COMMENTARY

Use of Indigenous Informed Epistemologies can inform Intervention Models to Fight COVID-19 in Africa

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The coronavirus disease 2019 (COVID-19) has put the world in unprecedented health and economic crisis threatening human existence and livelihoods. The pandemic has brought the world to a standstill and, has infected over 15 million and killed over 620 thousand people globally[1]. The socioeconomic impact of the pandemic is also expected to be higher. Reports indicate that in the USA alone, over 38 million people have lost their jobs due to the pandemic. Reports from Europe and other parts of the world also depict a grim picture. The pandemic has affected other regions such as Australasia where significant loss of jobs and livelihoods, and changes in societal resilience manifesting in increased mental health problems and domestic violence were reported.

Whilst the pandemic does not seem to discriminate, there is evidence that people of African descent are disproportionately affected in the USA. Recent data indicate that African Americans are dying from COVID-19 at three times the rate of White people[2]. Professor David Williams of Harvard School of Public Health relates the disparities to the apparent social disadvantage of African Americans in the country saying, *"What we've known for a long time, Black people in the United States and other people of colour have a chronic disease at younger ages and are more likely to have more than one condition.*

So, they are just physiologically more compromised and therefore more vulnerable to the pandemic." While co-morbidities are a factor, African Americans are disadvantaged in terms of access to services and treatment for disease. As Professor David added, "*Across virtually every therapeutic intervention from the simplest medical procedures to the most complex, blacks and other minorities received poorer quality care and less intensive care than Whites.*" Leaving no doubt about systemic neglect of the health of black Americans, Dr. Uche Blackstock, a New York-based physician on the frontlines, says, "*This pandemic will likely magnify and further reinforce racialized health inequities, which have been both persistent and profound over the last five decades, and Black Americans have experienced the worst health outcomes of any racial group*"[3]. Importantly, the rapidly expanding second wave of the disease is disproportionately affecting Africans in Melbourne, Australia - indicating significant implications for Africans in the diaspora more broadly.

Whilst coronavirus has laid bare the health disparities in the USA, in Africa, and internationally, the health and socioeconomic impact of the pandemic is yet to be understood fully. However, given the high burden of disease including HIV and the higher level of poverty and

social disadvantage across Africa, one can expect that the overall effect of the pandemic will be wide-ranging. It should also be noted that measures that worked in Europe and other parts of the world may not necessarily work in Africa. African countries do not have all the resources to care for their communities and protect their livelihoods. Thus, it is imperative to look for innovative solutions that are informed by other populations that had similar experiences to Africa. This is where Indigenous Australian epistemologies and methodologies can be useful.

In Australia, there have been efforts to incorporate Australian Indigenous epistemologies and methodologies to the Cancer Health Literacy Program (Can-HeLP) for African Australian women[4]. Can-HeLP intends to draw upon Indigenous Australian epistemologies and methodologies to explore the factors and dynamics that affect cancer health literacy and access to information and services among African women in Australia to reduce the impact of breast and cervical cancer[5]. Inherent to indigenous epistemology is a participatory research framework which can engage African women, communities and organisations to understand and apply their perspectives and experiences to extend understanding of the topic under investigation[6,7].

Unlike Western paradigms for research and health care, indigenous epistemology allowed the Can-HeLP researchers to centre indigenous women's knowledges, informed by the feminist methodological paradigm[7]. In doing so, indigenous epistemology recognises that individual experiences will differ due to intersecting oppressions produced under social, political, historical and material conditions that people share consciously or unconsciously[6,7]. These conditions and their interactions are also complicated by people's respective cultural differences, compliance and resistance to Western norms[6,7]. This is of significance as Western models of health care often engage with minority (women's) health using replicated models with minor adjustments for language or location. In the context of Can-HeLP, this was not sufficient to increasing minority women's cancer awareness or engagement in services[8]. Indigenous epistemology

can therefore help to explore, identify and understand the contexts of COVID-19 in Africa including opportunities for screening, literacy and protective behaviours. It also supports the development of an evidence base on the role of diverse Africans (including women and youth) as agents of their own health[7,9].

Studies have shown that the use of Australian indigenous epistemologies can serve as potential strategies to assuage fear and increase screening uptake. These included increased culturally appropriate education, promotion and the provision of care delivered by Aboriginal women[6]. We contend that the knowledge obtained from such research is equally applicable to policies and programs in Africa that are designed to flatten the curve of the current and other pandemics by instituting cultural governance and community empowerment as a basis for policy and practice. Indigenous epistemologies and methodologies can create opportunities to build the capacity of indigenous people in Africa, to participate in the fight against COVID-19 and other pandemics along with scientists, technocrats, and politicians as equal partners. It will also support the development of African communities' role as agents of their own health. The incorporation of indigenous epistemologies and methodologies can create decolonised frameworks and structures that explore innovative local solutions for future health interventions. Therefore, we suggest that indigenous communities across Africa be considered as knowledge partners who contribute to the solution by sharing their cultural ways of doing, knowing and being rather than passive participants who needed to be protected. This can go a long way in informing potential intervention models that are effective and culturally appropriate. Such outcomes would also lead to culturally safe, appropriate, and culturally competent programs by Africans and for Africans.

References

1. Johns Hopkins University. Coronavirus COVID-19 Global Cases by the Center for Systems Science and Engineering Baltimore, US: Johns Hopkins University & Medicine Coronavirus Resource Center, 2020. Retrieved from: https://coronavirus.jhu.edu/map.html.

2. Pilkington E. Black Americans dying of Covid-19 at three times the rate of white people. The Guardian 2020 May 21. Retrieved from https://www.theguardian.com/world/2020/may/20/black-americans-death-rate-covid-19-coronavirus

3. Fitzpatrick L. Coronavirus has exposed the world to health disparities in black America: So, what now? Forbes 2020 April 8. Retrieved from https://www.forbes.com/sites/lisafitzpatrick/2020/04/08/coronavirus-has-exposed-the-world-to-health-disparities-in-black-america-so-what-now/#1de433ad21ca

4. Mwanri L, Gesesew HA, Hiruy K, Udah H, Lee V, Kwedza R and Dune T. Health literacy and breast and cervical cancer among African women: A systematic review protocol of mixed methods. International Journal of Environmental Research and Public Health 2020; 17(9), 315

5. Moreton-Robinson A and Walter M. Indigenous methodologies in social research. Social Research Methods 2020; 1-18.

6. Moreton-Robinson A. Towards an Australian Indigenous women's standpoint theory: A methodological tool. Australian Feminist Studies 2013;28(78):331-47.

7. Moreton-Robinson A and Walter M. Indigenous Methodologies in Social Research (Online Chapter 22). 2009

8. Shahid S, Durey A, Bessarab D, Aoun MS and Thompson SC. Identifying barriers and improving communication between cancer service providers and Aboriginal patients and their families: the perspective of service providers. BMC Health Services Research 2013;13(1):460.

9. Ogunsiji OO, Kwok C and Fan LC. Breast cancer screening practices of African migrant women in Australia: a descriptive cross-sectional study. BMC women's health 2017;17(1):32.