

INFLUENCE OF BAKIGA CULTURAL BELIEFS AND PRACTICES ON MANAGEMENT OF CORONA VIRUS: IMPLICATIONS FOR MEDICAL SOCIOLOGY

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Abstract: The focus of this discourse is to construct an understanding of cultural beliefs and practices on the influence and spread of corona virus as viewed from lenses of medical sociology. This review starts from the premise that we need a sociology of health agenda to manage the corona virus epidemic. The study points to the fact that cultural beliefs are an unsung aspect in our understanding of the sociology of health particularly in the management of corona virus despite the role of describing social behavior in other disciplines, including utilization of medicine itself. Some cultural fanatics among the Bakiga hold several casual beliefs that Corona Virus is a disease of the West (most developed countries) and therefore, Africans are an exception. Another competing belief is that most Africans have endured harsh conditions which made them develop immunity against the virus. Another argument is that Africans have been infected by flu and common cold and therefore, their body has requisite immunity to fight COVID 19. Culture in health interventions seems to have three domains of health beliefs and behavior that should be taken into account: (1) Cultural Identity, (2) Relationships and Expectations, and (3) Cultural Empowerment. It is essential to maximize the wealth of experience that emerges both from anthropological and sociological analysis of epidemic responses in different contexts for similar airborne diseases, including historical analyses. Although the socio-cultural practices of the Bakiga highlighted in this work have been shown to contribute to the spread of COVID 19, any future efforts to eradicate and/or contain these outbreaks should also include the medical sociologist on the African continent as the dearth of them was the main structural contributor to the course of the pandemic.

Keywords: Cultural beliefs, Practices, Management of corona Virus, Medical sociology.

1. INTRODUCTION

Infectious diseases pose a significant risk to the global population (Kouadio et al., 2012). The reasons behind their appearance, and how outbreaks differ are of notable interest to epidemiologists and public health professionals. Continued lack of vaccines for many of the major infectious diseases will dampen progress in prevention, while continued alterations in temperature and rainfall, and human impact on agricultural lands, forests and rivers will in some instances increase the number of virus and alter the geographic distribution of animal hosts, leading to the emergence of new human infections and/or re-emergence of those that are known. Weak infection control procedures by health workers have caused the amplification of transmission in outbreaks diseases such as Ebola, SARS and MERS.

Coronaviruses in particular have become a global health threat. Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East respiratory syndrome (MERS-

CoV) and severe acute respiratory syndrome (Su et al., 2016). The Coronavirus, better known as COVID-19 in the medical community, is a group of viruses that causes respiratory tract illnesses. The symptoms are severe cough, sneezing, and breathing difficulties. The virus broke out in the Wuhan district in China and slowly spread to other parts of the world. An epidemic of coronavirus disease 2019 (COVID-19) has spread rapidly since December 8, 2019 in China. Currently, the disease has spread to over 104 countries with major economies such as Italy, Japan, South Korea, France, Spain, Australia, and the US having all reported multiple cases of the virus within their borders, and deaths related to the virus.

The World Health Organization (WHO), on 11th March 2020, declared the outbreak of a global pandemic raising the risk assessment of the outbreak to “very high”. A pandemic status is given to a disease epidemic that has spread across a large region across the globe and community spread is inevitable. The World Health Organization referred to the novelty of the new strain of the virus. Novel coronavirus (nCoV) is a new strain that has not been previously identified. Apparently, virus chains are renewing on a daily basis while we are trying to prevent exposure by social action (WHO, 2020).

The fear of contracting the virus is also perceived to be spreading faster than the virus itself, having sparked fear across the globe with most people being driven by emotional contagion and rushing to stock up on items such as hand sanitizers, gloves and face masks, with online sales for these products having risen by 81.7% between January and February 2021. The outbreak of coronavirus and its associated health and social consequences should be considered as one of the most important social events in human life in the 21st century (Kumar & Somani, 2020)

Many social and economic issues are tied to the Corona outbreak. The Coronavirus shock was wider and stronger than severe acute respiratory syndrome (SARS), bird flu, and swine flu in previous years. This particular outbreak of coronavirus revealed how a biological and epidemiological issue can be transformed to a social, economic and political subject. Many daily activities even in cities without confirmed cases were affected. Quarantines of large cities and some sort of home confinement for even unaffected persons occurred. In a rare event some countries closed their borders and restricted their flights (Paraskevis, Kostaki & Tsiodras, 2020).

The most common and the most important strategy of states facing this virus has been the public health approach. Enhancing the capacity of clinics and hospitals and strict quarantine of infected patients, campaigns for hand washing and cough etiquettes were commonly used. However, the demands have gone much further. Despite a lack of evidence for use of masks by general populations, an enormous demand for buying masks occurred worldwide (Tariku & Hajure, 2020).

Social distancing and social isolation has been identified as the surest way to reduce the intensity of COVID 19 infection. However, we should not overlook the social and psychological effects of these interventions. The containment campaign basically greatly reduces the contacts people have with one another, by canceling numerous social events and urging older people and those with special health conditions not to leave their homes. Many of these older folk live on their own, as their partners have died. For all, it means fewer opportunities to see family and friends (Sadati et al., 2020).

So far, it seems that coronavirus is transmitted mainly by droplets between infected people or carriers, although it also survives on surfaces for quite a while. Because of its long incubation period, we can't identify carriers early enough, although it seems that people are most infectious when they show symptoms. Most likely, there are many more infected people who do not show symptoms. In this regard, socio-cultural beliefs and practices encourage social contacts, social organization and social network that has impact on the spread of COVID 2019 (Jayaweera, Gunawardana & Manatunge, 2020). Examination of the future health care agenda makes it abundantly clear that if we didn't have a sociology of health initiative we would need to invent one. The influences affecting health and the provision of services are largely social, and the way we address problems of illness and care reflects our values and the arrangement of powerful interests within our social system. Therefore, it is vital to examine cultural beliefs and practices of the Bakiga community in regard to management of COVID 19 from a perspective of medical sociology.

The Kiga people, or Abakiga (“people of the mountains”), are an ethnic group located in northern Rwanda and southern Uganda. The Kiga speak a Bantu language called Rukiga. They are sometimes referred to as the Chiga or Kiga, while the singular form is Omukiga. It has been suggested that the Bakiga arrived in what is modern day Uganda from Rwanda between 1600 and 1700. The Bakiga people live in southwestern Uganda and North Eastern Rwanda, mostly located in Kabale district (and Byumba prefecture in Rwanda) (Niwatuhereza, 2019).

The Kiga have various cultural beliefs and practices. They believed in Ruhanga, the Creator of all things. They also had several cults, among which the most important was Nyabingi – the spirit of the much respected rain-maker. It was and is still considered good manners for a visitor to join a family eating a meal without invitation. The Bakiga brew local beer, and to enjoy it, people would sit on wooden stools surrounding a pot, and drink it through long tubes. Marriage wasn't only important for the chieftain; it held great significance for the entire clan. Polygamy was the exception rather than the norm, practiced in specific clans or segments of households when widow inheritance occurred following the death of a married family member. The form of dance for the Bakiga is called the Ekizino. Ekizino is a royal dance from the Bakiga people of Kigezi (Niwatuhereza, 2019).

2. THEORETICAL FOUNDATION

One model that has been at the forefront of understanding the influence of culture on health is the PEN-3 cultural model (Iwelunmor et al., 2014). Developed by Airhihenbuwa (1989), the model places culture at the core of the development, implementation and evaluation of successful public health interventions (Airhihenbuwa & Webster, 2004; Airhihenbuwa, 2007). Airhihenbuwa asserts that to centralize culture in health interventions, three domains of health beliefs and behavior should be taken into account: (1) Cultural Identity, (2) Relationships and Expectations, and (3) Cultural Empowerment. Each domain includes three factors that form the acronym PEN; Person, Extended Family, Neighborhood (for the Cultural Identity domain); Perceptions, Enablers, and Nurturers (for the Relationships and Expectation domain); Positive, Existential and Negative (for the Cultural Empowerment domain). Within the Cultural Empowerment domain, health issues are investigated first by identifying practices that are positive highlighting values that are existential and have no harmful health consequences before identifying negative practices that serve as barriers (Airhihenbuwa, 2007). Using the PEN-3 cultural model as an analytical framework, the objective of this study is to assess the role played by sociocultural factors in the spread of Corona Virus 2019. Health beliefs, cultural practices, and human behavior have combined to fan the dispersal of the disease. Using the cultural empowerment dimension of the PEN-3 model, we analyze the role of cultural belief and practices on the management of COVID 2019.

Cultural aspects have a great influence on the processes of symptom recognition, labelling, help-seeking and the structure of health systems (Angel & Williams, 2000). For example, a peoples' decision to attend or ignore physical or psychological changes, their interpretation and evaluation of this change and their way of acting on the symptoms is influenced by culture (Angel & Williams, 2000). Hence public health measures need to consider the cultural background, i.e. the social agreements and assumptions (Napier et al., 2014) and must be located at community level to enhance in-depth understanding of the individual context, participation and appropriateness of measures (Shaikh & Hatcher, 2005)

Literature shows that culture, 'a system of shared beliefs, values, customs, behaviors, and artifacts' has the potential to influence infectious disease transmission including COVID 19 (Yoosefi Lebni, Abbas & Ziapour, 2021). There are several casual beliefs that Corona Virus is a disease of the West (most developed countries) and therefore, Africans are an exception. Another belief is borne out of the belief that most Africans have endured harsh conditions which made them develop immunity for the virus. Another perception is that Africans have been infected by flu and common cold and therefore, their bodies have developed requisite immunity to fight COVID 19. Another common belief among the Bakiga Community in Uganda is that they have received various immunizations and vaccinations which increased the general ability of their bodies to combat viruses.

It is also worthy to note that some of the Bakiga communities do not believe in pharmaceutical medicine and drugs to treat infectious diseases. It is evident that resistance to use these drugs increases the spread of the corona virus . Currently, several recognized motives exist among African populations for the U.S. creation or re-creation of viruses such as EVD include profiting from providing a cure for the disease and/or working hand-in-hand with the pharmaceutical industry, as well as the belief that EVD was purposely administered to African civilians in the form of a vaccination under the guise of humanitarian assistance (Guy-lucien et al., 2015). These beliefs lead to health workers being met with suspicion and distrust in most African countries. This, in turn, increase the likelihood of individuals resorting to home remedies or simply waiting to go to the doctor until only after the disease has progressed too substantially (Omonzejele, 2014)

However, the beliefs have been subject to criticism with the WHO warning that Africans should not believe that they are immune to infectious diseases such as Corona Virus as this would result in careless living hence increasing the chances of COVID 19 transmission. Statistics from the United States seem to indicate that African Americans appear to have been

highly been affected by COVID 19 in some states. Similarly, the belief that the virus is active among the old, has also been refuted with evidence of all age groups being affected by the corona virus (WHO, 2020).

Extensive literature seems to suggest that cultural practices have resulted in pandemics of infectious diseases in African contexts. The Bakiga, like other Ugandan communities, have several cultural practices such as funerals, initiation ceremonies, wedding and religious ceremonies which among others have increased the spread of infectious diseases. The Bakiga community have an elaborate marriage ceremony although there has been transformation due to urbanization. However, some households especially in rural areas still have cultural practices such as 'The Visit of the Couple Butter' (OkumaraAmajuta), Bridal Reception (Okutaasya), 'Give-Away' Ceremony (Okuhingira) and : Invitation to Collect the Bride (Okutegura) among other procedures. During cultural practices, there are several personal contacts which increase the possibility of corona virus infections (Atekyereza, 2007).

Sub-Saharan Africa embraces a rich diversity of indigenous and imported religious traditions. Since moral behavioral prescriptions often trace their sources to religious teachings, religion and a strong adherence to religious principles have been thought to protect against transmission of infectious diseases such as corona virus (Sewe, Oduke, Odhiambo & Obwoye, 2021). Even though modern religions such as Christianity and Islam have taken credence among the Bakiga Community, there are elements of traditionalists who still believe in their supreme being. Majority of the Bakiga community believe that the disease is related to supernatural actions. Some of the people indicated that their God is not happy and therefore, diseases such as Corona Virus and Ebola are common hence there is need for repentance as well as offering of sacrifices to the supernatural being. Koenig and Al Shohaib (2014) concluded from a study of Muslims, Christians and Animists in a rural community of Senegal that there was little difference in infectious diseases knowledge between groups that consider religion important and those that do not.

The deeply rooted tradition of large family gatherings at funerals has also been recognized as very likely to increase the spread of this outbreak. Various activities associated with burial practices contribute to the transmission of virus based diseases such as COVID 19. Most communities in Africa believe in life after death. Consequently, funeral and burial practices are perceived as crucial steps in transitioning from the world of the living to the spiritual world. It is believed to be a duty for surviving relatives of a deceased person to facilitate the transition from this world to the spiritual world through funeral and burial rituals. Given that the major means of human-to-human transmission of corona virus is through droplets, the afore-mentioned funeral and burial practices inadvertently result in spreading of the disease (Houéto, 2019). For instance, the study of Louis et al. in Guinea reported that people who attended a rural funeral were more affected by the outbreak of infectious diseases that ensued than those who did not (Ngwa et al., 2017).

While modern health care based on Western medicine is now considered the norm in many countries, much of Africa still relies heavily on traditional practices. While traditional medicine can have a positive role in health care, ethnomedical beliefs can also have important impacts on health-seeking behavior, health outcomes, and pathogen transmission pathways. Individuals often look to traditional healers and family members for advice and care despite inexperience of the person providing information. Traditional healers may have positions of influence within the community and, therefore, command a level of trust, and can also have a significant influence on health-seeking behavior and uptake of health messages, factors that can directly affect outbreak dynamics. Sick individuals have often opted to listen to traditional healers and rumors about potential "cures. For instance, as mentioned, they no longer suck out yam with their mouths because some healers who did so contracted and died from diseases related to virus. Thus traditional healers are most likely to infect a lot of patients unknowingly due to incubation of corona virus which is approximately 14 days (Hewlett & Amola, 2003).

Assessing the parameters of gender roles, which includes socio-cultural dynamics as well as male-female differences, is therefore crucial in examining both the patterns of exposure to infectious agents (frequency and intensity) and the treatment of infectious diseases. Historically, and even presently, the relationship between gender and infectious disease has been under-researched, particularly when assessing approaches to disease management and control. Culturally sanctioned gender relations have an especially prominent role in the infectious diseases epidemic in sub-Saharan Africa (UNAIDS, 2008). Generally, in the literature, gender is understood as the social role occupied by each sex and gender relations as the interactions between these two social roles.

The relative status of women in society in general and in their intimate relationships in particular can strongly impact the chances of being infected (Macdonald, 1996) and is a common theme in the literature. Ethnographic evidence in relatively

egalitarian societies also supports the connection between gender relations and spread of infectious diseases. Customs such as remaining close to the sick family member to nurse them, touching and/ or embracing them is mainly performed by women. This entails means that the extent of contracting virus is high among women as compared to men. According to Bah et al (2015) the cleaning and grooming of the victim's body by family members have been identified as triggering factors in the spread of the disease due to a high viral load present in victims.

3. MEDICAL SOCIOLOGY VIEW

Health and medicine are key areas of sociological specialization, but in the face of rapid global challenges, they are changing (Karvonen, Kestilä & Mäki-Opas, 2018). The need for change is becoming more and more urgent and the relevance of some of the traditional approaches, frameworks and theoretical perspectives should be evaluated. Medical sociology is the sociological analysis of medical organizations and institutions; the production of knowledge and selection of methods, the actions and interactions of healthcare professionals, and the social or cultural (rather than clinical or bodily) effects of medical practice. The field commonly interacts with the sociology of knowledge, science and technology studies, and social epistemology. Medical sociologists are also interested in the qualitative experiences of patients, often working at the boundaries of public health, social work, demography and gerontology to explore phenomena at the intersection of the social and clinical sciences. Health disparities commonly relate to typical categories such as class and race (Cockerham, 2014).

There has been general awareness of the importance of cultural aspects, however, recommendations from anthropologists have mostly not been taken into account and Kargbo et al (2016) explained that initially response teams dealt with pandemics solely as a health issue without awareness of the complex culture (Kargbo et al, 2016). Thus, health interventions were not only ineffective but sometimes even harmful and often did not meet the need for practical implications (Abramowitz et al., 2015). For medical sociologists to have a positive impact on the management of Corona Virus of 2019. The roles exhibit a wide spectrum from prevention of the disease to post disease management and especially stigmatization of the ex-patients.

Stigma hurts everyone by creating fear or anger towards other people. Stigmatized groups may be subjected to social rejection, denial of healthcare, education, housing, employment, physical violence among others. Stigma affects the emotional or mental health of stigmatized groups and the communities they live in. Stopping stigma is important for us to create a society that is resilient to the pandemic. Everyone can help stop stigma related to Covid-19 by knowing facts about the virus and sharing them with others. It was not the wish of coronavirus patients to contract the disease (WHO, 2020).

"Stigma can undermine social cohesion and prompt possible social isolation of groups, which might contribute to a situation where the virus is more, not less, likely to spread," the WHO says. In short, if people are trying to hide their illness to avoid discrimination, they are less likely to get tested or treated. "Using criminalizing or dehumanizing terminology creates the impression that those with the disease have somehow done something wrong or are less human than the rest of us, feeding stigma, undermining empathy, and potentially fuelling wider reluctance to seek treatment or attend screening, testing and quarantine (WHO, 2020).

The medical sociologists' contribution to pandemics cannot go unnoticed. Medical sociology, for example, has had long involvement in the study of medical education, dating from the 1950s. Educators sought assistance from sociologists in improving curricula and in understanding better how to structure education to deal with the stresses of training, reduce unethical behavior, improve selection processes, and induce more thoughtful inquiring behavior on the part of physicians in training—in short, how to transform students into better medical professionals. Many sociologists sharing these goals with medical educators did excellent studies on such issues as coping with uncertainty, specialty selection, factors affecting professional socialization, and the like (Naseer, 2016).

Work in medical sociology, more closely tied to disciplinary interests, finds less acceptance among physicians and administrators because it looks at issues of health and medicine from the outside, commonly operating on premises that reject basic assumptions of the medical profession (Seale, 2008). Petersdorf and Feinstein (1991), in commenting on the field, note that such work "has been a troublesome domain for many clinicians, who believe their distinctive concerns for individual people are lost in collectivist beliefs about society, and whose generally conservative political views have clashed with the strongly liberal, often radical positions of many sociologists." It seems clear that these commentators—

and probably most of their colleagues—prefer a sociology that is adjunct to medical activity and accepting of its basic premises. Such a sociology would simply be a servant to medicine, not fulfilling its larger responsibility to understand medicine as a social, political, and legal endeavor; to challenge its curative and technological imperatives; to examine equity of care in relation to class, race, gender, age, character of illness, and geographic area; and to study the appropriate goals and objectives for health care (Weiss, 2015).

Public health measures to stop viral pandemics did not consider such cultural aspects at first, however UNESCO realised that a medical approach alone is not sufficient to tackle a multifaceted issue. Yet, the motivation for this shift was mainly driven by the need for more effective interventions e.g. in terms of behaviour change (UNESCO, 2001) and respect for local cultures seemed to be only a side-effect. This corresponds with the common deficit orientated understanding of culture in public health research (Bond & Brough, 2007).

Alongside epidemiological and medical approaches, it is believed that social scientists with experience in pandemic response must be included in this management (Lees, Palmer, JProcureur & Blanchet, 2020). Collaboration between social scientists and practitioners is vital to understand the key social and cultural features of the local contexts of affected areas, and how these will directly influence the strategy and implementation of the COVID 19 management. There is need to investigate social contexts of health emergencies to better control outbreaks and to prepare for them.

This is essential to maximize the wealth of experience that emerges both from anthropological and sociological analysis of epidemic responses in different contexts for similar airborne diseases, including historical analyses (Baer, Singer & Susser, 2013). Although the socio-cultural practices highlighted in this work have been shown to contribute to the spread of COVID 19, any future efforts to eradicate and/or contain these outbreaks should also include the medical sociologists on the African continent as the dearth of them is a structural contributor to the course of the pandemic.

REFERENCES

- [1] Abramowitz, S. A., McLean, K. E., McKune, S. L., Bardosh, K. L., Fallah, M., Monger, J., ... & Omidian, P. A. (2015). Community-centered responses to Ebola in urban Liberia: the view from below. *PLoS neglected tropical diseases*, 9(4).
- [2] Airhihenbuwa, C. O. (1989). Perspectives on AIDS in Africa: strategies for prevention and control. *AIDS Education and Prevention*.
- [3] Airhihenbuwa, C. O. (2007). 2007 SOPHE Presidential Address: on being comfortable with being uncomfortable: centering an Africanist vision in our gateway to global health. *Health Education & Behavior*, 34(1), 31-42.
- [4] Airhihenbuwa, C. O., & Webster, J. D. (2004). Culture and African contexts of HIV/AIDS prevention, care and support. *Sahara-J: Journal of Social Aspects of HIV/AIDS*, 1(1), 4-13.
- [5] Angel, R. J., & Williams, K. (2000). Cultural models of health and illness. In *Handbook of multicultural mental health* (pp. 25-44). Academic Press.
- [6] Atekyereza, P. R. (2007). Transformations in the Marriage Process among the Bakiga of South-western Uganda. *The Faculties of Arts and Social Sciences Makerere University*, 1.
- [7] Baer, H. A., Singer, M., & Susser, I. (2013). *Medical anthropology and the world system: critical perspectives: critical perspectives*. Praeger.
- [8] Bah, E. I., Lamah, M. C., Fletcher, T., Jacob, S. T., Brett-Major, D. M., Sall, A. A., ... & Fowler, R. A. (2015). Clinical presentation of patients with Ebola virus disease in Conakry, Guinea. *New England Journal of Medicine*, 372(1), 40-47.
- [9] Bai, Y., Yao, L., Wei, T., Tian, F., Jin, D. Y., Chen, L., & Wang, M. (2020). Presumed asymptomatic carrier transmission of COVID-19. *Jama*.
- [10] Bond, C., & Brough, M. (2007). The meaning of culture within public health practice-implications for the study of Aboriginal and Torres Strait Islander health. *Beyond Band-aids: Exploring the Underlying Social Determinants of Aboriginal Health.*, 229-238.
- [11] Cockerham, W. C. (2014). Medical sociology. *The Wiley Blackwell Encyclopedia of Health, Illness, Behavior, and Society*, 1-19.
- [12] Guy-lucien, S. W., Kambamba, D. K., Conserve, D., & Tshiswaka, D. I. (2015). Socio-Cultural Factors Associated with Epidemics: The Case of 2014 Ebola Outbreak. *Antiviral research*, 110, 79-93.

- [13] Hewlett, B. S., & Amola, R. P. (2003). Cultural contexts of Ebola in northern Uganda. *Emerging infectious diseases*, 9(10), 1242.
- [14] Houéto, D. (2019). The social determinants of emerging infectious diseases in Africa. *MOJ Public Health*, 8(2), 57-63.
- [15] Iwelunmor, J., Newsome, V., & Airhihenbuwa, C. O. (2014). Framing the impact of culture on health: a systematic review of the PEN-3 cultural model and its application in public health research and interventions. *Ethnicity & health*, 19(1), 20-46.
- [16] Jayaweera, M., Perera, H., Gunawardana, B., & Manatunge, J. (2020). Transmission of COVID-19 virus by droplets and aerosols: A critical review on the unresolved dichotomy. *Environmental research*, 188, 109819.
- [17] Kalwinsky, R. K. (2008). Western worms! Explication of aspects of health care behavior among Chamorro with HIV/AIDS. *Journal of Transcultural Nursing*, 19(1), 55-63.
- [18] Kargbo, D., Li, X. L. & Liu, K. (2016). Transmission dynamics of Ebola virus disease and intervention effectiveness in Sierra Leone. *Proceedings of the National Academy of Sciences*, 113(16), 4488-4493.
- [19] Karvonen, S., Kestilä, L. M., & Mäki-Opas, T. E. (2018). Who needs the sociology of health and illness? A new agenda for responsive and interdisciplinary sociology of health and medicine. *Frontiers in Sociology*, 3, 4.
- [20] Koenig, H. G., & Al Shohaib, S. (2014). Religiosity and behavioral health in Muslims. In *Health and Well-Being in Islamic Societies* (pp. 217-241). Springer, Cham.
- [21] Kouadio, I. K., Aljunid, S., Kamigaki, T., Hammad, K., & Oshitani, H. (2012). Infectious diseases following natural disasters: prevention and control measures. *Expert review of anti-infective therapy*, 10(1), 95-104.
- [22] Kumar, A., & Somani, A. (2020). Dealing with Corona virus anxiety and OCD. *Asian Journal of Psychiatry*, 51, 102053.
- [23] Lees, S., Palmer, J., Procureur, F., & Blanchet, K. (2020). Contested legitimacy for anthropologists involved in medical humanitarian action: experiences from the 2014-2016 West Africa Ebola epidemic. *Anthropology & Medicine*, 27(2), 125-143.
- [24] MacDonald, T. (1996). Why common sense goes out the window: Effects of alcohol on intentions to use condoms. *Personality and Social Psychology Bulletin*, 22(8), 763-775.
- [25] Napier, A. D., Ancarno, C., Butler, B., Calabrese, J., Chater, A., Chatterjee, H., ... & Woolf, K. (2014). Culture and health. *The Lancet*, 384(9954), 1607-1639.
- [26] Naseer, S. (2016). *Health and Empowerment: A Sociological Study of Women in Aligarh City* (Doctoral dissertation, Aligarh Muslim University).
- [27] Nmutandani, M. S., Adedija, D., & Nmutandani, V. (2014). Aids Pandemic: Traditional Practices Increasing Risk of HIV Infections in South Africa. *Journal of Clinical Research & Bioethics*, 5(2), 1.
- [28] Ngwa, M. C., Young, A., Liang, S., Blackburn, J., Mouhaman, A., & Morris Jr, J. G. (2017). Cultural influences behind cholera transmission in the Far North Region, Republic of Cameroon: a field experience and implications for operational level planning of interventions. *Pan African Medical Journal*, 28(1).
- [29] Niwatuhereza, E. (2019). *Exploring motifs for textile decoration from Kiga indigenous cultural icons in South Western Uganda* (Doctoral dissertation, Kyambogo University).
- [30] Omonzejele, P. F. (2014). Ethical challenges posed by the Ebola virus epidemic in West Africa. *Journal of bioethical inquiry*, 11(4), 417-420.
- [31] Paraskevis, D., Kostaki, E. G., Magiorkinis, G., Panayiotakopoulos, G., Sourvinos, G., & Tsiodras, S. (2020). Full-genome evolutionary analysis of the novel corona virus (2019-nCoV) rejects the hypothesis of emergence as a result of a recent recombination event. *Infection, Genetics and Evolution*, 79, 104212.
- [32] Petersdorf, R. G., & Feinstein, A. R. (1981). An informal appraisal of the current status of 'medical sociology'. In *The relevance of social science for medicine* (pp. 27-48). Springer, Dordrecht.
- [33] UNESCO (2001). 'Why literacy matters': Exploring a policy perspective on literacies, identities and social change. *The Journal of Development Studies*, 44(6), 779-796.
- [34] Sadati, A. K., Lankarani, B., Hossein, M., & Bagheri Lankarani, K. (2020). Risk Society, Global Vulnerability and Fragile Resilience; Sociological View on the Coronavirus Outbreak.

- [35] Seale, C. (2008). Mapping the field of medical sociology: a comparative analysis of journals. *Sociology of health & illness*, 30(5), 677-695.
- [36] Sewe, C. A., Oduke, C., Odhiambo, G., & Obwoye, H. (2021). The nexus between traditional African belief and pandemics: the manifestation of nyawawa spirits amidst the spread of corona virus in the Lake Victoria basin, Kisumu, Kenya. *International Journal of Culture and Religious Studies*, 1(1), 79-96.
- [37] Shaikh, B. T., & Hatcher, J. (2005). Health seeking behaviour and health service utilization in Pakistan: challenging the policy makers. *Journal of public health*, 27(1), 49-54.
- [38] Su, S., Wong, G., Shi, W., Liu, J., Lai, A. C., Zhou, J., ...&Gao, G. F. (2016). Epidemiology, genetic recombination, and pathogenesis of coronaviruses. *Trends in microbiology*, 24(6), 490-502.
- [39] Tanner, S., Chuquimia-Choque, M. E., Huanca, T., McDade, T. W., Leonard, W. R., & Reyes-García, V. (2011). The effects of local medicinal knowledge and hygiene on helminth infections in an Amazonian society. *Social Science & Medicine*, 72(5), 701-709.
- [40] Tariku, M., & Hajure, M. (2020). Available evidence and ongoing hypothesis on corona virus (COVID-19) and psychosis: is corona virus and psychosis related? A narrative review. *Psychology Research and Behavior Management*, 13, 701.
- [41] UNAIDS (2008). The writing is on the wall for UNAIDS. *Bmj*, 336(7652), 1072-1072.
- [42] Weiss, G. L. (2015). *Sociology of health, healing, and illness*. Routledge.
- [43] World Health Organization. (2020). Coronavirus disease 2019 (COVID-19): situation report, 67.
- [44] Yoosefi Lebni, J., Abbas, J., Moradi, F., Salahshoor, M. R., Chaboksavar, F., Irandoost, S. F., ... & Ziapour, A. (2021). How the COVID-19 pandemic effected economic, social, political, and cultural factors: A lesson from Iran. *International Journal of Social Psychiatry*, 67(3), 298-300.