

The Dialectics of Indigenous Knowledge in Mitigating the Predominant Mechanism of Health Financing in Nigeria

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doi: <https://doi.org/10.37745/ijccs.2014/vol11n12637>

Published September 27 2023

Citation: Yildam F.J., Fabong H.A. M. and Igboechesi G.P. (2023) The Dialectics of Indigenous Knowledge in Mitigating the Predominant Mechanism of Health Financing in Nigeria, *International Journal of Community and Cooperative Studies*, Vol.11 No.1, pp.26-37

ABSTRACT: *With the current realities of the world economy, Nigeria as a Low- and Middle-income Country (LMIC) continues to face challenges in attaining the Universal health coverage (UHC). This article explores ways at which this can be attained using unique, home-grown-modified methods through the integration of the perceptions of communities on Indigenous Knowledge (IK) and how their concepts can impact the development of Healthcare and health financing in Nigeria. To develop new approaches in mitigating the predominant mechanism of Health Financing in Nigeria, using IK. Detailed Document Review Process (DDRP) was carried out on findings from a segment of the-mixed method study data of a Baseline Survey (BS) report of 2021 that has to do with predominant mechanism of Health Financing in Nigeria. Other related literatures were used to present researchers' perspectives. The BS report showed that predominant mechanism of health financing in Nigeria is Out-Of-Pocket (OOP) spending. It also outlined the immediate challenges of OOP as experienced by the respondents. The paper offers modified Health Insurance models through which the integration of IK may be used to mitigate OOP in financing healthcare in Nigeria.*

KEYWORDS: Indigenous Knowledge (IK), Health Financing, Out-Of-Pocket spending (OOP), Information Professionals, Health Insurance (HI).

INTRODUCTION

Globally, Health Financing (HF) is one of the major building blocks of health effective systems, especially when its level of functionality has direct impact on the overall functionality of the health system in view. Where you find persistent laxity in the functionality of any country's health

system, it serves as the major weakness of the health financing building block. Basic features of such weak system include low public spending, very high levels of out-of-pocket (OOP) spending and high incidence of catastrophic health spending and impoverishment of citizens due to spending on healthcare. The Nigeria health system has performed woefully against all vital health indices, trailing behind many African countries despite its enormous potentials. The reason for this is mainly due to the financial risk Nigerians face in accessing healthcare (Odunyemi, 2021). In the case of OOP, Nigeria is one of the highest in the world. In understanding the current status of health financing in Nigeria and how best to approach it, it is important to provide practical evidence-based guidance if there will be tangible improvement in the financing of healthcare services in the country. In achieving this, there is the need to approach the missing gap in the effective activation of Indigenous knowledge (IK) in advancing better HF in Nigeria. The holistic understanding of the IK and its operation in Nigeria is a key factor that is naturally in place to support the implementation of different financing mechanisms in different contexts in Nigeria.

IK has been often described by some scholars as antagonistic to other knowledge systems, above all Western scientific knowledge, or by looking at assumed distinctive features of IK. They perceive IK as backward and antidevelopment, some even posit that it is ambivalent nature, thereby being problematic in finding coherence for knowledge systems in the knowledge production frontier. This approach has been also criticized by some other scholars as problematic and in fact counterproductive (Marobela, et'al, 2012). One basic advantage you cannot take out of IK is that it provides an opportunity for valorizing grassroots peoples' knowledge, which helps in the advocacy of a context-specific approach to addressing any developmental problem. This is why Indigenous knowledge (IK) has become a popular subject in the last decade. It has been recognized by global institutions as a valuable source for scientific innovation and significant in promoting development for poorer communities (Marobela, Okatch, Katongo, Ngwenya and Monyatsi, 2012). Going by the unique nature of Nigeria, putting into cognizance the majority of its people and their levels of exposure/civility, education and literacy, as it is clearly stated by National Bureau of Statistics (NBS) that approximately 70 per cent of Nigeria's populations live in rural areas, yet these areas are home to 80 per cent of poor people (Izuaka, 2022). Activating IK will be valuable in appropriately shaping Nigeria's policy and program choices that can improve health financing and accelerate the achievement of Universal Health Coverage (UHC) in the country.

METHODS

This study used archival study analysis based on a Baseline survey (BS) on the disease burden, universal health coverage, health-seeking behavior, knowledge attitude and perception of Plateau Residents on Social Health Insurance Submitted to Plateau State Contributory Healthcare Management Agency PLASHEMA, November 2021. The BS was a mixed method study; structured electronic questionnaires and Focus Group Discussion (FGD). The use of multiple data collection methods provided complemented and validation of data. The study was undertaken in 17 local governments of Plateau State, Nigeria on 3981 household head ranging between 16 and

20 people between 26 – 30 years of age in the. Review of relevant literatures to justify the position of the research findings on OOP.

Data collection an Analysis

Data were collected through review of BS documents, focusing more on the findings on Mechanism of Health Financing, precisely on OOP. Detailed Document Review Process (DDRP) review was done to identify the current predominant mechanism of Health Financing in Nigeria. A document review template was used to guide the review process. Quantitative data analysis was conducted using a combination of MS Excel and SPSS applications. Qualitative data was analyzed using thematic frameworks based on NVIVO and later own transcribed to Excel. Data was collected, analyzed and interpreted.

Socio-demographics

Respondents' socio-demographics statuses of the baseline survey show that it could be related to different levels of Health Financing mechanism, precisely on OOP. The current study examined how demographics like gender, age, marital status, education level, religion, and employment status contributes to their Health Financing capacity.

Conceptual framework

The framework for conceptualization is drawn from the United Nations Environment Programme (UNEP) perspective on IK and Langill and Landon article on Indigenous knowledge. The position is to show that IK can affect the institutional legacies shaping the nature and environment of the system in which health financing mechanisms unfold.

The research has the following objectives:

- i. enumerate on the state of Health Financing in Nigeria
- ii. ascertain the importance of IK on Health care system in Nigeria
- iii. justify the role of Ik in mitigating the predominant mechanism of Health Financing in Nigeria

Indigenous Knowledge

IK is a living and practical application central to people's livelihoods, culture and identity which makes it particular to researchers and experts when developing important interventions and programs in relation to development. It makes such interventions and programmes more effective in addressing poverty and vulnerability of communities. Over the years, global institutions and the academia have presented various definitions of indigenous knowledge (IK). For example, the United Nations Environment Programme (UNEP) defines IK as:

“the knowledge that an indigenous (local) community accumulates over generations of living in a particular environment. This definition encompasses all forms of knowledge—technologies, know-how skills, practices and beliefs that enable the community to achieve stable livelihoods in their environment” (UNEP, n.d.).

Marobela, et'al (2012) defined IK as “a cumulative body of knowledge generated and evolved over time, representing generations of creative thoughts and actions within individual societies in an ecosystem of continuous residence with an effort of coping with ever changing agro-ecological and socio-economic environment.” For Johnson, 1992 as cited by Langill and Landon (1998) Indigenous knowledge (IK) can be defined as "A body of knowledge built up by a group of people through generations of living in close contact with nature." Broadly speaking, Indigenous knowledge (IK) is the knowledge used by local people to make a living in a particular local environment. This means that such knowledge evolves only in that local environment, so that it is specifically adapted to the requirements of local people and conditions. Interestingly, IK is also creative and experimental, constantly incorporating outside influences and inside innovations to meet new conditions as times and situations change. It is therefore an ignorant mistake to think or assert that IK is backward, old fashioned, static or unchanging because everything eventually changes.

In the world view, many Indigenous communities are working to strengthen cultural healing practices that were marred through colonization and oppressive government policies. Emerging evidence suggests that Indigenous-led health service partnerships improve holistic (inclusive of mind, body, emotion and spirit) health outcomes for Indigenous Peoples, as well as access to care, prevention uptake and adherence to care plans. Indigenous-led health care partnerships provide innovative models of inter-professional collaboration, be it in community based healing lodges, remote clinics or urban hospitals (Allen., Hatala., Ijaz., Courchene and Bushie, 2020). Specific examples of how IK is being used to mitigate out-of-pocket health financing can be seen in countries like India, where a community-based healthcare program is using IK to provide affordable and accessible healthcare services to rural communities. The program includes traditional healing practices, as well as modern medical services. The program has been shown to be effective in reducing out-of-pocket health financing and improving the health outcomes of rural communities. In Australia, an Aboriginal health service is using IK to develop culturally appropriate programs for the prevention and treatment of chronic diseases. The programs include education on traditional foods and lifestyle practices, as well as access to traditional herbal remedies. The programs have been shown to be effective in improving the out-of-pocket health financing and health outcomes of Aboriginal people. Also in South Africa, a traditional healing program is being used to help people with diabetes to manage their condition. The program includes education on traditional foods and lifestyle practices, as well as access to traditional herbal remedies as well as modern medical services. The program has been shown to be effective in reducing blood sugar levels and improving overall health outcomes and out-of-pocket health financing in South Africa. Indigenous Peoples in Canada continue to benefit from regaining access

to and strengthening traditional cultural ways of life, including health and healing practices (Allen., Hatala., Ijaz., Courchene and Bushie, 2020). These are just a few unique examples of how IK can be used to mitigate out-of-pocket health financing. It also goes to show that IK has vast potential to improve the health and well-being of people around the world, while also reducing the financial burden of healthcare costs. Perhaps, these and other obvious undeniable facts spurred the World Health Organization (WHO) to convene their first ever high level Traditional Medicine Global Summit in August 2023 in Gandhinagar, Gujarat, India. It was co-hosted by the Government of India. The Summit explored the role of traditional, complementary, and integrative medicine in addressing pressing health challenges and driving progress in global health and sustainable development. Scientists, practitioners of traditional medicine, health workers and members of the civil society organizations also took part. In pursuit of better healthcare for all, the Summit will explore ways to scale up scientific advances and realize the potential of evidence-based knowledge in the use of traditional medicine for people's health and well-being around the world. Scientists and other experts led technical discussions on research, evidence and learning; policy, data and regulation; innovation and digital health; and biodiversity, equity and Indigenous knowledge (IK) (WHO, 2023).

Predominant Mechanism of Health Financing: out-of-pocket (OOP) Payment

The prevailing poor health indices and extreme poverty in the sub-Sahara African region, especially in Nigeria, have been attributed to inequality in access and financial protection in healthcare utilization (Odunyemi, 2021). After two decades, Nigeria still has one of the worst health indices in Africa because it still one of the four countries with the lowest life expectancies in the world, after the Central African Republic, Lesotho, and Chad, based on the latest data from the United Nations as opined by Nwachukwu (2021). The root of early deaths in Nigeria is a healthcare system that has virtually collapsed due to the lack of investment and commitment. As at 2021, World Health Organization survey ranks Nigeria's healthcare system as the fourth worst in the world (Nwachukwu, 2021). It struggles with looming poverty and unemployment, which adversely impact public health. The country designates only 3.38% of its GDP to healthcare (Ijaz, 2023). Moreover, the country has one of the highest number of extremely poor people worldwide after overtaking India only recently with an estimated population of 88.4 million people living in extreme poverty as at 2022 (Sasu, 2023). Though these indices were derived from multiple factors, one of the most significant constant variable is the issue of poor equitable access and exposure to financial hardship arising from catastrophic healthcare costs. Despite the establishment of National Health Insurance Scheme (NHIS) in 1999, officially launched in 2005, to provide financial risk protection for citizens and reduce the high burden of out-of-pocket spending (OOPs) on individuals and households, evidence shows that NHIS now National Health Insurance Authority (NHIA), has been unable to achieve intended population coverage with financial risk protection based on the figures outlined above. Out-of-pocket expenditures still persists, it constitutes nearly 90% of the total private health spending (Onwujekwe, Ezumah, Mbachu, Obi, Ichoku, Uzochukwu and Wang, 2019), placing a significant burden on households, and about 70% of all health spending is financed directly by households without insurance (Odunyemi, 2021).

Based on the Baseline survey on the disease burden, universal health coverage, health seeking behavior, knowledge attitude and perception of Plateau Residents on Social Health Insurance Submitted to Plateau State Contributory Healthcare Management Agency (PLASCHEMA), the most predominant means of payment for healthcare services amongst the respondents was OOP. Only a few of the respondents (3%) had a prepaid plan for healthcare. Amongst those with a prepaid health plan, a majority were enrolled under the NHIS. Only a few were beneficiaries of the State Social Health Insurance Scheme (SSHIS). An infinitesimal proportion of the respondents own private health plans.

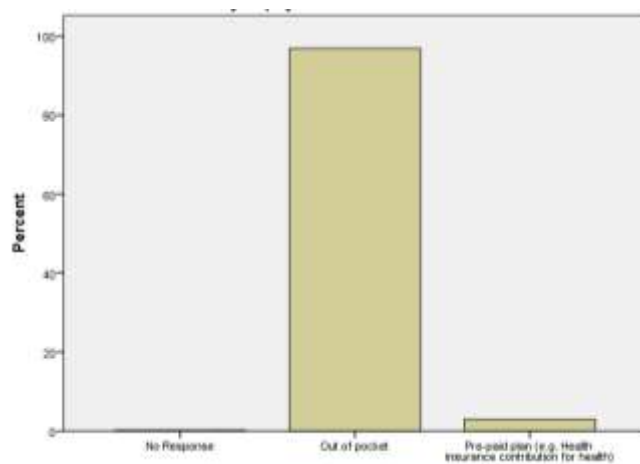


Table 1: predominant mechanism of health financing

In addition, respondents' reports on qualitative analysis stated that when it has to do with income and health spending, the major means of paying health care services is out of pocket payment in which relatively all of them consented to. A very few out of them highlighted to have benefitted from charity and free service. The problem faced with OOP payment is lack of funds to afford payment due to financial hardship suffered by the populace as shown by the poverty indices of Nigeria. This conforms to the fact that in Africa, Nigeria is one of the worst states concerning healthcare; her Health indicators are some of the worst in Africa (USAID, n.d). One of the main reasons is that about 70% of its population lives in the rural areas and they cannot afford good healthcare on their own. This indicates that majority of the population are below the average dwellers who operate more on IK. They are comfortable with anything and everything that they can understand and attach themselves to. Translating and transmitting the different types of health financing modes uniquely available to them at their own levels through their IK will go a long way to strengthen their perceptive and acceptance. The key aspect is to know their unique levels and the best health financing (HF) plans for them. In the case of rural dwellers, it only possible to know the best suited HF plans if they are understood at their own level. This suggests the need to accelerate enrollment into prepaid plans at the federal and State Social Health Insurance Scheme.

Role of Indigenous Knowledge (IK) in Mitigating the Predominant Mechanism of Health Financing in Nigeria

Nigerians continue to encounter major barriers in accessing and using health services largely because of differential health care capacities in funding. Because of this dominance in the Nigerian health care, Indigenous Peoples all too often encounter health care systems that are not people inclined or reflective of / grounded or friendly to their culture and belief on the definitions of health care positions they hold. In Nigeria, the practice of IK in field of health care, especially as it concerns Health Financing, little attention has been given to how communities themselves particularly conceptualize IK and how their conceptualization of IK controls the knowledge that drives their everyday lives. This has been so because IK is basically abstract and concrete, individual and collective, specific and holistic in a dialectical manner (Marobela, et'al, 2012). These natural "unity of opposites" are the elements that promote constant change of IK. There is the need to apply the many opportunities of linking IK (based on community perceptions) to the development of health care issues in Nigeria. While opportunities abound for Nigeria to increase coverage with social health insurance and other financial risk protection mechanisms and ultimately substantially improve the functioning of the health system with healthy citizens, understanding the effectiveness of different health financing mechanisms unique to Nigeria and the bottlenecks that constrain effective implementation of financial risk protection to most Nigerians, modifying their functions and processes of operations according to the nature and ways that Nigerians understand is needed to ensure improvements in financial risk protection. It is most certain that a dialectical process-oriented approach to IK and health care is a necessity that needs to be harnessed for a sustainable development and meaningful health care financing in Nigeria in line with the requirement for achieving UHC. This is because Indigenous knowledge (IK) in health care and healing practices endure today in Nigeria, despite modern medical health policies and continued systematic oppression of it. In most part of rural Nigeria, where majority of the population reside, indigenous-led movements that center on traditional Indigenous knowledge (IK) is an important feature of the Nigerian medical landscape, though it has grossly being down played by the modern practices in theory. For these people, IK promotes cultural activities, self-determination, governance, language, medicine and wellness. On the aspect of IK, Nigerian physicians/ health care professionals, receive minimal training in the inculcation of IK in their practice. IK aspects like cultural, spiritual, psychological, social, historical, political and community-specific aspects the Indigenous patients need. Hence the need to bring in the Healing specialists, indigenous Knowledge Keepers and Elders who are skilled in understanding and working within Indigenous cultural local views, determinants of health and most importantly information professionals are increasingly needed in the multifaceted partnerships to bridge the gap in their divergent positions, decision-making processes and patient care beliefs. Information professionals plays the key role of integrating all efforts an Perspectives, analyzing their unique and innovative Indigenous-led health partnerships, considering the benefits that such partnerships can hold for all parties involved to benefit the Indigenous communities and Nigerians at large

Nigeria has a unique experience with Indigenous knowledge (IK) as a result of the diversity in tribe and tongue. IK has been accumulated by indigenous peoples over centuries through direct contact with the natural unique settlements which encompasses a wide range of knowledge, including knowledge about plants and animals, their medicinal properties, and traditional healing practices. This makes it rigid for them to fully integrate modern perspectives in their life styles. In the uniqueness of Nigeria therefore, IK can play a valuable role in mitigating out-of-pocket financial health spending by emphasizing holistic and community-based approaches to well-being. Here are some ways in which IK can be applied:

Improve Understanding of Disease: Indigenous peoples have a unique perspective on disease and health. Their knowledge can help us to better understand their positions on the causes and progression of disease, this will help healthcare professionals through the mediation of information professionals to develop more effective prevention and treatment strategies merged with working modern methods.

Improve Healthcare Delivery: Indigenous knowledge can be used to improve the delivery of healthcare services to indigenous communities. People need to accept and believe in a program for them to make efforts in being part of it because when they accept it, there is usually the will to do it and when there is will (determination), the way is not far from it. For example, IK can be used to develop culturally appropriate health education programs or to train indigenous healthcare workers through the help of information professionals. This will make them understand the programs and processes in place from their own perspective.

Improve Accessibility: Indigenous knowledge can also help to make healthcare more equitable and accessible. In Nigeria, indigenous peoples often live in remote or underserved areas, and they may not have access to modern conventional healthcare services. Through IK with the services of information professionals, these communities can be provided with access to essential healthcare services, and can help to improve their health outcomes.

Herbal Medicine/Traditional Healing Practices: Indigenous knowledge often includes a deep understanding of local plants and herbs for medicinal purposes. Integrating herbal medicine into mainstream healthcare can reduce pharmaceutical expenses and provide more accessible and affordable treatments. Already, in many indigenous communities, they have their own traditional healing practices that focus on prevention and holistic health. Integrating these practices into modern healthcare systems can reduce the need for expensive medical treatments and medications and lessen the financial burden of OOP. This has been achieved in several countries with the help of information professional who bridge the gap between the parties involved. For example, Aboriginal elders in Australia are working with researchers to develop new treatments for cancer and other diseases. Maori healers in New Zealand are using traditional healing practices to help people with chronic pain. In Canada, Inuit elders are working with doctors to develop culturally appropriate health education programs for Inuit youth. Native American tribes in the United States of America are using traditional healing practices to help veterans cope with PTSD. These are just

a few examples of how IK is being used to improve healthcare around the world. Its potential benefits to healthcare are even more innovative and effective in improving the health and well-being of any indigenous people anywhere in the world because IK is the knowledge that has evolved within the people and it is passed on from generation to generation, often based on a deep understanding of the natural world and traditional practices that have been developed over centuries. Bringing balance in understanding an acceptance between IK and modern health care patterns is sure to be the best way to spur the locals into health financing mechanisms available and suitable for them to mitigate out-of-pocket health financing.

Cultural Competency in Healthcare and Community Health Education: Training healthcare providers in cultural competency and sensitivity to indigenous beliefs and practices can improve healthcare outcomes. When patients feel heard and understood, they are more likely to seek early care and follow recommended treatments, reducing the severity of illnesses and related costs. Information professionals with support from healthcare professionals, have a big role to play in this aspect because investing in community health education programs that incorporate indigenous knowledge can empower individuals to take control of their health and make informed decisions, reducing the likelihood of costly health crises.

Nigeria has the potential to reverse the trend of predominant OOP health care financing by learning from other countries all over the globe which have achieved UHC by designing and adopting of health care financial mechanisms according to their unique natures. To promote equity and access to healthcare in Nigeria, National Health Insurance Authority (NHIA) Act should be amended to make insurance mandatory to ALL Nigerians so as increase participation. In doing this, adequate awareness should be created for the same reason using information professionals to achieve the goal. The following are some possible recommendations:

Modified Social Health Insurance (SHI)

Most developed countries have protected people from financial risk using social health insurance (SHI). Apart from the fact that government mandates people to contribute to financing their health, which is usually funded jointly by the employees and their employers, more importantly, the government should also be able to pay for those who cannot pay (by providing free healthcare), such as the poor, unemployed and vulnerable thereby removing inequality and inaccessibility. As a Low- and Middle-income Country (LMICs), this method can be adopted and made the predominant health financing method in Nigeria. A bottom-up approach, starting with the poor and vulnerable group and then the informal sector, is strongly been suggested as the startup level if this scaling-up approach is adopted.

Modified Community-Based Health Insurance (CBHI)

It is a form of private health insurance in which a group of people in a community contributes to financing their healthcare. It is mostly used in LMICs to cater for the rural population and the

informal workers usually not covered by other health insurance. This kind insurance is could also be designed to cover the unique nature of rural dwellers in Nigeria. The funding of this should also be largely done by the government (80 percent) so that no matter how small, the premium may be affordable for the poorest members of the community as to encourage the informal workers, rural poor, unemployed and vulnerable groups in accessing quality health care. Indigenous communities often prioritize community well-being over individual health. By emphasizing community-based healthcare models, where government and individuals support each other and engage in preventative measures, the overall health of the community can improve, reducing the need for costly medical interventions. To increase its potency, the benefits package should also be reviewed to be more comprehensive to attract and encourage enrollees willingly not because it is compulsory. In most practice of CBHI, it is more of a short term measure against OOP but the government, through information professionals, can bring up a design that is constant in nature.

Traditional Health Insurance Models: Some indigenous communities have traditional insurance or risk-sharing systems that can be adapted or integrated into modern healthcare systems to help individuals cover healthcare costs without resorting to high out-of-pocket spending. Therefore, IK can also be a powerful tool for advocating for policy changes that promote equitable access to healthcare resources and reduce the financial burden on individuals and families.

From the researchers' perspectives, if any of the above modified insurance methods are operated based on findings and recommendation of IK generated information, merged with modern methods to bring about standard practice, there may also be numerous direct IK benefits that will help to mitigate out-of-pocket health financing like:

Advocate, support and promote policies on indigenous community-based healthcare solutions: IK can be used to develop better community-based healthcare programs that are more affordable and accessible than conventional healthcare services when the people and their unique nature are recognized because they are home grown. Thus, it may be used to advocate for policies that support the use of IK in healthcare systems, ensuring that indigenous peoples have access to affordable healthcare services. For example, indigenous medical practices are often less expensive than conventional medicine. With the collaboration discussed and exemplified above in other countries, modern health professionals can team up with the indigenous practitioners who often have access to a wide range of medicinal plants and other natural resources that can be used to treat a variety of illnesses. Once they make sure it meets the expected standards, they can also be put to use because these natural resources are often free or very low-cost, which can help to reduce the financial burden on individuals and families also boost the trust of the people in the whole process.

Preventative Care: In operating any of the methods above, the use of IK provides people with the knowledge and skills they need to care for themselves and their families. Indigenous knowledge often emphasizes preventative care, including healthy diets, physical activity, and mental well-being. Promoting these practices can reduce the incidence of chronic illnesses that

often result in high out-of-pocket spending. This can help to reduce people's reliance on expensive healthcare systems, helping the government to make maximum use of its scarce resources.

CONCLUSION

Incorporating IK into healthcare systems requires cultural sensitivity, collaboration with indigenous communities, and respect for their traditional practices. It's essential to engage in meaningful partnerships and consultations to ensure that these approaches are implemented in a culturally appropriate and respectful manner. Inculcating the IK initiative effectively should reflect concrete steps in the efforts to mitigate OOP healthcare equity for Indigenous Peoples and by implication most Nigerians. More work in this area demand continues attention and research by all stakeholders because the recognition of Indigenous knowledge and healing practices in Nigeria continues to grow, irrespective of the obvious denial by major stake holders in government and multinational corporations. The cautious and right step to take is to inculcate it into the process of proper Healthcare in Nigeria by redefining and remodeling it to fit into accepted standards. Though Indigenous Peoples can embody culturally complicated, mixed and integrated identities with critical insight into what collaborative health and healing services partnerships can mean as a result of long lost confidence and trust in the governance and collaborative process, the place of information professionals with help in bridging the available gap. They should be able to ensure that all parties involved know that addressing healthcare financial inequities requires a deeper understanding of the diversity within and across all boards and that different models of modern/Indigenous-led health partnerships has the capacity to respond to various healthcare services needed by the people, irrespective of who is involved.

REFERENCE

- Allen, L., Hatala, A., Ijaz, S., Courchene, D.& Bushie, B. (2020). Indigenous-led health care partnerships in Canada. *CMAJ*, 192(9), 208-216. <https://doi: 10.1503/cmaj.190728>
- Ijaz, S. (2023). 25 Countries with the Worst Healthcare System. Retrieved August 30, 2023, from https://finance.yahoo.com/news/25-countries-worst-healthcare-system-165406868.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xILmNvbS8&guce_referrer_sig=AQAAAD5iCxX-4QvdRXWVHPGnTHx5S_LQ8u732z5kypCQd6eYFyNZYsyer3VJVXgAFznsLZCJVjXvf0iCMQugV60Rd8040QKbwnNnOXQPbKjvJRpqCQg_8ynB88vSJwAw7mKtECMqEIFU2QM6_lpykbDLUCUDogFDpwo4nXYVFgu-nE5q
- Izuaka, Mary (2022). 133 million Nigerians living in poverty – NBS. Retrieved September 19, 2023, from <https://www.premiumtimesng.com/business/565993-133-million-nigerians-living-in-poverty-nbs.html?tztc=1>
- Kolawole, O. D. (2022). Is local knowledge peripheral? The future of Indigenous knowledge in research and development. *AlterNative: An International Journal of Indigenous Peoples*, 18(1),132-140. <https://doi.org/10.1177/11771801221088667>
- Langill, S. & Landon, S. (1998). *Indigenous Knowledge: Readings and Resources for Community-Based Natural Resource Management Researchers*. Vol. 4. Compiled by for the Community-Based

- Natural Resource Management Program Initiative, IDRC. Retrieved September 4, 2023, from <https://idl-bnc-idrc.dspacedirect.org/server/api/core/bitstreams/870a68c9-accb-46da-8de0-a02a66a8e6e4/content>
- Marobela, K.A., Okatch, H., Katongo, A.M., Ngwenya, B. N. & Monyatsi, K. N. (2012). The Dialectics of Indigenous Knowledge: Community views from Botswana. *Sage Journals: An International Journal of Indigenous Peoples*, 8(2),148-162. <https://doi.org/10.1177/117718011200800204>
- Nwachukwu, E. (2021). Nigeria: A health sector in crisis. Retrieved September 6, 2023, from <https://www.premiumtimesng.com/opinion/477854-nigeria-a-health-sector-in-crisis-by-emmanuel-nwachukwu.html?tztc=1>
- Odunyemi, A. E. (2021). The Implications of Health Financing for Health Access and Equity in Nigeria. *Healthcare Access*, Edited Vol., 1-15. DOI: 10.5772/intechopen.98565. <https://www.intechopen.com/chapters/78273>
- Onwujekwe, O., Ezumah, N., Mbachu, C., Obi, F., Ichoku, H., Uzochukwu, B. and Wang (2019). Hong Exploring effectiveness of different health financing mechanisms in Nigeria; what needs to change and how can it happen? *BMC Health Services Research*, 19(661), 1-13. <https://doi.org/10.1186/s12913-019-4512-4>
- Sasu D. D. (2023). People living in extreme poverty in Nigeria 2016-2022, by gender. Retrieved September 4, 2023, from <https://www.statista.com/aboutus/our-research-commitment/2683/doris-dokua-sasu>
- United Nations Environmental Programme (UNEP). (n.d.). What is indigenous knowledge? Retrieved September 7, 2023, from <http://www.unep.org/IK/Pages.asp?id=About IK>
- USAID: Global Health. Home Nigeria Global Health (n.d). Retrieved July 12, 2023, from <https://www.usaid.gov/nigeria/global-health>
- World Health Organization (WHO). Traditional Medicine Global. Retrieved September 19, 2023, from [Summithttps://www.who.int/news/item/10-08-2023-who-convenes-first-high-level-global-summit-on-traditional-medicine-to-explore-evidence-base--opportunities-to-accelerate-health-for-all](https://www.who.int/news/item/10-08-2023-who-convenes-first-high-level-global-summit-on-traditional-medicine-to-explore-evidence-base--opportunities-to-accelerate-health-for-all)