

Chapter 7

Indigenous Health Practices and Lifestyles: Can They Help Zimbabwe Transform Its Health Systems in the Face of the COVID-19 Pandemic?



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Abstract The COVID-19 pandemic has significantly strained the healthcare systems, resulting in a social crisis and widespread public fear. Globally, researchers and health experts have advocated for non-pharmacological and pharmacological preventive measures to lessen the impact on society. Developing countries, known to have weaker health systems, limited resources, and populations with lower socio-economic status, relied on indigenous systems to survive during the pandemic. This narrative review aimed to assess indigenous health practices and lifestyles in Zimbabwe in light of the COVID-19 epidemic and how these practices and lifestyles impact Zimbabwe's health systems. Information about these indigenous practices and lifestyles was gathered using well-known scholarly databases such as Web of Science, Scopus, ScienceDirect, PubMed, and Google Scholar. Several indigenous lifestyles and techniques, such as diet, handwashing, cultural norms, and herbal medicines, have been discovered and studied in terms of how they aid in the fight against COVID-19. However, it was found that advocating for these indigenous lifestyles and practices as a sole solution to COVID-19 is insufficient. Furthermore, an integrated strategy combining indigenous lifestyles and customs with hospital-based therapies can prevent COVID-19 transmission. Zimbabwe is

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encouraged to go beyond pro- and anti-nonnative measures and suggest a health reform based on indigenous traditions and lifestyles, which might function alone or be effectively and practically linked with WHO COVID-19 prevention initiatives.

Keywords Indigenous health practices · Traditional lifestyles · Health reform · COVID-19 pandemic

7.1 Introduction

Zimbabwe reported its first case of COVID-19 on March 20, 2020, and the number has continued to rise since then (Murewanhema & Makurumidze, 2020). As of January 19, 2022, Zimbabwe had recorded 227,552 confirmed cases and 5276 deaths (MoHCC, 2022), and based on the advice of the World Health Organization (WHO), compounded by the novelty and uncertainties surrounding the containment of COVID-19, the Government of Zimbabwe, like other governments in the region, implemented measures such as enforcing national lockdowns and other myriads of interventions (Murewanhema & Makurumidze, 2020; Shumba et al., 2020), as a way of combatting the spread of the pandemic. All of this was done following the WHO, which concluded that national lockdowns, social distancing, self-isolation, the use of facemasks, the use of surface disinfectants/hand sanitizers, and vaccines are the best measures for containing COVID-19 spread (Siqueira et al., 2020; Summan & Nandi, 2021; Manderson & Levine, 2020; Atangana & Atangana, 2020; Ahn et al., 2020; Pradhan et al., 2020).

However, the interventions resulted in recessions, new social lifestyles, and disruptions in healthcare provision and supply chains, among other consequences (Murewanhema & Makurumidze, 2020; Msimanga et al., 2021). Zimbabwe, a less economically developed country with a high unemployment rate (6%), a high inflation rate (7%), and an already severely weakened and fragile public healthcare system (Shumba et al., 2020), was not immune to the pandemic's wrath. The restrictions exacerbated the situation, pushing socioeconomically vulnerable groups more profound into the shackles of poverty (Dudzai & Wamara, 2021). Unfortunately, even frontline health workers were not spared due to the transmission dynamics of the diseases and the lack of personal protective equipment (Chingono, 2020).

Even in the absence of cases in some countries, the faster Africa accepted and implemented the WHO COVID-19 interventions, the faster it assumed that the spread of COVID-19 could not be prevented in any other way than the ones they proposed. However, with the pandemic's consequences still present in Africa and being felt by people inextricably, people's minds are filled with questions. These include:

1. Why has the government excluded African indigenous practices as one of its COVID-19 policy responses?

2. Why have traditional African practices been overlooked in the fight against COVID-19 (Makanda & Matambo, 2021)?
3. Do we have indigenous practices and lifestyles that can limit the spread of COVID-19 or do people still practise traditional health practices?

The standard response would be that COVID-19 is a new disease, and there was no time to develop indigenous approaches to it (Makanda & Matambo, 2021). Given the alarming severity of the disease in the West at the time, it was better to listen to the countries that had first-hand experience with it.

However, epidemics are not uncommon in Africa (Neerinckx et al., 2010; Frith, 2012; Phoofolo, 1993). One should investigate how Africans have dealt with pandemics or plagues (Bernault, 2020). It is a well-known fact that before the arrival of Western medicine, African traditional healers, diviners, and the elderly had the methods that worked for them in dealing with pandemic diseases (Makanda & Matambo, 2021). Since time immemorial, Africans have used their cultural beliefs (Adeleye et al., 2021) and plants as primary forms of medicine (Chassagne et al., 2021; Ozioma & Chinwe, 2019; Elujoba et al., 2005; McGaw et al., 2005). Many African countries appear to use indigenous practices on COVID-19. Notably, Nigeria, Uganda, Madagascar, and Cameroon reported herbal medicines that can reduce and eliminate COVID-19 symptoms (Titanji, 2021; Kindzeka, 2020), though the advances were met with geopolitical criticism and were not approved by WHO. The fact that there are fewer deaths in Africa and a higher number of deaths from the pandemic in countries with the most advanced health systems (CDC COVID-19 Response Team, 2020) can attest to the efficacy of indigenous African practices to some extent (Fongzossie Fedoung et al., 2021; Olaopa, 2020). However, the role of African indigenous health practices and lifestyles in containing the spread of COVID-19 in Zimbabwe and on the African continent has not yet been adequately articulated, even though Africans have previously been able to fight pandemics and plagues using culturally based approaches.

As a result, this chapter's main purpose was to critically examine indigenous health practices and lifestyles in Zimbabwe to see if they could aid in the fight against the spread of the COVID-19 disease. Hand hygiene, steaming and phyto-medicines, diet, self-isolation/quarantining, and other people's everyday lifestyles are all investigated. To that end, the chapter employs Afro-indigenous health practices and lifestyles to move beyond pro- and anti-nonnative approaches and propose interventions based on indigenous practices that can work alone or be practically and pragmatically blended with Western approaches to combat COVID-19 spread. This type of intervention can be viewed as one of the most critical efforts to improve our understanding of COVID-19 prevention. Such health reforms are expected to improve health delivery and knowledge on the indigenous control and management of COVID-19.

7.2 Overview of Indigenous Health Practices

Indigenous or traditional medicine/healthcare, according to Lazarus (2006), is an integration of knowledge and practices, regardless of whether explicable or not, in the treatment, mitigation, or eradication of physical, psychological, and social diseases. Herbalists, bonesetters, psychological healers, midwives, faith healers, diviners, spiritualists, and even older adults have traditionally used indigenous knowledge and practices to develop methods and materials used in primary healthcare since time immemorial (Dhewa, 2008). Indigenous health practices are reported to be the primary treatment for major ailments such as cancer among the Shona tribes in Zimbabwe (Maunganidze, 2016). For some poor people in the past, it was the first and last line of defence against the most infectious and hereditary diseases that threatened their lives (Madamombe, 2006). Even today, some practices are claimed to go far beyond the physiological body's limits into the spiritual (Makhubele et al., 2020), so the public readily accepts them. The practices involved herbal medicines, diet, self-isolation/quarantining/social distancing and hand hygiene.

Most clinical health therapies can be traced directly or indirectly to herbs (Darko, 2009). Interestingly, herbal medicines have long been essential to Africa's indigenous healthcare system (Alegebeye et al., 2020). Most African ethnic groups, as expected, rely on plants for primary healthcare, which is scientifically supported by the fact that 89.2% of plant species have been reported to have a wide range of pharmacological properties (Maroyi, 2013a). The same author reported that in rural Zimbabwe, most people believe that herbs are the most effective treatment for most diseases compared to other therapies. According to Chigora et al. (2007), respiratory infections are common in rural areas, especially during the winter, and medicinal plants such as *Lippia javanica*, *Myrothamnus flabellifolius*, *Pellaea sp.*, *Vilx payos*, and *Coleochloa setiflora* are commonly used as part of folkloric medicine. The most commonly used of these plants was *Lippia javanica*, especially herbal tea (Kamanula et al., 2017; Maroyi, 2017). In Zimbabwe and other African countries, the same plant species has a long history of treating ailments such as influenza, bronchitis, coughs, chest pains, colds, and pneumonia, which Chanda-Kapata et al. (2020) and Menni et al. (2020) identified as other COVID-19 symptoms. Furthermore, diarrhoea is a perceived symptom of COVID-19 (Cheung et al., 2020; Villapol, 2020; Thuluvath et al., 2021), and many herbal plants are used to treat diarrhoea in Zimbabwe, including *Lannea edulis*, *Mangifera indica* L., *Carissa edulis*, *Asparagus africanus* Lam., and many others (Maroyi, 2011, 2013b). The same indigenous health practice can be used in COVID-19 management. Cough, catarrh, fever, and joint pain are other COVID-19 symptoms (Biadsee et al., 2020; Goërtz et al., 2020). Before the pandemic, African traditional healers were reported to have treated the same symptoms with concoctions of various plant parts ranging from leaves, roots, seeds, and even the entire plant (Ayima et al., 2021).

Several studies have discussed the significant potential of indigenous herbal medicine practices in providing solutions to Zimbabwe's health system (Makhubele et al., 2020; Maunganidze, 2016; Matthew et al., 2020; Chigora et al., 2007). Despite

their importance in modern medicine, indigenous herbal methods have been shrouded in secrecy for some time due to a perceived adversarial relationship between herbalists and their conventional counterparts. However, some other public health experts are sceptical; herbalists are now allowed to treat COVID-19 patients in Zimbabwe (Paudyal et al., 2022). Such doubts are common; even the *Artemisia afra* concoction, believed to relieve respiratory disease symptoms similar to COVID-19, met the same fate (Dandara et al., 2021).

African communities have diverse indigenous knowledge and nutrition practices that ensure adequate food, food quality, and food safety (Oniang'o et al., 2004). Even with the introduction of external ones, some communities continue to rely on their traditional diets (Legwaila et al., 2011). For example, several African communities have consumed indigenous fruits and leafy vegetables as part of their daily diets, especially in rural areas (Gido et al., 2017a, b). Vegetables such as *Amaranthus hybridus*, *Cleome gynandra*, *Bidens pilosa*, *Corchorus olitorius*, and *Adansonia digitata* are common on people's tables in Buhera, Zimbabwe (Chipurura, 2014). More importantly, edible weeds have also been reported to supplement traditional vegetables in some Zimbabwean rural communities (Maroyi, 2013a). In addition to ensuring food and nutrition security, edible weeds, such as *Sonchus oleraceus* L., *Cleome gynandra* L., *Bidens pilosa* L., *Amaranthus hybridus* L., and many others, also provide basic primary healthcare due to their medicinal value (Lewu & Afolayan, 2009; Stepp & Moerman, 2001; Semanya et al., 2012). Several studies have revealed the nutritional value and potential of vegetables and edible weeds to boost people's immune systems (Chipurura et al., 2011; Kwenin et al., 2011; Mibei et al., 2012; Chipurura, 2014; Onyambu et al., 2021), and if the same vegetables and fruits are incorporated into the mainstream health system, this could work in COVID-19 management (Moreb et al., 2021).

Aside from the standard diet, people in pre-colonial Africa had some methods for preserving and preparing food. Shona's dried meat and vegetables, known as *chimu-kuyu* (biltong) and *musone* (dried vegetables), are common two examples (Nyota et al., 2007; Mapara, 2009). Other indigenous preserves include (1) boiled and dried mushrooms (*hwowa*), (2) smoked fish, and (3) birds and other small animals such as mice boiled and then dried over a fire or smoked (Makanda & Matambo, 2021). This was done to ensure that the meat and vegetables were not discarded, mainly if they had been obtained in large quantities at one time. The excess would be stashed in reservoirs and utilized during times of need, especially when the vegetables are out of season. This could go a long way towards ensuring food availability and quality, even during difficult times like the COVID-19-enforced lockdowns, when people could not access public food outlets.

Indigenous health practices have an impact on the dietary needs of sick people. It is an African custom to prescribe the lifestyles of their sick relatives, particularly what foods they may and may not consume (Croucamp, 2013; Ajako, 2019). People with respiratory problems, for example, are frequently advised to drink herbal tea containing herbs such as *Lippia javanica* (lemon bush), which has been shown to reduce allergic airway inflammation (Mfengu et al., 2021), a reported symptom of COVID-19 (Hardeland & Tan, 2020). Furthermore, certain taboos exist in Africa,

including Zimbabwe, regarding what should be considered food. This is significant because some diseases have been reported to be transmitted via the fork. Food, for example, is argued to have played an important role in the COVID-19 outbreak, with early cases linked to the Huanan seafood market, where wild animal trading occurred (Wu et al., 2020).

Access to long-term food stocks and water at home was restricted during the enforced lockdowns. Because income had to be earned daily, communities' ability to comply with preventative measures like social distancing was limited. Like many other sub-Saharan African countries, Zimbabwe has an under-resourced health service, massive unemployment, and densely populated areas and experiences a shortage of essential commodities, for instance, food and water, making lockdowns challenging to comply with and implement (Mackworth-Young et al., 2021). People from different communities do not regularly meet, so most rural community setups are mostly self-sustaining, so social distance is attainable and easily practised. Stay-at-home orders could help minimize COVID-19 exposures, and they have received much support from the public. The COVID-19 patients' stay-at-home arrangement, on the other hand, necessitated a well-ventilated single room and strict adherence to health precautions such as hand cleanliness and medical masks. Despite the need for a COVID-19 patient to avoid contact with other family members (Puig-domingo et al., 2020), such a concept is less feasible in rural communities due to a lack of facilities.

7.3 Indigenous Lifestyles/Culture

7.3.1 Religion

Due to their beliefs and over-dependence on traditional medicine and supernatural interventions, many orthodox communities will find it challenging to use prescribed immunizations, including COVID-19 vaccination programmes (Manguvo & Mafuvadze, 2015). In Zimbabwe, such groups include the Johane Marange sects, who have always been at loggerheads with health officials for discouraging their members from seeking proper healthcare (Matthew et al., 2020; Manguvo & Mafuvadze, 2015). However, this severely impacts COVID-19 control, treatment, and transmission. While the government provides scientific explanations and legislative announcements, Zimbabwean chiefs and spirit mediums inform citizens that their ancestors are enraged and must be appeased (Nhamo & Chikodzi, 2021). In some instances, Zimbabwean church leaders are deceiving their congregations by claiming to have the capacity to safeguard their members from COVID-19 (Matthew et al., 2020). The Shona people of Zimbabwe, like monotheistic religions like Christianity, Judaism, and Islam, have always believed in God (Kazembe, 2009). According to Machingura (2012), being in touch with the spiritual world is crucial in one's birth, throughout one's life, at death, and after death. Among the Shona,

mashavi (wandering spirits) (Masaka & Makahamadze, 2013) and *mhondoro* (wishful spirits) are potent spirits. Although *mhondoro* and *mashavi* are essential, they are not as crucial as *vadzimu* (Masaka & Makahamadze, 2013). Thus, Shona cosmology emphasizes the importance of *vadzimu* in terms of life and death and good and bad health. However, when their families are offended, *vadzimu* either protect them or withdraws their protection (Masaka & Makahamadze, 2013). The Zimbabwean people also believe in taboos critical to disease prevention and environmental conservation (Mabvurira et al., 2021).

7.3.2 Sunbathing and Fire Warming

Though not documented, sunbathing and fire warming (*kudziya moto*) are Zimbabwean indigenous lifestyle practices. One study in Indonesia concluded that a higher duration of sunlight exposure was associated with more recovery cases from COVID-19 (Asyary & Veruswati, 2020). However, it should be noted that sunlight does not inactivate SARS-CoV-2 and, therefore, cannot prevent the infection. Equally, sunlight was reported to sustain COVID-19 patients' health conditions, which increases the chances of recovering from the disease. Generally, sunlight heightens the immune system and retards influenza's development in the human body (Miller, 2018). This is not surprising given that sunlight initiates vitamin D synthesis, boosting the immune system (Brown et al., 2018). Notably, poor exposure to sunlight has been linked to the activation of influenza (Sagripanti & Lytle, 2007), and this is more likely to be correlated to COVID-19.

Fire warming tends to increase the temperature of the surroundings and could inactivate SARS-CoV-2. However, a study from the State of Pará in Brazil showed that an increase in fire occurrences increases the number of COVID-19-related hospitalizations (Asyary & Veruswati, 2020). Additionally, the COVID-19 mortality risk was more significant in high fire exposure than in the period of low fire exposure (Henderson, 2020). Fire from firewood is associated with wood smoke that may make people more susceptible to respiratory infections, including COVID-19 (Navarro et al., 2021). Using best burn practices such as burning dry and seasoned firewood has been critical in maintaining fire and reducing smoke (Henderson, 2020). Though thermal inactivation of SARS-CoV-2 was reported, the results showed inactivation could occur in less than 30 min, 15 min, and 3 min at 56 °C, 65 °C, and 95 °C, respectively (Batéjat et al., 2021). There is, however, a shortage of information on the link between fire warming and SARS-CoV-2 inactivation.

7.3.3 Diet

Zimbabwean diets are based on traditional food crops (Fig. 7.1), including *Zea mays*, *Voandzeia subterranea*, and small grains (*Sorghum bicolor* and *Pennisetum americanum*) and vegetables (*Cucurbita pepo*, *Sesamum angustifolium*, *Cucumis metuliferus*, and *Cleome gynandra*) (Shava et al., 2009). These indigenous food sources provide necessary nutrients that play a central role in boosting the immune system, providing antiviral defences, overcoming gut microbial dysbiosis, and calming cytokine storms (Nyasha et al., 2021). This indicates that nutritional interventions in Zimbabwean culture can be considered for COVID-19 prevention and treatment. The standard diet of rural and urban Zimbabweans should contain fibres in vegetables. These diets comprise non-digestible carbohydrates such as fructooligosaccharides, inulin, xylan, and xylooligosaccharides, selectively fermented by beneficial gut microbes, often in the lower digestive tract (large intestine and colon).

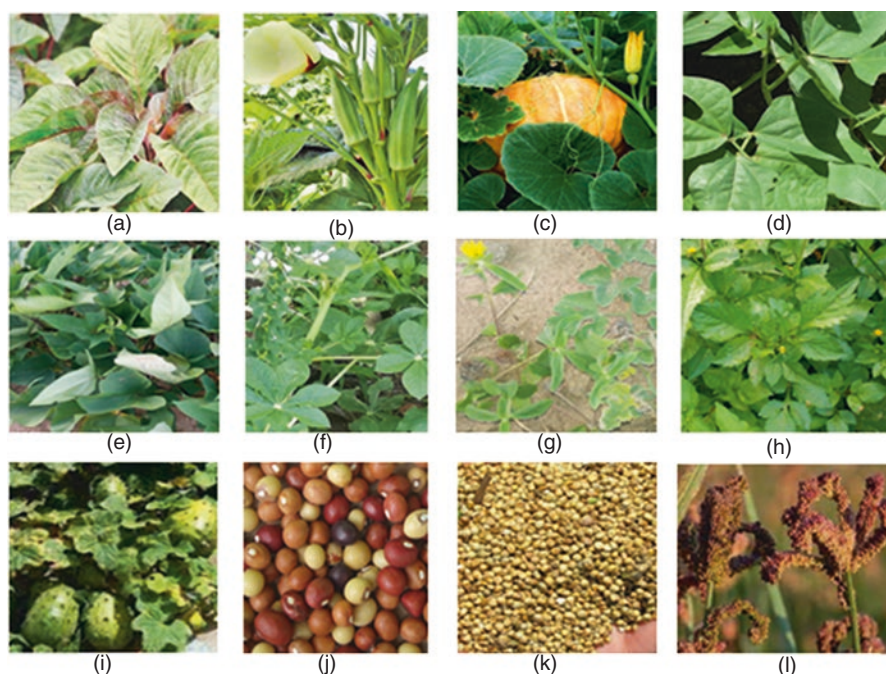


Fig. 7.1 Indigenous food crops, small grains, and vegetables commonly consumed in Zimbabwe: (a) *Amaranthus thunbergii* (pigweed leaves/mowa), (b) *Abelmoschus esculentus* (okra/derere), (c) *Cucurbita* spp. (pumpkin fruit and leaves/manhanga), (d) *Vigna unguiculata* (cowpea leaves/mun-yemba), (e) *Ipomoea batatas* (sweetpotato leaves and root fruit/mbambaira), (f) *Cleome gynandra* (spider wisp leaves/nyevhe), (g) *Dicerocaryum zanguebarium* (ruredzo), (h) *Bidens pilosa* (black-jack leaves/mutsine), (i) *Cucumis metuliferus* (African horned cucumber/magaka), (j) *Voandzeia subterranea* (Bambara groundnuts/nyimo), (k) *Pennisetum americanum* (pearl millet), (l) *Eleusine coracana* (finger millet/rapoko). (Source: Authors)

It is now well accepted that the function and composition of the gut microbiota play a role in maintaining host gut health. Modulating the gut microbiota is one of the most significant advances in human health since disturbed or dysbiotic microbiota is linked to various human disorders.

Scientists are now working on medicines or nutritional therapy to heal or repair such ailments (Markowiak & Śliżewska, 2017). Non-antibiotic supplement food additives and fibre-containing diets are required for illness management since they are safe (little to no side effects), ecologically friendly, cost-effective, and natural (Carlson et al., 2018; Markowiak & Śliżewska, 2017). Diet is significant for human fitness and well-being. As a result, the spread of non-antibiotic and environmentally-friendly dietary additives is critical in producing and managing diseases like COVID-19 (Hu et al., 2021; Olaimat et al., 2020). Because of their potential health advantages, prebiotics, probiotics, synbiotics, and plant extracts have sparked much interest (Carlson et al., 2018). Plant metabolites and bioactive compounds have been linked to various medicinal applications. However, the link between prebiotic/probiotic/disease/lifestyle is complicated. A lack of awareness of all these interconnected components may limit the effectiveness of ecological and biological strategies for improving diets and preventing disease outbreaks in humans. Lifestyle has also had a significant role in COVID-19 fatalities in Zimbabwe since most cases have been reported in urban areas. These COVID-19 deaths can be linked to the sorts of foods consumed in these two settings. The rural diet is often higher in fibre, and they consume much sour milk because it is cheaper in rural areas than in urban areas, which contains probiotics from fermented milk and lactic acid, which will boost their healthy gut bacteria. Because antibiotics are scarce in rural locations, individuals often employ herbal treatments for non-serious infections. However, most individuals overuse antibiotics in metropolitan areas, destroying vulnerable beneficial gut flora and dysbiosis. Diet is still one of the most important human and animal health management aspects (Carlson et al., 2018; Hu et al., 2021; Markowiak & Śliżewska, 2017; Olaimat et al., 2020). Healthy diets should be promoted nationwide, and the market for new healthy food items in Zimbabwe should be expanded. More probiotics and prebiotics should be added to yoghurt, cheese, drinks, and fermented milk products. To boost human gut microbiota and immune system, there should be a greater emphasis on eating a nutritious diet rich in fibre, onions, garlic, and ginger (Fig. 7.1). Foods like onions, bananas, garlic, and ginger are high in vitamins and non-digestible carbohydrates (prebiotics), which can be selectively fermented by beneficial gut bacteria, enhancing the human gut immune system and the overall immune system. Because the gut is frequently the site of many illnesses, preserving gut health through dietary feed additives necessitates considerable scientific commitment. Future study is required to compare the gut microbiomes of rural and urban people and examine how various herbal preparations affect the gut microbiota.

7.3.4 *Handshaking*

When mourners meet at a funeral, they are supposed to shake hands; a custom is known as *kubata maoko* in Shona (most Zimbabweans' native language) (Musarandega & Chitongo, 2020). Handshakes are essential expressions of consolation in most, if not all, Zimbabwean rural societies (Dzinamarira & Musuka, 2021; Matthew et al., 2020). Because it is unsocial not to shake hands with the bereaved, traditional authorities in rural regions lack the inclination to implement COVID-19 mourner restrictions, making funerals COVID-19 hotspots (Matthew et al., 2020). With the COVID-19 pandemic in Zimbabwean settings, communities must be well-educated to understand how this pandemic is transmitted through handshakes.

Despite its simplicity, promoting regular handwashing remains a big challenge, especially in resource-constrained setups (Bulled et al., 2017). Glassman et al. (2020) and Adegbeye (2020) confirm fears that social distancing and hand hygiene initiatives may not be feasible in sub-Saharan African countries, particularly in lower-income societies where water is mostly available at public boreholes and income is earned informally daily, necessitating daily food purchases. Indigenous knowledge systems have mechanisms for dealing with loss. According to Sanni (2016), looking at most African countries, one can see that the social imaginaries shape whom we remain a problem in every society. Handshakes are meaningful gestures of consolation in most, if not all, Zimbabwean rural societies. In African cultures, the process of consoling is known as *kubata maoko*, which translates to "handshakes". Funerals are now COVID-19 hotspots (Matthew et al., 2020) because it is unsocial not to handshake the bereaved. Based on WHO guidelines, traditional practices and belief systems are incompatible with the COVID-19 regulations.

7.3.5 *Social Gatherings*

Though the economic crisis has been reported to significantly contribute to poor adherence to COVID-19 control interventions in Zimbabwe, cultural tendencies should not be ignored. Cultural beliefs and values are central to the success or failure of the country's efforts to contain the spread of COVID-19. For instance, in Zimbabwe, funerals can rapidly spread COVID-19 (CDC, 2020). In Zimbabwe, traditional funerals, and burial rituals, especially in rural settings, are associated with large numbers of family and friends attending to pay their last respects. Generally, most of them in Zimbabwe are buried in their rural homes, even if they die in another country (Ndlovu, 2010). Faced with this phenomenon, bodies and mourners are transported across the country, increasing the chances of SARS-CoV-2 transmission (Dzinamarira & Musuka, 2021). At some stage, the Zimbabwean government banned the transportation of corpses across provinces to stem the transmission of COVID-19 (Dzinamarira & Musuka, 2021). However, after a public outcry,

the decision was reversed within a few days, indicating the conflict between culture and Zimbabwean health systems. According to some studies, COVID-19 requirements are not being followed, with (1) funeral attendants exceeding the permissible numbers, (2) lack of social distance, and (3) insufficient sanitization procedures for mourners (XinhuaNet, 2021; Dzinamarira & Musuka, 2021). Body-viewing is critical in Zimbabwean culture in that that is where close relatives confirm if they are about to bury the correct person and see the corpse for the last time (Saidi, 2017). Although it is a cultural norm, it can act as COVID-19 peddlers (Matthew et al., 2020).

7.4 Analysis of Transformation of Health Systems

Cultural practices and beliefs, including indigenous health practices and lifestyles, can challenge “modern medicine” or practices that transform Zimbabwe’s or Africa’s health systems. The severity of COVID-19 is leaving no stone unturned. This chapter examines and investigates indigenous health practices and lifestyles in African communities, particularly in rural Zimbabwe, to determine how they influence modern health systems. Evidence from the communities is critical for understanding the potential positive impacts on health reforms in the face of the pandemic (Table 7.1). This can be used to develop policies that advocate for holistic approaches, which can transform health systems and manage COVID-19 and other pandemics in the future.

7.4.1 Hand Hygiene

Hand hygiene, in general, helps to prevent the spread of various diseases, including COVID-19. In Zimbabwe, handwashing is cultural, with people traditionally washing hands before and after eating. During the COVID-19 pandemic, handwashing with soap and the use of hand sanitizers to clean hands have increased dramatically (Marumure et al., 2022). Cleaning beneath fingernails, scrubbing the fingertips, using soap, and wiping hands on garments or a clean towel are some of the washing practices utilized in Zimbabwe (Friedrich et al., 2017). The health system in Zimbabwe is expected to be positively transformed if cultural hand hygiene practices are incorporated into the mainstream. These practices, however, should be strengthened and implemented in all rural and urban settings. In general, hand hygiene should be supported by the availability of clean and safe water, soaps, and other readily available natural antimicrobials.

Table 7.1 The impact of indigenous health practices and lifestyles on health system transformation

Aspect	Classification	Comments on the transformation of health systems	References
Herbal remedies	Indigenous health knowledge	Herbal remedies can be used to manage COVID-19, thereby benefiting healthcare systems	Kamanula et al. (2017), Maroyi (2017), Madamombe (2006), Chigora et al. (2007), Makhubele et al. (2020), Maunganidze (2016), Matthew et al. (2020)
Diet	Indigenous lifestyle	Ensuring food availability and quality, thereby guarding against malnutrition	Shava et al. (2009), Gido et al. (2017a, b), Nyota et al. (2007), Mapara (2009)
	Indigenous health practice	Indigenous food sources boost the immune system	Nyasha et al. (2021), Semenya et al. (2012), Chipurura et al. (2011), Kwenin et al. (2011), Mibei et al. (2012), Chipurura (2014), Onyambu et al. (2021)
Self-isolation/ quarantining/ social distancing	Indigenous health practice	Difficult to implement due to the shortage of houses; hence, the health systems face challenges in managing the spread of diseases in remote areas	Puig-domingo et al. (2020)
Hand hygiene	Indigenous lifestyle	The traditional lifestyle practices and belief systems on hand hygiene are incompatible with the COVID-19 regulations	Sanni (2016), Matthew et al. (2020)
Religion	Indigenous lifestyle	Some religions discourage their members from seeking formal healthcare, as this negatively affects the health system on management of diseases Some taboos are critical in disease prevention and environmental conservation	Matthew et al. (2020), Manguvo and Mafuvadze (2015), Mabvurira et al. (2021)
Sunbathing and fire warming	Lifestyle and indigenous health practice	This sustains the health conditions for some diseases such as of COVID-19 as this increases chances of recovering	Miller (2018), Sagripanti and Lytle (2007)
Social gathering	Lifestyle	Cultural norm which results in large numbers of family and friends gathering can act as infection peddlers thus compromising health system	Dzinamarira and Musuka (2021), Ndlovu (2010), Musarandega and Chitongo (2020), XinhuaNet (2021)

Source: Authors' compilation

7.4.2 *Herbal Remedies*

Many rural populations in Zimbabwe rely on herbal treatments to cure various ailments, including diarrhoea and wounds (Maroyi, 2011). Traditional healers and herbalists play a significant role in treating the most severe and contagious diseases that affect their communities (Dhewa, 2008). Many impoverished individuals in Zimbabwe cannot pay healthcare expenses and rely on herbalists or prophets. Although healers work outside of conventional healthcare institutions, disregarding them can have disastrous consequences (Madamombe, 2006). For the sake of the patient's safety, healers and medical physicians must work together. Herbs and antibiotic drugs' dose and synergistic effects should be established and scientifically proven. Traditional healers must be integrated into the health system since many community people seek their aid and understand some of the symptoms of lethal diseases such as COVID-19 to avoid disease transmission. Traditionally, healers used a single razor to treat several patients, but due to increasing understanding of disease transmission, it is now unlawful in Zimbabwe to use a single razor to stop the spread of HIV. Because traditional healers are governed by the Zimbabwe National Traditional Healers' Association, the government must legislate collaboration between healers and the medical profession to administer herbs in the correct dosages and provide scientific evidence for the efficacy and toxicity of the herbs. Healers must be active participants in the health system for Zimbabwe's public health goals to be accomplished. It is not a secret that indigenous medical knowledge is the only capital for most poor rural communities without health facilities. It is necessary to document ethnomedicinal plants having therapeutic benefits scientifically. If herbal medicines have scientific backing, efforts should be made to make them more accessible, easily stored, and precisely administered in hospitals/clinics across the country to reduce antibiotic consumption and overuse. Antibiotics have increased the burden of disease emergence and treatment. Improving the health system by integrating traditional healers, ensuring equitable access to cost-effective therapies and innovation, and promoting health knowledge and healthcare information systems are all required for the large-scale modernization of Zimbabwe's health systems.

Furthermore, incorporating herbal remedies into Zimbabwean healthcare systems is presumably critical to positively transforming healthcare delivery. It is, however, essential to conduct scientific analyses and standardize, label, and incorporate these remedies into our diets. In addition, herbal extracts traditionally used to treat respiratory ailments can also be used to develop teas or formulations that can be taken on a regular or emergency basis. Such teas or formulations would be well-received because they would be therapeutic and profitable.

7.4.3 *Diet*

Diet is still one of the most important human and animal health management aspects. Healthy diets should be promoted nationwide, and the market for new healthy food items in Zimbabwe should be expanded. More probiotics and prebiotics should be added to yoghurt, cheese, drinks, and fermented milk products. In order to boost human gut microbiota and immune system, there should be a greater emphasis on eating a nutritious diet rich in fibre, onions, garlic, and ginger. As part of disease control and treatment interventions, traditional Zimbabwean vegetables, fermented foods, and foods derived from small grains should be included in the main diets. The incorporation of these foods into the country's main diets has a significant impact on the country's health systems. Though it is believed that these traditional foods transform Zimbabwean health systems, more research into nutrient content, the bioavailability of nutrients, and modern processing techniques are needed.

7.4.4 *Indigenous Lifestyles/Culture*

Zimbabwe's beliefs, over-reliance on traditional medicine, and supernatural interventions may or may not transform the healthcare system. If religious beliefs, such as those held by the Johane Marange sects (Matthew et al., 2020; Manguvo & Mafuvadze, 2015), are incompatible with vaccination, herd immunity is rendered impossible. This, however, has severe consequences for pathogen mutations, variant development, disease treatment, and transmission. Furthermore, some indigenous cultures may harm health systems, such as the involvement of Zimbabwean chiefs and spirit mediums in advocating for ancestors' enagement while ignoring and dismissing disease control interventions. Furthermore, the negative health system is evident in instances where Zimbabwean church leaders claim to protect their members from COVID-19 and other infectious diseases (Matthew et al., 2020). However, if church leaders, spirit mediums, and chiefs are consulted and educated on health-related issues, they may become critical in positively transforming healthcare systems. The taboos that Zimbabweans believe (Mabvurira et al., 2021) are critical in positively transforming health systems if adequately implemented in the health system mainstream.

7.5 **Conclusion**

This chapter sought to undertake a critical examination of Zimbabwe's indigenous health practices and lifestyles to see if they could aid in the fight against the spread of the COVID-19 disease. To that end, cultural characteristics must be identified and included in national COVID-19 measures, even if only as an afterthought, to

establish a successful pandemic control strategy. When hospital and African indigenous techniques are fully integrated into a fusion that incorporates practical elements, they can effectively combat COVID-19 spread. Traditionalists who advocate for African indigenous practices and lifestyles only in COVID-19 management may be interpreted as missing the winds of change. In the past, Africans had their practices for dealing with disasters such as pandemic illnesses, and they worked for them, but doing the same for COVID-19 can be disastrous. Advocating for the same practices alone as a solution for COVID-19 is not justified for the following reasons: (1) the severity of COVID-19 does not allow for such experimentation; (2) even in African countries that advocated for COVID-19 management, cases and casualties are high; and (3) some beliefs, cultures, and practices can contribute to the spread of COVID-19. On the other hand, while WHO interventions have been lauded for significantly reducing COVID-19 spread and fatalities, many see success in eradicating COVID-19 or developing a cure soon as a mirage. As a result, Zimbabwe and other countries in the sub-Saharan region are encouraged to move beyond pro- and anti-nonnative approaches and propose a health reform based on indigenous practices and lifestyles that can work alone or can be practically and pragmatically blended with WHO approaches to combat the spread of COVID-19.

7.6 Future Perspectives and Research Directions

The indigenous health practices and lifestyles might have a role to play in the management of the COVID-19 pandemic. The introduction or strengthening of some of these indigenous practices might lead to the transformation of the health system in Zimbabwe and other African countries. The general public, especially in rural areas and urban townships, should receive more health education to understand COVID-19 transmission and management better. There should be more coordinated interventions between public health experts and traditional leaders to bridge the gap between indigenous cultural practices and lifestyles and the modern health management systems. Traditional leaders should be immediately educated and resourced to actively participate in the fight against COVID-19 in their respective communities. These leaders are at the centre of the community, so mobilization, debunking pandemic falsehoods, and negotiating concessions on incompatible measures with local cultural norms would be prioritized. Research on indigenous practices and lifestyles to see if they can prevent the spread of the COVID-19 pandemic should be supported. More research should be carried out on the indigenous plants used by the locals as vegetables or food and herbs used for their primary healthcare. The vegetables might be capable of boosting the immune systems, which is very important in managing COVID-19. The phytochemical analysis of the plants used as herbs could lead to new natural drugs that can address the therapeutic need, especially in the current search for a COVID-19 effective cure. Plant extracts' antimicrobial efficacy should be established for handwashing in rural areas. In order to eliminate in-person gatherings, communities should be encouraged to embrace and adopt technologies that

decongest the people, for example, in online meetings for wedding ceremonies and other social events. Furthermore, in Zimbabwe, traditional healers or diviners were astute enough to prescribe and advise on traditional treatments for epidemic diseases based on Afro-indigenous practices and lifestyles. Such practices are culturally based and are implemented considering the effects on Ubuntu. Studies and further explanations of such practices should be considered at the national level in order for them to be incorporated into the health system.

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