statistics as at 1<sup>ST</sup> February, 2021.**

<b>Items</b>	<b>World Over</b>	<b>Nigeria</b>
Cases	24,33,644	53,021
Recovered	16, 874,557	40,281
Deaths	829,674	1613

*Source: National Center for Health Statistics NCHS (2021)*

As at August 25, 2020, average of 945 people per day has died from COVID-19 in the U.S. since the first case was recorded in the country in mid-January (Elfein, 2020). On an average day, nearly 8,000 people died from all causes in the United States. However, WHO (2020) reported that Nigeria has an average of four deaths per day. A sample of death toll across the world is listed in Table 2.

**Table 2: Covid-19 Deaths Worldwide as of August 26, 2020, by Country compiled by the National Center for Health Statistics, (2020).**

<b>World</b>	<b>823,560</b>		
USA	182,404	Ecuador	6,368
Brazil	116,666	Pakistan	6,267
Mexico	61,450	Netherlands	6,207
India	59,632	Turkey	6,163
UK	41,449	Sweden	5,814
Italy	35,445	Egypt	5,298
France	30,544	Bolivia	4,664
Spain	28,924	China	4,634
Peru	28,924	Bangladesh	4,028
Iran	20,901	Saudi Arabia	3,722
Columbia	17,889	Romania	3,367
Russia	16,568	Philippines	3,038
South Africa	13,308	Guatemala	2,630
Chile	10,958	Ukraine	2,318
Belgium	9,996	Switzerland	2002
Germany	9,345	Poland	1,977
Canada	9,090	Panama	1,919
Argentina	7,563	Portugal	1,805
Indonesia	6,858	Ireland	1,777
Iraq	6,596	Honduras	1,703
Dominican Republic	1,585	Kenya	559
Kazakhstan	1,523	Yemen	557
Algeria	1,456	Australia	549
Afghanistan	1,397	Azerbaijan	521
Japan	1,196	Kuwait	519

Krygyzstan	1,057	Czechia	416
Nigeria	1,007	Cameroon	410
Moldova	960	UAE	377
Morocco	955	Costa Rica	376
Israel	859	Venezuela	343
Armenia	858	Kenya	559
Sudan	819	Yemen	557
Austria	733	Australia	549
Ethiopia	709	Azerbaijan	521
Serbia	705	Kuwait	519
El Salvador	687	Finland	335, .....etc
Belarus	652		
Oman	642		
Denmark	623		
Hungary	614		
North	573		
Macedonia			
Bulgaria	572		
Bosnia	560		
Herzegovina			

**Source:** *National Center for Health Statistics NCHS (2020)*

According to National Center for Health Statistics (NCHS,2020) that the number of deaths reported in Table 2 above are the total number of deaths received and coded as of the date of analysis and do not represent all deaths that occurred in that period. Counts of deaths occurring before or after the reporting period are not included in the Table. NHCS (2020) further noted that data during this period are incomplete because of the lag in time between when the death occurred and when the death certificate is completed, submitted to NCHS (2020) and processed for reporting purposes. This delay can range from 1 week to 8 weeks or more, depending on the jurisdiction and cause of death. Hence, some researchers made this observation: ‘the number of publicly reported deaths from coronavirus disease 2019 (COVID-

19) may underestimate the pandemic's death toll. Such estimates rely on provisional data that are often incomplete and may omit undocumented deaths from COVID-19. Moreover, restrictions imposed by the pandemic (e.g, stay-at-home orders) could claim lives indirectly through delayed care for acute emergencies, exacerbations of chronic diseases, and psychological distress (e.g, drug overdoses). This study estimated excess deaths in the early weeks of the pandemic and the relative contribution of Covid-19 and other causes.

It is clear that the illness is caused by a novel coronavirus family called SARS COV-2, and later named as COVID-19 (Huang, Li, Leung, Liu, Liu, Wang, Lan, Li, Yu, Cu, & Luo, 2020), which was first identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China (Chan, Kok, Zhu, Chu, To, Yuan, & Yuen, 2020). It was declared by World Health Organization (2019) as a global health emergency and a global pandemic (Sohrabi, Alsafi, O'Neill, Khan, Kerwan, Al-Jabir, & Agha, 2020). This illness caused by severe acute respiratory syndrome (SARS-CoV-2) is recently termed COVID-19 by WHO, the new acronym derived from "corona virus disease 2019. The name was chosen to avoid stigmatizing the virus's origins in terms of populations, geography, or animal associations. Drawing from the perspective of Terror Management theory (TMT) one can easily ascertain the threatening impact of this death tolls and varying perception of it among people.

The tenet of TMT is that the awareness of our own death produces a crippling terror, and that humans develop two distinct buffers in order to allay this fear: cultural worldviews, and self-esteem. Cultural worldviews involve shared symbolic concepts of the world, including identifying with cultural values or endorsing belief systems and lifestyles. Sharing these cultural worldviews, belief systems and lifestyles are thought to offer a sense of 'symbolic immortality', by giving an individual a sense of permanence and meaning in the face of death. Secondly, self-esteem, gained through fulfilling the expectations of one's cultural worldview, belief systems and lifestyles, is also said to buffer death anxiety, by making one feel like a valuable member of their culture, who is (and will be) remembered even after death (Greenberg, 2012).

TMT also proposes that humans use different defense mechanisms depending on whether thoughts of death are within or outside of conscious awareness. According to this 'dual process model', when thoughts of death are conscious, people engage in 'proximal defenses', which

include suppressing these thoughts (e.g. turning off a news report about COVID-19 death tolls), denying one's vulnerability (e.g. 'I'm not in a high risk group, so I'll probably be fine' or looking for so many other reasons to justify/diffuse the inexistence/killing impact of COVID-19), or trying to prevent death (e.g. trying to observe the WHO's regulations such as cleaning down all home surfaces with antiviral wipes, hand washing, etc.). On the other hand, when thoughts of death leave conscious awareness, people instead engage in 'distal defenses', which involve bolstering the two buffers (e.g. by endorsing cultural worldviews, belief systems, life styles, or enhancing our self-esteem) of the TMT.

## **Method**

### **Participants**

The study adopted an In-depth Interview where nine participants including four females and five males who volunteered were interviewed on their feelings about the realities and varying perception of COVID -19 and the possible psychological implications. Five among them were medical personnel including two doctors while four were non-medical personnel. They are all working class and three among them were married. We believe that the medical personnel who are in the forefront of the pandemic can give more accurate facts about the realities of Covid-19. Consequently, the participants were purposively selected. Besides, these responses, online sources, newspapers, etc were sources of literatures reviewed in the study. The essence of the interview is either to validate or refute most media and literature claims about the threatening impacts of Covid-19 death tolls. Three out of the nine participants were initially met at their environment; two were met at their environment different from the previous three; and four were equally met in another different setting altogether.

### **Instrument**

The research instrument for the present study was a semi-structured, in-depth questionnaire. The participants were encouraged to tell about their experiences in their own words. The interviews were conducted based on an interview guide (Brinkmann, 2017) that included significant key areas, yet was enough to allow both for the development of a dialogue between interviewer and interviewee and for meaningful self-expressions (Brinkman, 2017). All

interviews were conducted using paper and pencil, and a recording device. Each interview lasted for an hour; and after the data collection, analysis follows suit using content analysis.

### **Procedure**

Since the advent of COVID-19, studies had variously been conducted addressing a number of key issues such as lockdown and palliatives (Aneej, 2020; Omaka-Amari, Aleke, Obande-Ogbuinya, Ngwakwe, Nwankwo, & Afoke, 2020), WHO/NCDC regulations (Omaka-Amari et.al, 2020), ailment associated with COVID-19 (Curley, 2020), hand sanitizers (Braun, 2020), COVID-19 vaccine controversy (Bill Gates, 2020; Kolstoe, 2020), coping with the hardships (Brahima, & Payce, 2020), isolation centers (Anazonwu, 2020) etc. The results of the literature reviews as well as the media claims and that of the primary information from the participants were all summarized under psychological implications of Covid-19 death tolls. We understand a limited data set of ours, and so we tried to have our data highly structured and the analysis based on content analysis. Open-ended questions were adopted initially and where necessary, for specificity sake we also employed close-ended questions (Bell & Waters, 2014). We equally probed more on some unclear responses. We asked such questions like: *“Do you think Covid-19 exists? “If it does, what could likely be the implications on the people”* more questions we asked were: *“In your opinion, do you think there is(are) psychological implications of covid-19? If yes, can you mention some of them you can remember”*. *“How do you think these (the factors the respondent mentioned) factors have impacted on you and others.....explain more”* Thematic analysis (Bell et al., 2014; O’Leary, 2014)) was used to arrive at the results.

### **Design**

The study adopted a qualitative-phenomenological approach recommended by Patton (2002), that for one to obtain an in-depth understanding of the studied phenomenon, he/she needs to enter the world and experiences of the participants. This will help in examining voices and experiences of the informants as they choose to express them, thus providing a deeper understanding of the interviewees and arriving at insights that give meaning to different phenomena (Creswell, & Poth, 2016).



## **Results**

Generally, we found that the pandemic has generated lot of distress and adverse psychosomatic outcomes ranging from poor mental imbalance and development, panic, stigmatization, fear and anxiety, sudden death, and Post traumatic stress disorder (PTSD). The media such as the social networking services of all forms fueled it; and perhaps may have led to misinformation regarding the reality of the death tolls from people around us. For instance, the director-general of WHO has referred to this as “coronavirus infodemic” which is breeding fright and panic by laying out unchecked mind-boggling rumors, flamboyant news propaganda and sensationalism (Zarocostas, 2020; Hua, & Shaw, 2020).

As a consequence, we noted that so much of uncontrollable emotion or excitement regarding Covid-19 death tolls may result to or worsen many psychological problems in public from all the socioeconomic domains, which could potentially be even more detrimental in the long run than the virus itself (Depoux, Martin, Karafillakis, Preet, Wilder-Smith, & Larson, 2020). Earlier studies (e.g, Sim & Chua, 2004; Wu, Fang, Guan, Fan, Kong, Yao, Liu, Fuller, Susser & Lu, 2009) have shown that such global pandemic can heavily impact mental well-being of people in a number of ways. Therefore, it is imperative to narrate the various psychological implications of the realities of Covid-19. Information about death tolls, and a mere observation of dead bodies via online stream line, and even identifying a loved one from amongst a mass of dead bodies is extremely distressing; and this has a number of negative psychological impacts as discussed subsequently.

## **Discussion**

First, we sought to examine the possible psychological implications of COVID-19. The overall psychological implications found were high incidences of fear, anxiety, panic, and it was more on the older people and also those with underlying health conditions, having been identified as more vulnerable to COVID-19, and to be told that they are very vulnerable, can be extremely frightening and very fear-inducing. These psychological impacts of anxiety and its related stress for this population further triggered depression, boredom/loneliness, hypertension, and in most cases, death. Its impacts can be particularly difficult for older people who may be experiencing cognitive decline or dementia. These adults may become much more anxious,

agitated, and socially withdrawn due to fear of dying. Caregivers taking care of the aged may not be disposed as they use to be before the emergence of COVID-19 due to fear of contacting the virus and this may result in the emotional breakdown of the older populations.

The developmental period of childhood and adolescents is an important stage of human development and learned experiences through environmental factors during early childhood engender the fundamentals for lifetime behavior and success as it is a crucial phase for cognitive, emotional and psychosocial skill development (Wang, Zhang, Zhao, & Jiang, 2020). COVID-19 death tolls impact on children is generally disregarded; but one should understand that during a severe pandemic like COVID-19, community-based mitigation programs, such as closing of schools, parks, and playgrounds will disrupt children's usual lifestyle and can potentially promote distress and confusion. Stressors, such as monotony, disappointment, lack of face-to-face contact with classmates, friends and teachers, lack of enough personal space at home, and family financial losses during lockdowns, all can potentially trigger troublesome and even prolonged adverse mental consequences in children (Wang et al., 2020).

Sitting at home and mourning parents or loved ones concerning the death tolls heavily impacts on people and especially children's emotions too. A study (Muris, Rassin, Mayer, Smeets, Huijding, Remmerswaal & Field, 2009) showed a significant correlation between parents' and children's fears regarding H1N1 swine-flu pandemic of 2009. It also revealed remarkably positive correlations between children's fear reactions about the disease and H1N1-related threat information obtained from their parents and other media (Remmerswaal, & Muris, 2011). In the same way, children at this time of COVID-19 may develop phobia, PTSD etc after learning risk information and other worrisome details through audio-visual media, including social media (Muris & Field, 2010). They may even begin to be anxious and fear losing their parents, loved ones, friends and even themselves; and this may give rise to prolonged psychological impact. Dubey et al (2020) suggested that Health Care Providers (HCPs) along with mass media should take the responsibility for providing the correct information and creating an effective communication with the citizens to curb this "infodemic" and mitigate the risk for their inappropriate behaviours.

Like HIV/AIDS, those whom it was reported they tested positive to Corona virus has a psychosocial implication in stigmatization among the sufferers that even after recovery many find it is still difficult to restart their daily functioning (Dubey et. al., 2020). Healthcare providers are more prone to stigmatization, and any information on Covid-19 death tolls is likely to increase fear of dying and also of contacting the virus among them. Individuals who are stigmatized may not like to seek medical help on time and even when they do, may not be disposed to reveal the necessary information which may help in treatment thereby worsening the situation. Research on psychosocial response of HCPs during a pandemic is a complex task and remains incompletely understood (Dubey et. al., 2020). The unavoidable stress, fear and anxiety about a contagious disease outbreak like COVID-19, can be tremendous among the higher-risks, such as HCPs and other frontline workers, including bankers, policemen, armed forces etc. Not only that they are seriously exposed to COVID-19 cases in their working place but the death or illness of a relative or friend from COVID-19, and heightened self-perception of danger by the lethality of the virus puts the health workers in a psychological trauma (Zhong, Huang, & Liu, 2021).

Also, high rate of COVID-19 death tolls in developing nations like China, India, where the health care system is already overburdened usually provokes acute anxiety, irritation and stress among health care providers, and this could be worsened by the inadequate supply of protective equipments among HCPs who are at the highest risk of transmission (Chen et. al., 2020). Remembering that they will return home at the close of work provokes profound anxiety due to fear of transmitting the disease to their own family members (Chen et al., 2020), especially if there are elderly members with preexisting chronic illness having much higher risk of developing grave and unfavorable outcomes. In some cases, doctors and nurses have been assaulted due to the deaths of COVID-19 patients (Chong et.al, 2004) and eviction of resident physicians from their rented houses (Unadkat, 2020) amidst the ongoing pandemic are being reported. Emotional breakdowns following these disgraceful episodes could trigger common psychiatric illnesses in the short- and long-terms (Bao, Sun, Meng, Shi, & Lu, 2020). In other words, Dubey et al. (2020) cautioned that proper psychological well-being of the HCPs in this vulnerable time is absolutely essential.

Apart from the HCPs, the impact of COVID-19 death tolls is also excessive on the general population. For instance, as noted by Dubey et al. (2020), mass fear of COVID-19 known as 'corona phobia' is very common among the people during this pandemic; due to increase in death tolls reported on a daily basis, the uncertain character and unpredictable course of the disease, intolerance of uncertainty, perceived risk of acquiring the infection etc; can (has) generate(d) negative psychological responses including maladaptive behaviors (such as excessive abuse of alcohol), emotional distress and avoidance reaction among common people (Taha, Matheson, Cronin, & Anisman, 2014). During disease outbreaks, news of death tolls can heighten people's fears, frustrations, helplessness and anxiety over the situation.

Also, some scholars (e.g, Rubin & Wessely, 2020; Zhao, An, Tan, & Li, 2020) reported in their studies that such a situation can as well results in misplaced health-protective and help seeking behaviors by anxious public that may lead to conflicts between clinicians and patients, which can be harmful to epidemic control programs and hamper social stability. The populace worry about lockdown-related scarcity of emergency and essential services (like hand sanitizer, medications, protective masks or even toilet papers); and such behavior can have detrimental impact on a community that genuinely need them and may even promote unconcealed black marketing or panic buying (Banerjee, 1992; Singh, & Misra, 2020), that can also lead to social disruptions and injustices (Mahase, 2020).

Secondly, in looking at the perception of its existence, and that of whether COVID-19 is a fact or an illusion; we observed that people may believe more in its existence if government or politicians fail to play politics with it. This therefore accounts for why most people query and doubt about the existence. Those who have their loved one as victims are the ones who (to some extent) probably believe it is real while those who neither have their relation as victim nor know or see anyone infected of COVID-19 believed it is all an illusion. Grieving over the death of dear friends, colleagues, and loved ones due to COVID-19 and the inability to gain access, and in some cases seeing their dead bodies being burnt to ashes can result in more anger, resentment, psychological trauma and long-term psychiatric conditions (Ho, Chee, & Ho, 2020).

In conclusion, respective authorities must identify the high-risk groups for psychological morbidities such as depression, anxiety, and helplessness during COVID-19 through proper

screening, in-time referral, and promote early interventions in targeted manner (Ho et al., 2020). Specific attention needs to be paid to more vulnerable groups, such as quarantined people, HCPs, children, older adults, marginalized communities (include daily wagers, migrant workers, slum dwellers, prisoners, and homeless population) and patients with previous psychiatric morbidities (Dubey et al., 2020). Daily report of these death tolls should aptly reflect the true figure rather being politicked perhaps for selfish aggrandizements.

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