

ISSN 1115 - 2613

NIGERIAN JOURNAL *of* MEDICINE

www.nigerianjournalofmedicine.com

IN THIS ISSUE

- OUTCOMES IN PALLIATIVE CARE FOR ADVANCED PROSTATE CANCER IN THE RADIOTHERAPY AND ONCOLOGY DEPARTMENT OF THE AHMADU BELLO UNIVERSITY TEACHING HOSPITAL, ZARIA.
- THE PREVALENCE AND CORRELATIONS OF ELECTROCARDIOGRAPHIC-LEFT VENTRICULAR HYPERTROPHY IN A RURAL COMMUNITY IN AFRICA.
- CONTROL AND PREVENTION OF CHOLERA TRANSMISSION IN LOW RESOURCE CLINICAL SETTING
- SKELETAL INJURIES IN CHILDREN PRESENTING IN A TERTIARY HEALTH FACILITY IN LAGOS STATE, NIGERIA
- ANTIBIOGRAM OF BACTERIAL AGENTS OF LOWER RESPIRATORY TRACT INFECTIONS IN A CENTRAL NIGERIAN HOSPITAL
- SURVEY OF EARLY PREDICTIVE SIGNS OF POOR MENTAL HEALTH AND SOCIO-CULTURAL BELIEFS ABOUT MENTAL ILLNESS IN ENUGU STATE, NIGERIA
- RUPTURED UTERUS: FETOMATERNAL OUTCOME AMONG UNBOOKED MOTHERS AND ANTENATAL CARE DEFAULTERS AT THE UNIVERSITY OF PORTHARCOURT TEACHING HOSPITAL.



Vol. 27 No. 1
January - March, 2018

AN INTERNATIONAL PEER REVIEWED

MEDICAL JOURNAL
PUBLISHED BY THE NATIONAL ASSOCIATION OF RESIDENT DOCTORS OF NIGERIA



Contents

The Nigerian Journal of Medicine Board and NARD Executive Committee.....	i
Editorial Notices.....	ii
Writing for the Nigerian Journal of Medicine.....	iii

Original Articles

Outcomes in Palliative Care for Advanced Prostate Cancer in the Radiotherapy and Oncology Department of the Ahmadu Bello University Teaching Hospital, Zaria. Adamu A, Chukwuocha IC, Jimeta JD, Olasinde TA.	1
The Prevalence and Correlations of Electrocardiographic-left Ventricular Hypertrophy in a Rural Community in Africa. Alikor Chizindu A, Emem-Chioma Pedro	7
Control and Prevention of Cholera Transmission in Low Resource Clinical Setting Owoeye David, Adebayo Oladimeji	14
Skeletal Injuries in Children Presenting in a Tertiary Health Facility in Lagos State, Nigeria Akinmokun OI, Giwa SO, Bode CO.	20
Antibiogram of Bacterial Agents of Lower Respiratory Tract Infections in a Central Nigerian Hospital Abdullahi N, Iregbu KC.	29
Survey of Early Predictive Signs of Poor Mental Health and Socio-cultural Beliefs about Mental Illness in Enugu State, Nigeria Ekwueme OC, Chukwueneke F, Ekwueme AC, Ndu AC, Idoko CA, Nwobi EA.	35
Ruptured Uterus: Fetomaternal Outcome among Unbooked Mothers and Antenatal Care Defaulters at the University Of Portharcourt Teaching Hospital. Eli S, Abam DS, Kalio DGB, Oriji V, Allagua DO, Green K, Ikimalo J.	46
Extraction of Mesioangularly Impacted Third Molar: Dental Drill Versus Crane Pick Elevator on Treatment Outcome. Dr. Charles E. Anyanechi.	52
Exploring Actors Roles in Formulation of the Human Resources for Health Policy in Nigeria Nkoli Uguru, Enyi Etiaba, Benjamin Uzochukwu, Miriam Ajuba, Giuliano Russo, Reinhard Huss, Obinna Onwujekwe.	59
Prevalence of Obesity and Ethno-geographic Variation in Body Sizes of Nigerians with Type 2 Diabetes Mellitus - A Multi-Centre Study. Balogun WO, Uloko AE, Ipadeola A, Enang O, Adamu AN, Mubi BM, Okafor CI, Odeniyi I, Lawal IU, Adeleye JO, Fasanmade OA.	69
Prevalence and Predisposing Factors to Birth Fractures and Brachial Plexus Injuries Seen in a Tertiary Hospital in Calabar, Nigeria. Asuquo JE, Abang IE, Urom SE, Anisi CO, Eyong ME, Agweye PU.	78
Knowledge and Use of Tuberculosis Treatment Guidelines in Endemic Settings: A Cross-sectional Study among Primary Health Care Workers in Ogbomosho, Oyo State, Nigeria. Sunday Olakunle Olarewaju, Wasiu Olalekan Adebimpe, Abiodun Oluwatoyin Olarewaju, Medinat Omobola Osinubi	84
Predictors of Lower Extremity Amputation Among Patients with Diabetic Foot Ulcer in a Tertiary Health Facility in North Central Nigeria. Enamino M, Odoh G, Uwakwe JN, Puepet FH.	92

policy-making to the upper echelons of the political and bureaucratic system. This small "circle" of people tend to make decisions based on intuition and personal experiences.^{4,6} The use of evidence or the type of evidence used in formulating policy is often skewed towards the members of the team with a high level of power.^{6,7}

Nigeria, with a population of over 170 million^{8,9}, has one of the largest Human Resource for Health (HRH) stocks in Africa with 30 doctors and 100 nurses per 100,000 population comparable to the sub-Saharan African average of 15 doctors and 72 nurses per 100,000 population.^{10, 11} Despite this large number, the country still does not have enough health personnel to deliver effective health care services.¹⁰

The Nigerian HRH policy document was first developed in 2006 following World Health reports devoted to addressing the global HRH crisis^{11,12} and low ranking of the countries health system¹³. The lack of evidence based health policies which will improve health outcomes have been identified as one of the reasons for weak health systems such that the incorporation of relevant high quality research evidence into policy-making has been outlined as a key strategy to improve health systems worldwide and thus improve universal access to health.¹³⁻¹⁵

Actors' views on evidence and their roles in policy development are critical to the use of evidence to develop policy. Thus the aim of this study is to examine how different actors' perception of evidence and their roles in the policy development process have influenced the use of evidence in development of the HRH policy. This information will enhance future policy elaboration and possibly implementation.

METHOD

Study setting:

The study was undertaken in Nigeria, where provision of healthcare is a concurrent responsibility of the three tiers of government (Federal, State and Local government). The Federal Ministry of Health (FMoH) is responsible for policy and technical support to the overall health system; the State Ministries of Health (SMoH) are responsible for the provision of secondary healthcare services, regulation and technical support for primary healthcare services and the local governments are responsible for primary health care services.¹

This study was part of a larger retrospective qualitative study and employed a case study approach. Data was collected through a systematic review of relevant documents and in-depth interviews of key national and state level stakeholders involved in the HRH policy development. The respondents were categorized into various groups namely; policy makers, civil society organizations (CSOs), academia/researchers, development partners, media and health workers. The list of respondents to be interviewed was informed by a review of relevant published documents as well as anecdotal information from review of unpublished documents, and snowballing from previous respondents. A total of 12 stakeholders were eventually interviewed for this study.

An interview guide was developed to elicit information on four thematic areas, derived from the study conceptual framework which was drawn from literature and adapted to guide understanding and assessment of role of evidence in health policy and strategy development¹⁶. The four thematic areas were Evidence (types and characteristics), policy development (stages and content), Context (level of power and position) and Policy

actors (roles and characteristics). For the purpose of this study policy development incorporates both the evidence generation and policy processes. Emphasis was laid on information on policy actors and evidence aspects.

The in-depth interviews were audio recorded and transcribed. Transcriptions were coded using Nvivo 10 qualitative analysis software and analysed by comparing with the findings of the document reviews. However, for this article; to fully understand actor roles in HRH policy, the Walt and Gilson policy triangle framework was used. It places the actors in the middle of the triangle of context, policy content and policy process and allows for exploration of actor interests, level of power and position with regards to the policy; from the agenda setting through to the policy formulation, implementation and evaluation

17.

Ethical considerations

Ethical approval for the study was obtained from the Ethics Board of the University of Nigeria Teaching Hospital Enugu.

RESULTS

Actors involved in policy process

Four broad groups of actors were very involved in the policy processes namely:

i. Government policy makers, ii. Civil society organizations (CSO), iii. Academia and iv) Development partners (DP). Groups infrequently mentioned were health workers, legislators and private health service providers. Actors played various roles in developing the HRH policy based on their individual understanding of evidence, their ideologies and the evidence considered most important for policy formulation.

A cross cutting look at the key actors involved in both HRH policy and evidence process identified different actors' groups. These actors included top policy elites such as the government policy makers and minister of

health, senior civil servants, development partners, regulatory bodies, civil society organizations, and other individual consultants. The actors specifically identified in the policy process were Minister of Health, Directors in the FMoH, Director planning, research and statistics (DPRS) of various SMOHs, a technical working group comprising; professional health groups and academia. Also involved were the members of the National Council on Health and the Medical and Dental Council of Nigeria (MDCN), CSO's and Development partners such as Partnerships for Transforming Health Systems Phase 2 (PATHS2), World Health Organisation (WHO) and State Accountability and Voice Initiative (SAVI) played a huge role. Members of the academia and other research networks participated also in the policy process. However, involvement of actors during the two phases of policy development varied.

Some actors were specifically identified as participating in the evidence gathering process; Government policy makers, Heads of service and directors in SMOH, Primary health care boards, and health training institutions, MDCN, development partners and individual consultants consisting of researchers and the academia. A larger representation of actors were involved in the policy process than in the evidence process. The identified gap suggests that there was a narrower actor network and participation during evidence process than there was during policy process, though important actors were still left out in both processes. However, there was a clear cut presence of the international actors in both processes, some of which together with the FMoH spearheaded the policy. The directorate of planning, research and at all levels of the government were involved. Although consultants were hired to generate the evidence, it would have been more meaningful if a network of some researchers were involved in the evidence process. Unfortunately, the media also did

not participate in either of the processes. This implied that there was poor dissemination of the policy before it was launched. Excerpts from the interviews buttress this point.

"You know in the ministry of health, there are about five directors, and a permanent secretary. All of them were involved. The commissioner was also involved. There were some technical assistants from WHO, HERFON, and other partners. All presidents of professional bodies were all there. There were people from health training institutions and research organizations"- (HRH Policy maker 5). "We did not see any member of the media during all these meetings. They were only present when we had concluded the policy and were launching" (Policy Maker)

"Consultants were hired to do the assessment but they worked through the ministry of health. The director of planning, research and statistics was involved. Sometimes, the director of administration, director of public health, nursing, and principal and provost of various training institutions were involved, including colleges of health sciences, health technology and midwifery schools and various professional bodies and their registration boards" - (Policy maker)

Stakeholders' perception of evidence

The respondents described evidence in different ways and most respondents' perceived evidence to be something factual and concrete to support a given decision. This is shown by the following quotes'

"My understanding of evidence use is having concrete data that has been collected through a process that is considered legitimate and you give reference to that data. It could have been a survey." (NGO)

"[...] evidence is like a mere idea that has been harvested and shows where you are, and informs what you intend to subsequently do. In this context, it should prove there is a situation' (Policy-Maker- Legislator)

Policy makers, especially at the departmental and ministerial levels viewed evidence as concrete physical evidence of data and information garnered from experience of experts in a particular field. A statement reflecting the opinion of the policy maker says *"Evidence is something that is feasible, that is physical... you can see it... something that you prove over a period of time or something that is concrete" It could also be something that you have experienced"* (policymaker-ministry of health)

Academics perceived evidence to be factual information on the specific area that the policy is being developed. *"The policy process and development should be supported by actual fact found or issues that you want to address"* (Academia)

Development partners perceived evidence to be verifiable information like that obtained from primary surveys conducted within the country or published national and international data sets and articles to reports from stakeholder consultations *"Evidence am looking more at empirical data...empirical data. But beyond looking at empirical data, am also interested in the process of gathering that data. I think it is the data about the people". (DP)*

Role of Actors

Actors played diverse roles in the evidence process which included production and distribution of health workforce registry and hiring of consultants who generated the evidence. Some actors facilitated and coordinated the evidence generation and dissemination process. While some (academics) applied their technical knowledge to facilitate evidence generation and dissemination. Some actors were important in coordinating the drafting of the policy document. These actors were sometimes in groups or consulted as individuals who were in strategic positions. The roles of specific actors is shown below;

Government policy makers

Our analysis shows that government policymakers played a lead role in the development of the HRH policy and three branches of the government were involved:

i. the executive branch ii. the executive branch and iii. the civil servants. The directional power and mandate of government actors to make policies and commission evidence for policy development contributed to their high influence on the policy processes.

Although government played a formal lead role in evidence used in HRH policy development, its involvement and level of power seemed hinged on the presence of a policy champion who was at the highest level of government and seemed to drive the policy development process. In the words of one government respondent:

"Before now there was no track of the Human Resources for Health and the minister then capitalized on that because he was very serious with his health reform agenda in that period. You know this country had so many health reforms in so many areas during his tenure". Policy maker

According to the respondents, two sub-categories of government were particularly active in policy development: i) executive arm (e.g. Minister of Health; Federal Executive Council); and ii) bureaucrats or civil servants in the administrative system (e.g. Permanent secretary and Directors in the Ministries and Departments). These were often drawn from national and state levels of government. Policy was developed at national level, with the states (i.e. sub-national levels) taking responsibility for policy implementation. The executive arm of government mainly played the role of agenda setting, after which the bureaucrats initiated and coordinated the process of policy development.

"The Federal ministry of health then spearheaded a meeting of experts where a technical working group was constituted and the decision to gather evidence to develop the policy was made." The

ministry of health was like the driving engine for the whole process. So whatever happens, there is high level of ownership of policy document. Various training institutions, line ministries, and agencies were also involved" - policymaker

Civil society organizations

Respondents stated that CSOs comprising mainstream grass-root non-governmental organisations (NGOs), professional regulatory boards and councils with close ties to the government and registered under government regulations, exerted their influence through evidence generation and advocacy by acting as pressure groups to promote the interests of patients or health staff advocating for e.g., improvements in healthcare delivery through workforce redistribution and recruitment. This is evident in the response below

'But you know, there was a lot of lobbying in terms of buying the interest of partner organizations and other CSOs----- professional bodies would lobby. You know if they don't do that, then wait for them to strike during implementation. (policy maker)

Academics

Academics are public health experts in universities and research institutions. The respondents reflected that technical competence of academics was the main characteristic, which contributed to their influence in evidence and policy processes. *"Consultants mainly from universities and research institutions were hired to do the assessment but they worked through the ministry of health."* (CSO)

Development partners were involved in both the evidence and policy processes. They included both bilateral for example; the World Bank, Department for International Development (DFID) and United States Agency for International Development (USAID) and multilateral organizations such as United Nations International Children's

Emergency Fund (UNICEF), WHO and PATHS2. A combination of technical expertise and financial power were the key characteristics of this group of actors, contributing to their roles in evidence and policy processes. Multilateral organizations such as PATHS2 and WHO, played a key role in setting the policy agenda. However all the respondents opined that PATHS2 virtually spearheaded the development of the HRH policy especially the evidence generation process where a situation analysis was done.

“Actually PATHS started the move. But then remember it was a national agenda. Many organizations were already making noise about it, but this time PATHS led in the development. So, we had support from PATHS and PATHS got consultants who led the process.” (policy maker)

Health workers

These were nurses, doctors, dental and allied health practitioners in private and public practice who were often represented by their professional organizations. In the analysis we regarded practitioner and professional groups¹ under health workers as these groups often represent the interests of health workers.¹⁵ From our observations the role played by this group of actors is unclear. However their role can be said to be contributory as the heads of health institutions and professional organizations were a part of the technical working group. The practitioners were more at the service delivery level and thus may be involved at the policy implementation level.

The roles played by the various actors determined their level of influence on the evidence and policy processes. Government and development partners had identically

high influences on policy and evidence processes with government initiating, coordinating the processes and approving policies, while development partners provided funding and technical expertise for the process, CSOs had a high influence on the evidence and policy processes because of their active involvement in evidence generation and advocacy. Academics and researchers played a medium role, featuring mainly as consultants for generating research evidence.

An individual was identified by our respondents as a policy champion who strove persistently for policy change, thus individual interests and value of policy champions appear to be important in inspiring leadership role in policy processes.

For example, the perceived alignment of the personal agenda of the Minister for Health, with the health sector reform agenda of the country was reported as being a particular motivation for developing the HRH policy. Despite the international interest in promoting HRH in Nigeria, respondents believed the policy would not have been formulated without a favourable political climate and particularly the personal interest of the Minister of health, who took on the role of a policy champion.^{17, 18} These findings are summarized in table 1 below.

Actor roles during policy development are not known to be static and levels of influence might change from one phase to another. Each group of actors presented in this table, is associated with specific characteristics where they had influenced HRH policy development the most.

Table 1: showing actors by their level of power and influence in policy development process

Power of Actors	Actor Groups	Type of influence exerted	Relevant quotes
High	Policy Elites	Highly influenced evidence and policy development. Spearheaded the policy and evidence processes. Gave legal backing and endorsement to both processes.	‘The government interest is in the reform because if the government was not interested in the reform it wouldn’t work. So the key commitment of the government was important.’
	Actors inside bureaucracy, e.g. Senior Civil Servants MOH, DPRS	Concept note development. Custodian of HRH data. High power to dictate the tone of policy development	‘The leadership of the ministry and some of the various departments took charge of spearheading the proposal. The Ministry of Health that dictated the tone’.
	International Actors e.g. PATHS2, WHO	Highly influenced funding to generate evidence, pay consultants, hold technical meetings.	‘Financially and technically, contributions were mainly from WHO and PATHS 2’. (HRH Policy maker)
	Interest groups/CSO/network	Advocacy: promoting interests of vulnerable people, Generating evidence.	They defend the rights of citizens and ensure concrete information on distribution of health workers, where they are? Whether public or private sector. (HRH Policy maker)
Medium	Academia/Research networks	Brought their power of knowledge and expertise into the evidence process. Were invited to the policy process because of their technical skill	‘There was research conducted by individuals like lecturers in the higher institutions and We consulted them and called for scientific presentations from them. We used their presentations to inform the outcome of the policy.’ (HRH Policy maker)
	Legislators	Had power to issue orders but never did. Did not influence the evidence process and to a lesser extent the policy process.	‘The house of assembly were co-opted in the process so as to give priority to health issues that were teased out from the assessments’. (HRH CSO)
Low	Media	Were not mentioned	Were not mentioned
	LGA	Had very little influence	‘So we had a meeting with them, in fact a dissemination meeting so they are clear on these issues (HRH Policy maker)
	Health staff	Not visible in any of the processes. Provided information on health workforce distribution as informants	They give you information on distribution of health workers, where they are? Whether public or private sector. (HRH Policy maker)

The arrangement of the table above shows that power decreases downwards and those actors in the group labelled high were more influential in the policy development process than those at the medium and low groups.

Different actors exhibited different levels of influences and types of power in the evidence process. The development partners were very influential, especially in financing of evidence processes and funding of technical meetings. The policy elites such as the honourable minister of health who was a technocrat used his power of position to move the HRH issue onto the policy agenda as he was very serious with his health reform agenda. The case was also similar for senior civil servants and other actors within bureaucracy who had powers of office and positions to direct, produce and communicate the evidence. The CSOs had high power because their contributions seemed indispensable. They were involved in evidence generation and seemed to be able to produce some evidence on absolute numbers and distribution of health workers in the country. They also formed a pressure group advocating for citizen rights. Although the consultants/academia lacked the power of position as well as financial power to influence the evidence process, their technical expertise may have facilitated the most part of the process as they were hired as consultants to carry out the baseline survey and contribute to the policy development process as well by using evidence from their researches.

DISCUSSION

The stakeholders involved in developing these policies represented different bodies within (health care providers) and outside (executive and legislative arm) the health sector. In Nigeria, like most other countries, public policy making is the mandate of elected government officials or their appointees. These policy makers are influenced by various groups of actors who have special interests. These actors who may

not have the power to make or enforce policy themselves, exercise varying levels of influence on its process.^{2,19} This has implications on advocacy and dissemination of the policies in terms of bringing research closer to people and policy making.

The media makes ideas and ideologies stronger and more manifest and their participation can be used to advance public health agendas.^{20,21} In this study however, the role of the media was not felt because their usual ability to provide important context for facts in this policy process was not demonstrated. This neglect of the media in both processes could imply that the policy may not have been disseminated maximally. Many of the implementers or recipients of this policy were probably unaware of the development of this policy. This alone could affect the success of policy implementation and uptake negatively.

The medium involvement of the academia and researchers show insufficient representation of this group during the policy development. The results show they were more active during the evidence generation stage. This will contribute further to the apparent disconnect between policy makers and researchers, making research uptake more difficult. The academia are well informed and would reasonably be expected to facilitate communication and sharing of information among key stakeholders, policy-makers and end users at every stage of the policymaking process. The fact that there were active CSO networking was a positive finding, because active group and individual engagement in policy making is an important factor for producing a successful policy document.¹⁹

The presence of a collaborative environment formed through the development of dynamic networks involving policy-makers, researchers, users and representatives from civil society who meet around well-defined

issues of concern to policy-makers gives credibility to the process. The interplay of power among actors to influence the policy process was a very dynamic one. The power play though perceived as mainly positive would have been fraught with tensions between the actors as they each sought to have greater influence on the process. Similarly the influence and interplay of power in policy process as well as actor relationships has also been illustrated in other studies.^{22,23}

The decision to formulate policy from available evidence was largely dependent on the ideologies and commitment of government and the stakeholders' spearheading and developing the policies. These individuals can be called policy champions because they are instrumental to implementing a change process and ensuring the use of evidence to influence policy change.¹⁷ Respondents mainly referred to the policy champion as an individual, however individuals often represent organizations and these organisations and inter-organizational relationships are likely to affect their roles to influence policy process.¹⁸

Policy-makers and researchers work in different environments. This difference becomes important as they express their experiences and their varying perspectives on use of knowledge and information in policy making, thereby producing a rich policy. The policies were developed by capturing most participants' contribution towards the development of the documents and each person's view was a reflection of their perception of the problem. Since policies are made to shape and manage people's behaviour, involving those groups of people affected by policy is important in the policy formulation process.²⁴

STUDY LIMITATIONS

This study did not capture the use of evidence in the implementation of the HRH policy.

CONCLUSION

The types of evidence used in formulating the HRH policy are determined by the ideologies of the most powerful actors as well as their political leanings. The role an actor played in the evidence and policy process determined the influence wielded by the actor in the final stages of policy development. Policy-making increasingly requires interaction between stakeholders to provide solutions based on consensus models even after research evidence. Researchers and academia do not generally operate under such restrictions and act only based on documented evidence. This apparent disconnect between the way academia and policy makers think will make uptake of research findings alone more difficult by policy makers.

Government policy makers, especially the executive arm had the power of authority and coercion and so had a high influence and drove the policy process. Financial power and group power also give actors an added advantage and high influence during the policy development process, as in the case of the development partners and the civil society organizations.

REFERENCES

1. Lomas, J. Connecting research and policy. *Canadian Journal of Policy Research*. 2000;1: 140-144. Available from http://portals.wi.wur.nl/files/docs/ppme/lomas_e.pdf. Accessed 10 April 2014
2. Michalowitz IL. What determines influence? Assessing conditions for decision-making influence of interest groups in the EU1. *Journal of European Public Policy*. 2007;14 (1):132-151.
3. Iturralde P, Heredia L, De Rham P, Mancero L. How do social actors influence public policies? 2007. Available from <http://www.publicpolicyadvocacy.info/>. Accessed 10 April 2014.
4. Echikwonye RA and Beetseh K. The role of public policy making and development in Nigeria *Journal of Social Science and Public Policy*. 2011 Volume 3. Available from <http://www.cenresinpub.org/>. Accessed 5 March 2014.
5. Federal Government of Nigeria. The Constitution of Federal Republic of Nigeria 1999 (as amended) (March 2011). Lagos, Nigeria: Federal Government Printer, Lagos Nigeria. Available

- from www.wipo.int/edocs/lexdocs/laws/en/ng/ng014en.pdf. Accessed 5 March 2014.
6. Gulhati, Ravi. The making of economic policy in Africa (English) 1990. pg. 34-35. EDI seminar series World Bank Institute (WBI). Washington, DC: The World Bank. Available from <http://documents.worldbank.org/curated/en/372611468740130973/The-making-of-economic-policy-in-Africa>. Accessed 5 March 2014.
 7. Grindle MS, Thomas JW,. Public choices and policy change: the political economy of reform in developing countries. Johns Hopkins University Press, Baltimore. Available from <https://trove.nla.gov.au/version/7656570>. Accessed 5 January 2016
 8. The World Fact book Washington, D.C. Central Intelligence Agency; 2014. Available from: <https://www.cia.gov/library/publications/the-worldfactbook/geos/ni.html>. Accessed 20 February 2015.
 9. World Health Organisation. WHO African Region: Nigeria, statistics Global Health Observatory. 2015. Available from <http://www.who.int/countries/nga/en/>. Accessed 7 May 2015.
 10. Labiran A, Mafe M, Onajole B, Lambo E. Health workforce country profile for Nigeria. Available from www.afro.who.int/index.php/hrh-Nigeria.pdf. Accessed 20 December 2014.
 11. Federal Ministry of Health Nigeria. National strategic health development plan (National health plan) 2010 - 2015; Abuja. Available from <http://www.health.gov.ng/doc/NSHDP.pdf>. Accessed 20 December 2014
 12. World Health Organisation World health report: Working together for health. 2006. Available from www.who.int/whr/2006/en. Accessed 20 December 2014
 13. Federal Ministry of Health Nigeria. National Human Resource for health policy document, Abuja. Federal Ministry of Health. 2006. Available from www.health.gov.ng/doc/NSHDP.pdf Accessed 28 June 2017
 14. Olomola A. An analysis of the research-policy nexus in Nigeria. In *The Policy paradox in Africa - Strengthening links between economic research and policymaking*, 2007. ed. E.T. Ayuk and M.A. Marouani. Africa World Press/IDRC. Available from http://www.idrc.ca/en/ev-113402-201-1-DO_TOPIC.html Accessed 20 February 2015.
 15. Onwujekwe O, Uguru N, Mbachu C, Etiaba E, Uzochukwu BSC and Ezumah N. 2013. Country report on assessing the role of evidence in health policy and strategy development in developing countries. *Health Res Policy Syst.* 2015; 24 (13):46. doi: 10.1186/s12961-015-0049-0
 16. Mirzoev T, Das M, Ebenso B, Rawat B, Uguru N, Russo G, Bymolt R and Huss R. Contextual influences on the role of evidence in health policy development: insights from India and Nigeria. *BMC Health Services Research.* 2014; 14(Suppl 2):05 doi:10.1186/1472-6963-14-S2-O5.
 17. Walt G, Gilson L. Reforming the health sector in developing countries: the central role of policy analysis. *Health Policy Plan.* 1994. 9(4):353-70.
 18. Dill K, Shera W. *Implementing Evidence-informed Practice: International Perspectives.* Toronto: Canadian Scholars Press, 2012. 241 p. Available from <https://pure.qub.ac.uk/portal/en/publications/implementing-evidenceinformed-practice-international-perspectives> (f1c51976-21a7-4c81-bb3e-ca328c907d51).html. Accessed 20 February 2015
 19. Mirzoev T, Green A, Gerein N, Pearson S, Bird P, HaBTT Ramani K, Qian X, Yang, X., Mukhopadhyay, M. & Soors W. Role of evidence in maternal health policy processes in Vietnam, India and China: findings from the HEPVIC project. *Evidence and Policy.* 2013; 9 (4): 493-511. ISSN 1744-2648.
 20. Uta L, Gilson, L. Actor interfaces and practices of power in a community health worker programme: a South African study of unintended policy outcomes. *Health Policy Plan.* 2013 Jul;28(4):358-66. doi: 10.1093/heapol/czs066.
 21. Delisle H, Roberts HJ, Munro Jones ML, Gyorkos TW. The role of NGOs in global health research for development. *Health Research Policy and Systems.* 2005;3:3. Available from <https://health-policysystems.biomedcentral.com/articles/10.1186/1478-4505-3-3>. Accessed 20 February 2015
 22. Prinja, S. Role of Ideas and Ideologies in Evidence-Based Health Policy. *Iranian Journal of Public Health* 2010. 39(1):64-69.
 23. Shadish WR, Cook TD, Leviton LC. Shadish WR, Cook TD, Leviton LC. *Foundations of Program Evaluation: Theories of Practice.* Sage Publications, 1991. Available from <https://www.scholars.northwestern.edu/en/publications/foundations-of-program-evaluation-theories-of-practice>. Accessed 10 January 2015.
 24. Buse K. 2004. *Making Health Policy.* Available from: Buse K, Mays N, Walt G, editors. *Making health policy. Understanding public health.* Berkshire: Open University Press; 2005.: Accessed 20 February 2015.