

## RELIGION, POSITIVE EMOTIONS AND IMMUNE BOOSTING IN THE ERA OF COVID-19 PANDEMIC: AN AFRICAN PERSPECTIVE

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### **Abstract**

*The relationship with the transcendent or sacred has a strong influence on a people's beliefs, attitudes, emotions and behaviour. Nations, communities, families and individuals have always found solace through their religious or philosophical beliefs during times of adversity and widespread anxiety or disaster. The COVID 19 pandemic experience is not an exception. Since its emergence in Wuhan, China in December 2019, COVID-19 has affected almost all the continents of the world including Africa. The daily real-time reporting of the COVID-19 pandemic has heightened panic and fear in people, as the number of cases and deaths recorded globally continues to increase. COVID-19 has continued to adversely affect the whole world despite different measures adopted to prevent its spread. One of the ways to manage infectious diseases is to ensure the normal functioning of the immune system. By using the concept of religion in relation to African Traditional Religion, Christianity and Islam, this article examined the role of religion in developing positive emotions which in turn triggers immune boosting for the protection of human body against COVID-19. It recommends among others the need for people to deepen their religious faith to reduce the stress associated with COVID-19 pandemic through positive emotions; and the need for people of all professions and religious faiths to spread God's love and hope to family members, neighbours, friends, and anyone else in need. These will help people to stay healthy and develop strong immunity to resist COVID-19.*

**Keywords:** Africa; Corona Virus; Immunity; Pandemic; Positive Emotions; Religion.

## **Introduction**

COVID-19 first emerged in Wuhan, China in December 2019 and has since affected almost all the continents of the world including Africa. In China, where the pandemic originated, identified cases were immediately isolated in designated wards in existing hospitals. Two new hospitals were built to isolate and treat patients who tested positive in Wuhan and Hubei. People who were exposed to COVID 19 by being in contact with cases were asked to self-quarantine at home or were taken to special quarantine facilities where they would be monitored for onset of symptoms. These measures were, however, not enough to slow down the spread of COVID 19. China had no choice but to go into a total lock down (Chirombe, et al., 2020). The same scenario played out in almost all the parts of the globe where COVID-19 has affected.

COVID-19 does not adhere to the boundaries of race, caste, ethnicity, religion, language, age, education and expertise. It enters all with the speed of breath and enslaves the respiratory system of any human. It crawls slowly and steadily. It advances like cancer and makes the person vulnerable to any type of emergency and failure. So, the ultimate goal of the virus is to defeat survival and life. Therefore, it is advised by all the statutory bodies to avoid all contacts with the people infected with virus and follow strictly the social distancing (Cordeiro, 2020).

The daily real-time reporting of the COVID-19 pandemic has heightened panic and fear in people, as the number of cases and deaths recorded globally continues to increase (Ede and Kalu, 2021). Currently, there are available vaccines for COVID-19 which are expected to protect people against the disease. Many different types of vaccines have been approved, the most efficacious of which includes the messenger ribonucleic (mRNA) types. These vaccines, which have been developed by Moderna and Pfizer/BioNTech, encode the viral S protein after entering the host cell (Thomas, 2021). However, the availability of enough vaccines to serve the generality of the people is not guaranteed. This, in addition to the fact that most people are skeptical about the vaccines (Boyd, 2021), makes it necessary for other ways of boosting immunity to be explored, especially in Africa. Conspiracy theories that vaccines could alter human DNA as well as reduce fertility in women have stalled vaccination progress in African countries. For instance, according to Obinna (2021), many Nigerians vow not to be vaccinated, because it is either a ploy to depopulate the country or some other satanic agenda. There is therefore, the need to explore the option of the development of positive emotions, which have been associated with immune boosting (Pressman and Black, 2012).

By using the concept of religion in relation to African Traditional Religion, Christianity and Islam, this article examined the role of religion in developing positive emotions which in turn triggers immune boosting for the protection of human body against COVID-19.

### **Epidemiology of COVID-19 in Africa**

COVID-19 has affected almost all the continents of the world including Africa. The continent confirmed its first case of COVID-19 in Egypt on 14th of February, 2020, and from sub-Saharan Africa the first case was reported in Nigeria on 27<sup>th</sup> of February, in an Italian patient who flew to Nigeria from Italy on 25th of February, 2020 (WHO, 2020, NCDC, 2020). The virus has spread to all the countries of Africa.

Available data show that the African continent, as of 8th August, 2021 has 5,096,999 confirmed cases of COVID-19 and 122,074 COVID-19 related deaths (WHO, 2021). This is summarized in Table 1 below:

**Table 1.: Countries with Reported Laboratory-Confirmed COVID-19 Cases and Deaths: Data as of 8th August, 2021.**

<b>COUNTRY</b>	<b>TOTAL CASES</b>	<b>TOTAL DEATHS</b>
South Africa	2,533,466	74,813
Ethiopia	284, 091	4,426
Kenya	211,828	4,149
Zambia	200,049	3,484
Algeria	181,376	4,550
Nigeria	178,086	2 187
Mozambique	132,452	1,613
Botswana	122,574	1,704
Namibia	121,043	3,191
Zimbabwe	116,322	3,900
Ghana	108,226	874
Uganda	95,875	2808
Cameroon	82,064	1,334
Rwanda	76,091	890
Senegal	67,579	1,482
Malawi	55,920	1,828
Democratic Republic of the Congo	51,889	1,048
Côte d'Ivoire	51,380	341
Angola	43,662	1 049
Madagascar	42,776	948
Cape Verde	34,052	298
Eswatini	31,060	861

Mauritania	28,197	605
Guinea	26,969	260
Gabon	25,462	165
Seychelles	18,617	91
Togo	16,874	159
Mali	14,643	534
Burkina Faso	13,625	169
Lesotho	13,603	377
Congo	13,293	179
Central African Republic	11,174	98
South Sudan	11,121	120
Equatorial Guinea	8,951	123
Burundi	8,800	10
Gambia	8 763	245
Benin	8,608	110
Eritrea	6,576	35
Sierra Leone	6 315	121
Niger	5 682	196
Liberia	5 461	220
Mauritius	5,120	21
Chad	4,978	174
Guinea-Bissau	4,788	79
Comoros	4,031	147
Sao Tome and Principe	2 470	37
United Republic of Tanzania	1,017	21
<b>Cumulative Cases(N=47)</b>	<b>5,096,999</b>	<b>122,074</b>

Source: WHO (2021)

### Religion and its Role in Africa

Some scholars, Marx (1844); Durkheim (1915); Freud (1927), earlier predicted that religion would die out as societies modernize. However, this has not happened as can be seen in the impact of religion in lives of majority of world population in recent time. According to Bentzen (2020), “today, 83% of the world population believe in God and the role of religion is strengthening in some societies” (p. 1). Similarly, Barrett and Johnson (2001) cited by Koenig (2009) stated that “despite spectacular advances in technology and science, 90% of the world’s population is involved today in some form of religious or spiritual practice” (p. 283). This shows that religion has been serving a purpose that modernization does not fulfill. Hence, Sulkowski and Ignatowski (2020) noted that despite progressing secularization, religion, churches, and denominational associations have an impact on individual ethical choices and business decisions.

In Africa, religion constitutes an inextricable part of the society. Religion constitutes the main fabric of African societies, and is intertwined with their general existence, including their sociopolitical and economic development. Hence, Mbiti (1999) asserted that Africans are notoriously religious and religion permeates all departments of life to such an extent that it is not easy or possible to isolate it. According to Koenig (2009), in many African countries people who do not subscribe to any form of religion make up less than 0.1% of the population. Although the African religious consciousness was initially derived from the practice of traditional religion, Christianity and Islam have given further impetus to this consciousness. In Africa, practically all human activities and conditions including health and diseases are seen and experienced from a religious perspective. It is therefore common for Africans to resort to religion in their moments of despair, disaster, fear and uncertainty.

### **Immunity and COVID-19**

The immune system protects against viruses and diseases and produces antibodies to kill pathogens. The body contains the organs of the immune system, which protects against diseases. It plays a key role in maintaining health and pathogenesis. It also protects the body from harmful substances, germs, and cell changes (neoplasm) (Chowdhury et al., 2020).

Apart from vaccine, the immune system is the best defense against COVID-19 because it supports the body's natural ability to defend against pathogens (eg, viruses, bacteria, fungi, protozoan, and worms) and resists infections. According to Chowdhury et al., (2020), as long as the immune system is functioning normally, infections such as COVID-19 go unnoticed. Hence, Chaussabel et al., (2010) stated that when the body encounters germs or viruses for the first time, the immune system cannot work properly, and illness can occur. This scenario is what has occurred in the case of COVID-19.

There are two major avenues of difficulty that arise with this pandemic. One created by the Covid-19 and another by the parallel process of being locked inside the house with social distancing. Both create stress and perhaps, for many it is a time of chronic stress. Chronic stress has two major consequences. It suppresses the immune system, and at the same time, creates emotional upheavals and a negative mood (Cordeiro, 2020).

The body's first response to COVID-19 is completed by the innate immune system and, soon after, the adaptive immune system. Innate immune cells recognize and remove the viral material while simultaneously signaling to other cells. This signaling subsequently arouses host immunity to prevent viral spread from the infected cell to others nearby (Thomas, 2021).

### **Positive Emotions and Immunity: The Religious Factor**

The study of positive emotions is relatively recent and has been propelled by positive psychology, which is the science of human flourishing (Gable and Haidt, 2005). George and Vaillant (2008) noted that the relatively new scientific disciplines of cultural anthropology, ethology (animal behaviour) and neuroscience in one way or the other study these positive emotions. Like all emotions, positive emotions are “brief, multisystem responses to some change in the way people interpret or appraise their current circumstances” (Fredrickson, 2013, p. 3). When those circumstances are appraised as good, a positive emotion arises. These emotions include love, hope, joy, forgiveness, compassion, trust, and gratitude. According to the broaden-and-build theory (Fredrickson, 1998), which has now received ample empirical support (Fredrickson, 2013), positive emotions broaden people’s thought-action repertoires. Over time, the recurrence of these micro-moments of positive emotion and broadened awareness build consequential personal resources, like optimism, conducive to higher life satisfaction (Fredrickson et al., 2008, Cohn et al., 2009). Therefore, positive emotions have been shown to increase well-being by broadening thought-action repertoires and by building consequential psychological, social, and physical resources. According to Brod et al., (2014) positive emotional states or emotional well-being have a distinct effect on the immune system. This effect, according to Pressman and Black (2012), is the enhancement of the immune function. Negative emotions, such as fear, anxiety, and psychological distress, on the other hand cause adverse effects on immune functioning (Glaser and Kiecolt-Glaser, 2005; Coughlin, 2012).

It is worthy of note that positive emotions form the bedrock of the teachings and practices of almost all world religions including the three major religions in Africa (African Traditional Religion, Christianity and Islam). Dzokoto et al, (2018) identified positive emotions and associated behaviors in African Traditional Religion to include Love; Pleasure/Happiness; Bravery/Courage (coded as positive emotions due to their focus on the absence of fear); Sympathy/Compassion; Laughter; and Gratitude. Among Christians, the positive emotions are known as the “fruit of the spirit” (love, joy, peace, forbearance, kindness, goodness, faithfulness, gentleness and self-control (Galatians 5:22–23). Indeed, the first of these is known to cast out fear (1 John 4:18). Similarly, the Islamic faith gives believers the hope that perfect happiness, peace, tranquility, security and freedom from fear will be present in Paradise, and those who do good deeds and have faith are guaranteed to have a good life here and an everlasting life in Paradise (Qur’an 2:82; 16:97).

From its inception, religion has addressed matters of paramount importance to humanity, matters of life, suffering, and death. Major religions portray life as a sacred gift to be

enjoyed and used wisely. Religion has long been believed to have an effect on individuals' emotional well-being, and theories abound concerning the origins and mechanisms underlying this effect. One of such theories is the Terror Management Theory. In this theory, one of the functions of religion is to help individuals cope with the recognition of their mortality (Vail, et al., 2010). According to the theory, such recognition threatens to overwhelm the individual with terror, but religion offers people a chance to escape mortality by offering them some form of eternal existence. If mortality is more salient to people suffering from a medical condition, it stands to reason that religion could be a valuable asset in staving off noxious emotions for these individuals. In addition to reducing negative emotion, Turton and Francis (2007) stated that religion creates positive emotion by helping individuals believe they are connected to and valued by a divine presence.

The ability of religion to regulate emotion may be valuable in and of itself, but it takes on a special significance with respect to health. Psychoneuroimmunological research, the study of how psychological factors are interconnected with the nervous and immune systems, has indicated that emotions are linked to physical health. In fact, there is evidence that high levels of negative emotions create deleterious physical effects, whereas high levels of positive emotions cause beneficial physiological changes (Bentzen, 2020).

The cognitive aspects of religion and spirituality have also been studied as potential explanatory mechanisms for the link between religion and well-being. Endorsing a religious faith or spiritual beliefs often provides a sense of coherence and meaning that may in turn promote greater well-being. Religion is a meaning-making system and serves as a way to understand the world, the self, other living beings, and their interactions (Park, 2005). This may engender perceived control and positive expectations about the future (Levin, 2010). Indeed, measures of religiosity and spirituality are positively associated with positive emotions (Smith et al., 2012).

Positive emotions are also an important component of religious and spiritual practices. Hence, Koenig (2002) posited that what people believe, think, and feel have a direct impact on neuroendocrine and immune function, and play a vital role in warding off disease and speeding recovery from illness. Solomon (2002) opined that faith can activate the brain-psych-body balance, particularly during the times of chronic stress and strengthen the adaptive coping styles coupled with developing positive emotions. Also, Brown (2002) stated that religion can help us build a healthy relationship with self, God, others and the cosmos and fortify the immune system. According to Gunderson and Cutts (2021), faith practices strengthen our capacity for resilience and adaptive behaviour.

Therefore, we have hope in the common resource that we enjoy every day which is our religion. Religion provides us with the ways of grasping coherently with meaning of life. It helps us to engage in rituals and symbolic expressions. It helps us to gain means and methods to awaken the divine and let the divine reign in us even in the most difficult situations of life. These can lead to the formation and development of positive emotions which can in turn boost immunity of the body to fight diseases, including COVID-19.

### **Recommendations**

Based on the above discussions, the following recommendations are made:

1. The period of COVID-19 is a wonderful time for Africans to develop a stronger relationship with God by concentrating on personal religious activities. This will help people to deepen their religious faith and reduce the stress associated with COVID-19 pandemic.
2. People should develop the attitude of prayer at this critical time. This can lead to divine intervention and solution to the COVID-19 crisis.
3. There is need for people to devote more time now than ever in reading sacred scriptures such as the Bible, Qur'an and devotionals. This will help in drawing messages of hope from the scriptures.
4. People should also engage in activities such as listening to or watching inspirational and religious programmes on radio, podcast, or Television. These will boost their faith and improve their emotional state.
5. There is need for people of all professions and religious faiths to spread God's love and hope to family members, neighbours, friends, and anyone else in need, while ensuring that their own safety is not at risk. Available modern technology should be employed by people to share God's love and hope. This can be done through group chats on the social media. This will spread a message of love and hope and ensure the well-being of those involved.
6. Governments, Faith Based Organizations and humanitarian organizations should coordinate with religious leaders to provide practical, spiritual and psychosocial support to communities and especially, to the vulnerable.

### **Conclusion**

These are challenging times for all, especially for older adults and those with underlying medical conditions who are at increased risk of serious health problems from contracting the coronavirus and developing COVID-19 lung infection with potentially devastating consequences. The fear and anxiety associated with COVID-19 has gathered momentum, throughout the world, especially among the elderly and people who have underlying



medical conditions. Anxiety and fear adversely affect the physiological systems that protect individuals from infection. Exhibiting positive emotions, as taught by different religions, is one way to stay healthy and develop resistance for those who are religious. In the event of infection with the corona virus, even then, the course of the illness will likely be less severe and recovery sooner due to increased emotional, social, physical, and spiritual resilience.

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