GLOBAL PHENOMENON OF HEALTH EQUITY AND INEQUITY: ATTENTION ON NIGERIANS ENVIRONMENT

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Abstract

This review examines the significant disparities in global health status, particularly highlighting the pronounced inequities between rural and urban areas in Nigeria, as well as between developed and developing nations of the world. Various factors, including social, economic, cultural, and geographical accessibility, contribute to these disparities. The paper identifies how healthcare resources are predominantly concentrated in urban areas having all the federal medical centres and teaching hospitals in the urban areas, disadvantaging rural and suburban populations in Nigeria. Additionally, the paper addresses the often-overlooked issue of occupational health within the country. To mitigate health inequities and promote health equity, the paper recommends enhancing the quality of Primary Health Care (PHC) to better serve the needs of rural communities in Nigeria.

Key Words: Health equality, Inequality, Global phenomenon, Nigerians environment

Introduction

In the year 1978 the World Health Organization (WHO) had a global conference as a result of the understanding of the crisis in the health sector, advancement in the biomedical sciences which led to improved technology in the health sector, especially in area of prompt diagnosis of cases, preventive strategies of various communicable and non-communicable diseases and lastly the improvement in the treatment of diseases through new discoveries. In spite of the aforementioned opportunities, it is obvious that many nations of the world may not be able to afford the cost of these technologies especially, the developing nations will be very far away at meeting the required health targets, considering the existing financial allocation to health care services and consequently, nations of the world cannot afford to provide universal access to many of the modern health technologies now in existence.

WHO consequently set the philosophical basis for the global vision for health development on the basis of fairness and social justice which led to the slogan *Health for All*. The goal set by WHO resolutely instituted the principle that health of the people globally, is the responsibility of the state to make sure that the highest level of health on the basis of available resources is attained through unrestricted access. Therefore national health services must include equity, which involves fairness in resource allocation with meticulous attention to the needs of the people with low socioeconomic status, value for money: which is to

cautiously choose cost-effective involvement in effectively managing health services to the people and with good sense of stewardship, which involves quick response to the needs of the people with utmost transparency to meet the sustainable development goal 3 (Odumosu & Okueso, 2021).

National Health Policy (NHP) of Nigeria

The development of NHP was an initiative of the federal ministry of Health, its agencies, representatives of development partners, the private health sector, civil society organizations, the regulatory bodies, state ministries of health, and the academia was constituted to form the Technical Working Group (TWG) that put in place the NHP. The goal of the 2016 NHP was to strengthen Nigeria's health system, particularly the primary health care (PHC) sub-system, to deliver effective, efficient, equitable, accessible, affordable, acceptable and comprehensive health care services to all Nigerians. There are ten policy thrusts which were derived from National Strategic, Health Development Plan (NSHDP) and the World Health Organization (WHO) health system building blocks which are: governance, health service delivery, health financing, human resource for health, medicines, vaccines, commodities and health technologies, health infrastructure. health information system, health research and development. ownership/participation, and partnership for Health. In spite of the plan to make health care equitable, the level of inequity remained unimaginable which has caused significant effects on rate of diseases and high rate of vulnerability (Chukwudozie, 2015).

In the 2016 draft of the national health policy (NHP) in Nigeria, the situational analysis revealed that the Nigerian health system is weak and, hence, underperforming across all building blocks of the World Health Organization, that the health system governance is weak. There is inequity in access to services and job opportunities due to variation in socio-economic status and geographical distribution of the citizenry (Fejoh, Okoye and Onanuga, 2019). For instance, the difference in ante-natal, maternal health care, child welfare and other care facilities and access among rural and urban dwellers is very wide as a result of the aforementioned variables (Okueso & Odumosu, 2022). It is a known fact that the prevention and treatment of diseases in Nigeria, occupational diseases inclusive, are issues that have direct bearing with public health (Anuar et al. 2021). This function of public health is primarily predicated upon early detection through various investigations to allow the application of various preventive measures at an affordable cost. The situation can be underpinned on a theoretical model which is; Health Belief Model (HBM), since its application has been made easy for use to handle both communicable and non-communicable diseases and health planning strategies that relates to making health accessible, based on the needs of the individual and communities to achieve the global health needs of every citizen (Rosenstock, 1974). The model was originally built on four perceptive constructs of: perceived susceptibility, perceived severity, perceived benefit and perceived barriers which can be said to relate to several ill-health conditions that are health behaviour related (Okueso et al, 2018; Okueso et al, 2021). Several scholars and researchers of health promotion and health education have applied HBM in solving several public health problems relating to both communicable and non-communicable diseases and sometimes in phenomenon that relates to both situations. Health Belief Model have been used expansively in establishing the connections existing among

health behaviour and health beliefs and also to create a loophole for research interventions (Skinner et al, 2015; Sharma, 2017)

Health equity and inequity

There is no gainsaying that there exists, gross inequity in the health status of the people globally particularly between developed and developing nations of the world and also within countries which is socially, politically and economically unacceptable to global development that is therefore, of common concern to all countries of the world including Nigeria that has a large proportion of her population in the rural areas (WHO, 1978., Pravina, & Muthulakshmi, 2019). Equity in health can be defined simply as fairness and justice which can thus be described as; status of health of families, public and communities, allocation of resources and accessibility to and deployment of available resources. There is health equity when: race, gender class, sexual orientation, gender expression, and other dimensions of individual and group identity no longer determines one's health outcomes, as everyone has what they need to thrive; all people can reach their full health potential and well being and are not disadvantaged by their race, ethnicity, language, disability, gender identity.

The World Health Organization (WHO) has identified the causes of health inequities and provided compelling statistics. In Africa, children from the poorest 20% of households are twice as likely to die before their fifth birthday compared to those from the richest 20%, primarily due to malaria, diarrhea, and other diseases which are highly prevalent and among the main causes of morbidity and death in Nigeria. Additionally, 95% of tuberculosis (TB) deaths occur in the developing world, predominantly affecting young adults that forms the working class supposed to improve the Gross Domestic Product (GDP) of Nigeria. Furthermore, 87% of premature deaths from noncommunicable diseases occur in low-and middle-income countries. The disparity in life expectancy is also unambiguous: the average life expectancy in low-income countries is 62 years, compared to 81 years in high-income countries, reflecting a 19-year difference. Health disparities, such as these, vary widely between countries, with significant differences in life expectancy observed across different regions (WHO, 2023).

On the health status, inequalities reflect inequities in the health care system considering economic accessibility or inaccessibility, political accessibility or inaccessibility, geographical accessibility or inaccessibility and lastly cultural accessibility or inaccessibility especially in developing nations of Africa (Boutayeb, 2021). Variations in health status is strongly predicated upon the distribution of poverty which when alleviated will underpin health promotion. On resource allocation, equity relates to the distribution of health resources to the different divisions of the population; allocation equity means that available resources are shared fairly. On access and utilization, equity implies that every member of the population should have equal access to health care without any latent or manifest limitations. Distribution of health centres and other institutions in relation to the population is important, considering how far people have to travel to reach such facilities, health facilities should be near enough to encourage patronage and if reverse becomes the case, geographical inaccessibility to health ensue and it is part of the component of health inequity which is a common phenomenon among the rural populace in Nigeria.

In many countries of Africa, socioeconomic, geographical, cultural and political factors are important determinants of varied level of disease vulnerability with little or no attention to occupational health matters for instance (Kendall & Zielinski, 1999; Dressler, 2004; Pell et al. 2011; Omoleke, et al. 2018). Socioeconomically, many members of the populace are either not employed or under-employed living with less than a dollar per day and many are not educated to be able to understand those things that can prevent a number of both communicable and non-communicable diseases and develop health promoting behaviour. Geographically, many of the people are not accessible to health care services as both community and referral health services are very far away from them locating them out of their geographical reach. Culturally, there are beliefs and practices 'which should have been demystified with functional health education interventions.' Practices that are inimical to health like; some food fads and fallacies, traditional mental health care procedures, burial practices, traditional maternal and child health principles and traditional hesitation to vaccinations (Umaru, et al., 2013; Sovran, 2013., Kahissay, et al. 2017; Bruns et al. 2020; Kaur, 2020). Political factors are preponderant as it affect vulnerability to ill-health conditions ranging from unequal distribution of health facilities having rural and urban dichotomy as an important variable, accessibility to social infrastructure in the rural area as a mirage with its numerous health consequences like absence of good cold-chain facilities for drug preservation such as vaccines, retaining good medical personals in the rural areas becomes difficult leading to active inaccessibility to good health care services (Shaikh & Hatcher, 2005., Pravina & MuthuLakshmi, 2019).

The situation of increased disease vulnerability in Nigeria has remained unabated for several reasons ranging from; daily decrease in the socioeconomic status which is presently becoming worst as a result of high rate of unemployment, increased number of school dropout, poor per capital income, lack of political will, which relates to dwindling exchange rate of over one thousand Naira to a US Dollar making the purchasing power of an average Nigerian to be very low which further deepens the health inequity parameter in terms of financial accessibility to heath resources. The poor rural agrarian community members of the populace can hardly afford the basic necessity of life such as nourishing food, good housing, and access to health care services is difficult due to increased cost of health care materials like drugs and other medical consumables (Gong et al. 2014; John & Stanley, 2014; Oladigbolu, et al. 2017).

Closing the gap of health inequity and promoting health equity

Optimization of equity and reducing the gap of inequity that is highly desirable in Nigeria, necessitate conscious thought on a great number of concerns that should be addressed: health policy formulation issue which calls for all policy attention both within the health sector and other sectors should be significantly scrutinized such as the macro-economic policy on health should be cautiously evaluated. Pertinent researches should be conducted to bring about macro-economic policies that would not harm the health of vulnerable groups both globally and locally. Also, political obligation on the part of government is a great tool for upholding equity and reducing inequity in health. Promoting equity is complicated where the political outlook is dominated by free market ideas and market forces. Political commitment is required correct the inequities which is as a result of discrimination on the foundation of race, ethnic group, gender religion with government policies characterized by marginalization of disadvantaged groups like the rural agrarian

farmers in Nigeria with low access to basic infrastructural facilities., community involvement is a crucial tool through which equity cam be promoted, therefore health services have to devise strategies for obtaining informed view from all the community members irrespective of the demographic differences (Ndili et all, 2021). Lack of consultation and involvement of all the civil society members will further widen inequity (World Bank Group, 2018., WHO, 2008., Odumosu & Okueso, 2021). Hence, authorities must consult to provide relevant information and make everyone organized to be on the same page for health promotion.

Resource allocation is an important responsibility of government which should take cognizance of fairness and justice without any bias but hinged on the principle of special needs of the disadvantaged group. It is on record that most times, the enthusiastic elite groups have disproportionate shares of scarce resources at the expense of the disadvantaged rural agrarian community members. Data collection is important to monitor performance of health services with equity as the measuring parameter. The instrument for data collection must be designed to adequately consider groups and subgroups which are disadvantaged due to limited access to services by economic, social, geographical and cultural variables. Equity check in health services is very important hence mechanism must be designed to regularly and objectively monitor equity. Health authorities must add to their services sensitive indicators that will periodically remind them of their performance with special reference to equity and access to care.

The World Health Organization (WHO) conference held at Alma Ata in1978 set the philosophical foundation for the global idea of health development on the basis of social justice (Lucas and Gilles, 2003). The historical declaration at the conference established the various health goals till date including the sustainable development goal 3 (SDG3). This firmly established that health care is the responsibility of government to make sure that all the citizens have equal right to highest health care in consonance with the available resources. Preferably, the health care services of every nation should include: fairness in resource allocation taking into cognizance the individual and group needs, selecting and managing resources carefully and efficiently by adopting cost-effective intervention models and identifying the felt needs of the people and responding to them most transparently, prudently and accountably (Hajat et al, 2015; Hufe et al. 2015; Rani, 2017; Roth & Johannes, 2018).

Health state of inequality between the rural poor and the elitist city dwellers can no longer be tolerated; hence, the existing political, social and community variables that tend to allow this inequity must be addressed because it is of great concern to public health and legal practitioners. Equity in health care means justice and fairness which has three varied meanings: health status of families and groups, resource allocation, access to resources and utilization of available resources (Lucas & Gills, 2003, Goldmann & Lakdawalla, 2005., Boutayeb, 2006., Boutayeb & Helmert, 2011).

Health equity can be promoted through the following important issues: political commitment, which is the responsibility of government to promote health equity. It is difficult in Nigeria because the political stance is dominated by free market idea and it is capitalistic in nature, it is important to note that political commitment is required to correct the inequities that results from discrimination on the basis of gender, ethnic, race, and other demographic variables and also policies that marginalize disadvantaged groups like

the rural agrarian dwellers and when the law fails to take cognizance of these variables, the level of vulnerability of the disadvantaged group members will be high which can be reduced through good legal framework and legislation (Piketty, 2018)., policy formulation within the health sector should be critically scrutinized on its effect on health equity to reduce the incidence of high vulnerability by the rural poor and this can be achieved by legal input for peace and justice (Kanbur & Adam, 2014., Hughes et al, 2019., (Ndili et all, 2021) resource allocation, the government should allocate financial resources fairly evenly to the whole population irrespective of geopolitical variability but should be based on the needs of the people especially the most vulnerable groups identifying their felt needs. Intersectoral action, this can best be utilized for equity by enacting in the health policy the various integrative policies that will promote health equity within all related health sectors., community involvement is an integral part of the process of health policy formulation that will promote equity, the needs of every individual community members should be put into consideration before anything and if this is not considered, the administrators/implementer of policies may be working at variance with the need of the people which will further complicate issues of vulnerability (Donatti et al, 2018., Diffenbaugh & Marshall, 2019). And also, to monitor equity, for good evaluation of all health activities, it is meant to identify the area of strength and weaknesses in order to move in line with various emerging issues from time-to-time. To make equity possible and effective, there should be a welldefined framework through which the health policy implementation can be monitored.

The information provided by the tables 1 and 2 is to further reveal and inform that health inequity in Nigeria is of great concern as almost all the referral teaching hospitals and specialist hospitals are geographically inaccessible to the rural community members as all of them are located in the state capitals and major cities of the country.

Table 1: List of all Teaching Hospitals (Federal, State and Private) in Nigeria

Name of Hospital	Ownership	Location	State
North East (3)			
University of Maiduguri Teaching	Federal	Maidugur	Borno
Hospital		i	
Abubakar Tafawa Balewa	Federal	Bauchi	Bauchi
University Teaching Hospital			
Federal Teaching Hospital	Federal	Gombe	Gombe
North West (3)			
Aminu Kano University Teaching	Federal	Kano	Kano
Hospital			
Ahmadu Bello University Teaching	Federal	Zaria	Kaduna
Hospital			
Usman Dan Fodio University	Federal	Sokoto	Sokoto
Teaching Hospital			
North Central (6)			
Jos University Teaching Hospital	Federal	Jos	Plateau

University of Ilorin Teaching Hospital	Federal		llorin	Kwara
University of Abuja Teaching Hospital	Federal	Gwagwala	ada	FCT
National Hospital	Federal		Abuja	FCT
Benue State University Teaching	State		Markudi	Benue
Hospital				
Bingham University Teaching	Private		Jos	Plateau
Hospital				
South West (10)				
Lagos University Teaching	Federal		Idi Araba	Lagos
Hospital				
Lagos State University Teaching	State		Ikeja	Lagos
Hospital				
Olabisi Onabanjo University	State		Sagamu	Ogun
Teaching Hospital	•			
Ladoke Akintola University of	State		Osogbo/	Oyo/Osun
Technology Teaching Hospital			Ogbomos	
Habaaak Oallaaa Haaaka	Federal		0	0
University College Hospital	Federal		lbadan	Oyo
Obafemi Awolowo University	i ederai		lle-lfe	Osun
Teaching Hospital Federal Teaching Hospital	Federal		Ido-Ekiti	Ekiti
Afe Babalola University (ABUAD)	Private		Ado-Ekiti	Ekiti
Multi-System Hospital	Tilvato		AUU-LKIII	LNIU
Ekiti State University Teaching	State		Ado-Ekiti	Ekiti
Hospital			7100 ENIU	
Babcock University Teaching	Private		llishan-	Ogun
Hospital			Remo	- 3
South East (8)				
Abia State University Teaching	State		Aba	Abia
Hospital				
Nnamdi Azikiwe University	Federal		Nnewi	Anambra
Teaching Hospital				
Alex Ekweme Federal University	Federal		Abakaliki	Ebonyi
Teaching Hospital				
Ebonyi State University Teaching	State		Abakaliki	Ebonyi
Hospital				
University of Nigeria Teaching	Federal		Ituku-	Enugu
Hospital	0 1 /		Ozalla	
Imo State University Teaching	State		Orlu	lmo

Anambra State University Teaching Hospital Madonna University Teaching Hospital South South (8) University of Uyo Teaching Hospital University of Calabar Teaching Hospital University of Benin Teaching Hospital University of Port Harcourt Federal Hospital
Madonna University Teaching Hospital South South (8) University of Uyo Teaching Hospital University of Calabar Teaching Hospital University of Benin Teaching Hospital University of Port Harcourt Federal Fed
Hospital South South (8) University of Uyo Teaching Hospital University of Calabar Teaching Hospital University of Benin Teaching Hospital University of Port Harcourt Federal Federa
South South (8) University of Uyo Teaching Federal Uyo Akwa Ibom Hospital University of Calabar Teaching Federal Calabar Cross River Hospital University of Benin Teaching Federal Benin Edo Hospital City University of Port Harcourt Federal Port Rivers
University of Uyo Teaching Hospital University of Calabar Teaching Hospital University of Benin Teaching Hospital University of Port Harcourt Federal Uyo Akwa Ibom Calabar Cross River Benin Edo City University of Port Harcourt Federal Port Rivers
Hospital University of Calabar Teaching Hospital University of Benin Teaching Hospital University of Port Harcourt Federal Fed
University of Calabar Teaching Hospital University of Benin Teaching Hospital University of Port Harcourt Federal Calabar Cross River Benin Edo City University of Port Harcourt Federal Port Rivers
Hospital University of Benin Teaching Hospital University of Port Harcourt Federal Federal Federal Port Rivers
University of Benin Teaching Federal Benin Edo Hospital City University of Port Harcourt Federal Port Rivers
Hospital City University of Port Harcourt Federal Port Rivers
University of Port Harcourt Federal Port Rivers
officially of Fort Hardware
Topobing Hospital Haroquit
Teaching Hospital Harcourt
Delta State University Teaching State Oghara Delta
Hospital
Niger Delta University Teaching Federal Okolobiri Bayelsa
Hospital
Igbinedion University Teaching Private Okada Edo
Hospital
Irrua Specialist Teaching Hospital Federal Irrua Edo

Source: data collected by authors

The table 1 is the list of teaching hospitals in Nigeria with their locations in the various state of the federation. It can be concluded that all the hospitals are far from the rural populace which limits accessibility to referral health services without access to functional ambulance services as it is in the developed nations of the world.

Table 2: List of all Federal Government Owned Hospitals and Medical Centres in Nigeria

Name of Hospital	Location	State
Federal Medical Centre	Abeokuta	Ogun
Federal Medical Centre	Asaba	Delta
Federal Medical Centre	Azare	Bauchi
Federal Medical Centre	Bida	Niger
Federal Medical Centre	Birnin Kebbi	Kebbi
Federal Medical Centre	Birnin Kudu	Jigawa
Federal Medical Centre	Ebutte-Metta	Lagos
Federal Medical Centre	Gombe	Gombe
Federal Medical Centre	Gusau	Zamfara
Federal Medical Centre	ldo-Ekiti	Ekiti
Federal Medical Centre	Jalingo	Taraba
Federal Medical Centre	Katsina	Katsina
Federal Medical Centre	Keffi	Nassarawa
Federal Medical Centre	Lokoja	Kogi
Federal Medical Centre	Makurdi	Benue
Federal Medical Centre	Nguru	Yobe
Federal Medical Centre	Owerri	lmo
Federal Medical Centre	Owo	Ondo
Federal Medical Centre	Umuahia	Abia
Federal Medical Centre	Yenogoa	Bayelsa
Federal Medical Centre	Yola	Adamawa
Federal Medical Centre	Abakaliki	Ebonyi
Federal Staff Hospital	Jabi	FCT

Source: data collected by authors

The information provided in Table 2 further corroborates the fact that the referral hospitals are far from the rural areas which further inhibits access to health care hence promoting health inequity geographically and technologically malfunctioning.

Local Government Primary Health Care (PHC) Centres in Nigeria

The Nigeria Health Sector: Market Study Report, commissioned by the Embassy of the Kingdom of the Netherlands and organized by Pharm Access Foundation's Office, revealed that there are 34,076 Primary Health Centres (PHCs) in Nigeria, constituting 85.3 percent of the country's total hospitals. Unfortunately, the report highlights that only 20 percent of these PHCs are functional. Many of these centres lack the capacity to provide the essential healthcare services they were established to deliver. Challenges such as poor staffing, inadequate equipment, deteriorating infrastructure, and shortages of essential drugs hinder their optimal functioning. Additionally, the local government PHC centres, intended to serve rural communities, suffer from poor funding, further exacerbating health inaccessibility in Nigeria (Ibeh, 2023).

Conclusion

It is pertinent to conclude that health inequity is a common phenomenon that has been globally recognized, and efforts are geared towards reducing it, especially in the advanced countries of the world to improve equity as proposed by the World Health Organisation. Alas, the phenomenon of health inequity remained unabated in African countries with special reference to Nigeria where some limiting factors to health equity remained unabated considering socioeconomic, political and cultural and geographical variables among others. It is therefore recommended that rural community members should be given special preference in terms of billing when referred to specialists and teaching hospitals for further health management when necessary. The PHC centres should be better equipped by the local government where both human and material resources needed are adequately provided and lastly, advocacy through health education should be improved upon for the rural poor agrarian community members for improve access to health care by having the required knowledge needed.

References

- Anuar, H., Shah, S. A., Gafor, H., Mahmood, M. I., & Ghazi, H. F. (2021). Use of health belief model (HBM) in health behaviour: A systematic review. *Malaysian Journal of Medical and Health Sciences*, 16 (11), 201-209.
- Boutayeb, A. (2006). Social inequalities and health inequity in Morocco. *International Journal for Equity in Health*, 5(1), 1-9
- Boutayeb, A., & Helmert, U. (2011). Social inequalities, regional disparities and health inequity in North African Countries. *International Journal for Equity in Health*, 10 (1), 1-9. http://www.equityhealthj.com/content/10/1
- Boutayeb, A. (2021). Health equity and social determinants of Health. New Journal for Science vulgarization. 1, 1-6
- Bruns, D. P., Kraguljac, N. V., & Bruns, T. R. (2021). COVID-19: Facts, cultural considerations, and risk of stigmatization. *Journal of Transcultural Nursing*, 31 (1) https://doi.org/10.1177/1043659620917724
- Chukwudozie, A. (2015). Inequalities in health: The role of health insurance in Nigeria. *Journal of Public Health in Africa*.6 (1).http://creativecommons.org/licenses/by-nc/3.0/
- Diffenbaugh, N. S., & Marshall, B. (2019). Global warming has increased global economic inequality. *Proceedings of the National Academy of Sciences of the United States of America*, 116, (20), 9808-9813.
- Donatti, C.I. et al. (2018). Vulnerability of smallholder farmers to climate change in central America and Mexico: Current knowledge and research gaps. *Climate and Development*, 11, (3), 264-286.
- Dressler, W. W. (2004). Culture and the risk of disease. *British Medical Bulletin*, 69, 21-31.

- Fejoh, J., Okoye, J. O., & Onanuga, P. A. (2019). Work-family conflict, organizational commitment and optimal productivity among medical workers in Ogun State, Nigeria. *International Journal of Multi-Disciplinary in Educational Research and Development*. 1(1), 1-9.
- Goldmann, D. P., & Lakdawalla, D. N. (2005). A theory of health disparities and medical terminology. *Contributions to Economic Analysis and Policy*, 4, 1-3.
- Gong, Y., Yin, X., Wang, Y., Li, Y., Qin, G., & Liu, L (2014). Social determinants of community health services utilization among the users in China: A 4-year cross-sectional study. *PloS One*. 9(5),
- Hajat, A., Charlene, H., & Marie, S.O. (2015). Socioeconomic disparities and air pollution exposure: A global review. *Current Environmental Health Reports*, 2 (4), 440-450
- Hufe, P., Peichl, A., Roemer, J., Ungerer, M. (2015). Inequity of income acquisition: The role of childhood circumstances. *Social Choice and Welfare*, 49 (2-3), 499-544.
- Hughes, M. M., Paxton, P., Clayton, A. B. & Zetterberg, P. (2019). Global gender quota adoption, implementation and reform. *Comparative Politics*, 51(2), 219-238.
- John, E. U., & Stanley, I. (2014). User-fees in health services: Assessing how it impacts on access, utilization and quality of care in the tertiary health facility in Delta State, Nigeria. *American Journal of Public Health Research*. 2 (4), 119-241.
- Kahissay, M. H., Fenta, T. G., & Boon, H. (2017). Beliefs and perception of ill-health causation:

 A socio-cultural qualitative study in rural North-Eastern Ethiopia. *BMC Public Health*,

 17 (1),
 Article 124.https// doi.org/10.1186/s12 889-017-4052-y Google Scholar.
- Kaur, H. (2020). How religious communities are modifying tradition to prevent coronavirus spread. CNN, March 12th·https://www.cnn.com/2020/03/06/world/religion-modify-tradition-coronavirus-trnd/index.html Google Scholar
- Kanbur, R., & Adam, W. (2014). How useful is inequality of opportunity as a policy construct? *World Bank Policy Research Working Paper* No. 6980. Washington, DC.: World Bank.
- Kendall, C., & Zielinski, E. C. (1999). Social and cultural factors in topical medicine: Reframing our understanding of disease in Richard et al (Ed) *Tropical infectious diseases principles, pathogens and principles.* Toronto: Churchill Livingstone.
- Ndili, N., Dada, I., Ajanwachukwu, E., Serrano, A., & Osisiogu, U. (2021). Practical solution to global health challenges: Nigeria experience. *Project for Peaceful competition*. Available in https://www.peacefulcompetition.org/pub/tldp6koc/release/1
- Pell, C., Straus, L., Andrew E.V.W., Menaca, A., & Pool, R. (2011). Social and cultural factors affecting uptake of interventions for malaria in pregnancy in Africa: A systematic review of the qualitative research. *Plos One*, 6(7).doi: 10.1371/journal.pone.0022452

- Punch Newspaper (2022). *Only 46 million Nigerians in active employment*. Retrieved on 13th November, 2022 from https://punchng.com/only-46-million-nigerians-in-active-emoloyment
- Odumosu, T., & Okueso, S. A. (2021). The role of sustainable law in public health in Nigeria. In Mauerhofer, V. (Ed). *The role of law in governing sustainability*. London: Routledge Taylor & Francis Group.
- Okueso, S. A., Olusesi, L. O., Adekoya, A. F., & Oparaeke, M. I. (2018). Health and well-being practices: How adherent are staff of tertiary institutions in Ogun State, Nigeria? *Potchesfstroom Journal of Education and Social ScienceSouth Africa*. 9. 224-246.
- Okueso, S. A., Kalesanwo, O. O., & Awoleye, B. R. (2021). School health education for Covid-19 protocols adherence: Application of precede-proceed and Health Belief Models by health researchers. *African Journal of Science and Nature*, 12, 15-26.
- Okueso, S.A & Odumosu, T. (2022).Reducing disease vulnerability with health education and legal framework for sustainable development: perception of public health and legal practitioners. Proceedings of the 28th Annual Conference, International Sustainable Development Research Society, Sweden.
- Oladigbolu, R. A., Oche, M. O., Kaoje, A. U., & Gana, G. J. (2017). Socio-economic factors influencing utilization of health care services in Sokoto, North- Western Nigeria. *International Journal of Tropical Disease and Health*, 27 (2), 2-13.
- Omoleke, S. A., Alabi, O., Shuaib, F., Braka, F., Tegegne, S. G., Umeh, G. C., Ticha, J. M., Onimisin, A., Nsubuga, P., Adamu, U., Muhammed, K., Onoka, C., & Alemu, W. (2018). Environmental, economic and socio-cultural risk factors of recurrent seasonal epidemics of cerebrospinal meningitis in Kebbi State, Northwestern Nigeria: A qualitative approach. *BMC Public Health* 18 (4), 13-18. https://doi.org/10.1186/s12889-018-6196-9)
- Piketty, T. (2018). Brahmin left vs merchant right: rising inequality and the changing structure of political conflict. World inequality Lab Paris: Paris School of economics. WID. *World working paper series* No. 2018/7.
- Pravina, S & Muthulakshmi, K. (2019). Health equity and inequity: An overview. *Journal of Emerging Technologies and Innovative Research*, 6 (1), available in www.jetir.org
- Rani, U. (2017). Minimum wage policies and their effect in developing countries: A comparative perspective. *The Indian Journal of Labour Economics*, 60 (1), 33-55.
- Roth, C., & Johannes, W. (2018). Experienced inequality and preferences for redistribution. *Journal of Public Economics*, 167, 251-262.
- Rosenstock, I. (1974). Historical origins of the health belief model. *Health Education Monographs*, 2(4), 328-335

- Shaikh, B. T., & Hatcher, J. (2005). Health seeking behavior and health service utilization in Pakistan: Challenging the policy makers. *Journal of Public Health*, 27 (1), 49-54.
- Sharma, M. (2017). *Theoretical Foundations of Health Education and Health Promotion*. Berlington MA: Jones & Bertlett Learning.
- Skinner, C. S., Tiro, J., & Champion, V. L. (2015). Health Belief Model. In Glanz, K. Rimer, B.K., & Viswanath (Eds.), *Health behaviour: Theory, Research and Practice*. John Wiley & Sons.
- Sovran, S. (2013). Understanding culture and HIV/AIDS in sub-Saharan Africa. *Journal of social aspect of HIV/AIDS*, 10 (1), 32-41. https://doi.org/10.1080/17290376.2013.807071 Google Scholar
- Umaru, E. T., Ludin, A. N. M., Majid., M. R., Sabri, S., Chingle, M. P., Enegbuma, W., Abdrazack, Tajudeen A. N. (2013). Risk factors responsible for the spread of meningococcal meningitis: A review, *International Journal of Educational Research*, *1*, (2), 1-30.
- World Health Organization (1978) Alma Ata Declaration
- World Bank Group (2018). Overcoming poverty and inequality in South Africa: An assessment of drivers, constraints and opportunities. Washington, DC: World Bank. https://openknowledge.worldbank.org/handle/10986/29614
- WHO (2008). Closing the gap in a generation: Health equity through action on the social determinants of health. *Commission on social determinants of health Report*. Geneva: WHO.
- WHO (2023).Health Inequality data repository.Available inhttps://www.who.int>data>data. Retrieved November 9th, 2023