# Comparative analysis of health care system of Iran and Nigeria by Using WHO Building Blocks

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### **Abstract**

Health care is multifaceted system including hospital care, patient care, community, policy and environment and policies to improve health. Health systems involve a number of associations, organizations, resources and individuals whose basic role is to enhance Health for all. World Health Organization (WHO) framework is a comprehensive tool for assessment of health system. It has six blocks that define the standard measurement. That provides crest and reliable information for decision-making across all health system building blocks. The main objective of this article is to describe the health care delivery system of Iran and Nigeria, and analysis of both the health care systems in order to learn son lesson to improve health care sector of Nigeria.

# Introduction

Iran is an ancient country in the Middle East among Asia, Europe and Africa.(Mehrdad 2009) Iran is the one of the largest country 17th ranked, total area 1,648,195 Km,(Madani 2014) total population of Iran is 79,109,000 with the growth rate of 1.24%. (Darbandi, Mashati et al. 2017) The average life expectancy is 75.95years, birth rate is 17.9/1000 whereas the death rate is 5.3/1000 population. World Bank reported in 2016, Iran's GDP is 13.39% (418.977 billions). The Iran current health issues are triple burden disease like NCD, Injuries and mental health (WHO2012). Iran's health system has made great achievements, with the help of codified and regular programs, particularly in the public health sector and Primary Health Care (PHC). Improved life expectancy, Maternal and children's death decreases, NCD (prevalence and incidence) reduced, improved sanitation system, clean drinking water supply, Strengthen and increased services and expended coverage of the health system in overall country(Zaidi, Khan et al. 2014)

On the other hand Nigeria is located in North Africa, total area of Nigeria is 923,768KM2, total population is185, 989, 640, with growth rate 2.6%.(Nelson 2014) The average life expectancy is 53.428 years; much lesser than Iran. About 38.03 childbirths/1,000 population whereas 12.4 deaths/1,000 respectively. According to the World Bank Report 2016 Nigeria GDP is 3.7% (44.6 billions).(Organization 1999) Many studies indicated that health care system of Nigeria is deprived. Nigeria 187th ranked among 191 countries for health provision performance (World Health Report 2000) that's showed a large population of this country suffering from poor health care. The current health issues of Nigeria are maternal, neonatal, and nutritional followed by HIV, TB and Malaria.(Organization 2013)

## **Monitoring Framework WHO Six Building Blocks**

Health systems involve a number of associations, organizations,

resources and individuals whose basic role is to enhance Health for all(Organization 2010) World Health Organization (WHO) framework is a comprehensive tool for assessment of health system. It has six blocks that define the standard measurement. A welfare system includes organization, individuals and events, whose essential goal is to improve, reestablish health. Like some other framework, it is an arrangement of interconnected parts that need to work together to be persuasive. A standard service care framework conveys a better Quality of care to everybody who needs it and at any cost but equitable.(Alvarez-Rosete, Hawkins et al. 2013). The single structure incorporates the accompanying six building blocks which are utilized as a center format for evaluation including financing, health workforce; health information system, medical products and technology, service delivery; and governance.(Organization 2010) The resulting WHO observing structure perceived that "sound and solid data is the establishment of basic leadership overall health system building blocks. The idea of data sharing and correspondence frameworks has changed drastically since the WHO health system structure was presented. Correspondingly, information and contemplating "quiet commitment" in human services has incredibly advanced. Individuals who are effectively engaged with their own human services have a tendency to have certifiably better results(Thompson). Each country has its own health system and own strategies plan for achieving health goals; however these tools help to standard Health system analysis. After 2016 transition in global health from Millennium Development Goals (MDGs) to Sustainable Development Goals (SDGs) is a noteworthy move for resource-limited countries that have been struggling to improve the quality of healthcare at the ground. The main aim of this study is to compare health care system of Iran and Nigeria using and make recommendations for Nigeria.

## Comparison of health care system

## **Health Services Delivery**

Iran Health System provides all three levels of services mainly Primary health care and then makes referral to the secondary and tertiary health care according to needs of individual. Iran's government provides primary care services for free of cost. NGOs are also active Iran and their main focus is on breast cancer, thalassemia and diabetes and many more(Javanparast, Baum et al. 2011). In Iran, under the urban and rural family physician program this form of diagnosis and referral has been implemented.(Nasseri, Sadrizadeh et al. 1991) Also special care service is provided through the referral system in these areas; however, there is no referral system in Iran and all out-patient services have access to specialists, and patients have the independence to choose them. (Lewis 2007) Access to and coverage of health services under developed countries that have made primary care a cornerstone of their health systems have been successful in expanding coverage to a range of preventive and curative services.(Kruk, Porignon et al. 2010).In Comparison to Iran services delivery Nigeria main health service delivery is through public and private facilities. About 38% percent of every single enlisted office in the FMOH (Federal Ministry of health) wellbeing offices database is exclusive, of which around 75% are essential care and 25% are Primary health care sector(Organization 2010) further five hospital beds per 10,000 populations. Total of 23,640 public and private hospitals(FMOH). Overall coverage and assess of care is weak need to expend more however the poor performance of the health sector has been shortfall mainly to government's non

seriousness towards health (Idu, Erhabor et al. 2010).

## Human resource

Ministry of Health and Medical Education are responsible for training and modifying of the curricula of human resource in Iran. Human resources for health data show the density of general physicians is 8.9 nurses and midwives is 1.9 per 10 000 population, Density of pharmacists increased from 2.0 to 5.4 per 10 000 population (Organization 2016). The density of psychiatrists is 1.49 per 100 000 population (Sharifi, Hajebi et al. 2015)

Nigeria has one of the largest stocks of human resources for health in Africa, about 39,210 phyicians and 124,629 nurses, which translates into about 30 doctors and 100 nurses per 100,000 populations. On average, annual shortfall due to all factors among doctors is about 2.4%; nurses and midwives 1.4%; pharmacists and technicians 2.2%; laboratory staff 1.3%; etc. Attrition in rural areas is higher than in urban areas.(Oseji 2017)

## **Medical Products and Pharmaceutical**

Iran's pharmaceutical market has shown some extreme growth from the past years and has large pharmaceutical market in comparison with developing countries. The national generic medicine policy encourages prescribing generic drugs. The prices of the drugs are same in public and private sector and are also available online. Pharmaceutical expenditure is about to 20% of total treatment costs. About 10 largest companies hold close to 50% market share and 10 drugs which imported from pharma companies hold more than 73% of the importing drugs market. All phases of medicines policy comprising of manufacturing, importation and dissemination of medicines in Iran are under strict control of Iran Food and Drug Administration (IFDA) (Mehralian, Rajabzadeh et al. 2012)

Nowadays in Nigeria 130 pharmaceutical industries working and 5 indigenous companies control 58 percent of the manufacturing of pharmaceutical products. In Nigeria regulation bodies such as Pharmaceutical Council of Nigeria (PCN), Medical Laboratory Science Council of Nigeria (MLSCN) which Regulates training and development Licensee pharmacists and Technicians and regulate and accredit Medical laboratories. The National Agency for Food and Drug Administration and Control (NAFDAC) is accountable for the drug registration and medical equipment (Oseji 2017).

# **Health Information system**

Both Iran and Nigeria are following a electronic information system i.e. electronic health files or the Electronic Health Record (EHR) system(Chaudhry, Wang et al. 2006) and Health Resources Availability Monitoring System (HeRAMS) respectively it to policy maker(Nickerson, Hatcher-Roberts et al. 2015). The manual data collected from rural and urban population is transferred to district health centers, which is then entered into computer to provincial health care center, these countries still facing challenge to convert whole system in adequate data management due to less skilled work force. (AbouZahr and Boerma 2005)

### Health care Financing:

Iran and Nigeria financing systems are mixed and public complex system, where public and private sectors (private for profit providers, Non- profit organization, community based organizations, religious and traditional care workers) revenues from government. Iran's government has two big health insurance i.e. social security insurance and Iran health insurance organization. Total health expenditure in Islamic Republic of Iran has increased rapidly in the past decade. The per capita health expenditure increased from US\$ 65 in 2000 to US\$ 259 in 2007. In Iran, almost 90% of community is covered by public insurance or social security insurance but 56.8% is out of pocket (OOP). (Organization 2010)Nevertheless, to reduce the out of pocket payment, Iran introduced health transformation plan (HTP) in May 2014. Iran after the implementation of HTP showed that there was a significant decrease in OOP expenses and physician's casual fee.

However in Nigeria per capita health expenditure is US\$ 129.5 in 2010 and social security insurance less than 5%. Total household out-of-pocket expenditure has persisted the major source for constituting 70.3% in 2009 however Government expenditure on health as a percentage of GDP is lower the average for Sub-Saharan Africa(Oseji 2017).

#### Leadership and Governance

The leadership has played a vital role in improvement of health care as Iran's Governance is alike to developed countries in terms of policy development, funding and resource allocation of health care budget. It was done by Ministry of health and Medical Education to reduce the inequity, promote quality in healthcare system. Primary care services are provided by the public sector and Government is responsible and regulations. There is no Cost and fees at the time of services to the physicians. Iran, government agencies are accountable for population health whereas Nigeria works a devolved health system run via the Federal Ministry of Health, State Ministry of Health, and Local Government Health Department . The FMOH is the general health policy framing body. It directs and supervises the actions of the additional levels and local governments have the main duty of handling the PHC. (Organization 2010)Another important challenge in Nigeria's health care system is the lack of use of evidence for planning and policy making due to inadequate funding in health by the Nigerian government that's amplified poor medical services and poor wage of health workers in public sectors. The privatizations of health care services make individual to pay extra expense for seeking services even in Government sectors. There is a need of concrete provisions for health in Nigeria's constitution with the health rights of the people defined and made justiciable to empower them to demand accountability from their leaders(Aranda-Jan, Mohutsiwa-Dibe et al.

Strategies and Recommendations to Improve Nigeria Health Care System

- Government's expenditure should be increased on health carefulness services.
- Provision and services delivery should be expended and assessable for all. This will enhance it likely for medical services to be better in overall government hospitals and health workers sufficiently waged.
- Social welfare system or insurance system should be introduced to contribute especially for poor families who cannot pay for medical bills in public hospitals. It will help to reduce the out-of pocket expenses on health financing system that will ultimately affect food expense, liability load moreover increases health seeking behaviors of sick person.
- Improve Health policies co-ordination, integration and implementation among health packages services, research and external donor agencies.
- Public hospitals should be encouraging the use of traditional medicine.
- Leadership has to play their roles in reduction of corruption in the health sector that will bring changes in allocation of resources that mandatory to improve the performance of the health segment.

# Conclusion:

Health care system includes various building blocks which include leadership, service delivery, health care finance, technology, health workforce and information and research. Different countries adopt a variety of health systems thus differ in their characteristics. Therefore, to achieve access coverage and quality safety; monitoring and evaluation plays an important role in improving health outcomes, enhance responsiveness, augment financial protection, and improve efficiency in health care system of Iran and Nigeria. Inclusion Iran's health system has made great achievements, with the help of codified and regular programs, particularly in the public health sector and

Primary Health Care (PHC). Improved life expectancy, Maternal and children's death decreases, NCD (prevalence and incidence) reduced through sustainable strategies in which building block however to improve health care system this paper help policy makers to take reasonable decisions.

#### References

- 1. AbouZahr, C. and T. Boerma (2005). "Health information systems: the foundations of public health." Bulletin of the World Health Organization 83(8): 578-583.
- 2. Alvarez-Rosete, A., et al. (2013). "Health system stewardship and evidence informed health policy."
- 3. Aranda-Jan, C. B., et al. (2014). "Systematic review on what works, what does not work and why of implementation of mobile health (mHealth) projects in Africa." BMC public health 14(1): 188.
- 4. Chaudhry, B., et al. (2006). "Systematic review: impact of health information technology on quality, efficiency, and costs of medical care." Annals of internal medicine 144(10): 742-752.
- Darbandi, A., et al. (2017). "Status of blood transfusion in World Health Organization-Eastern Mediterranean Region (WHO-EMR): Successes and challenges." Transfusion and Apheresis Science 56(3): 448-453.
- 6. Idu, M., et al. (2010). "Documentation on medicinal plants sold in markets in Abeokuta, Nigeria." Tropical Journal of Pharmaceutical Research 9(2).
- 7. Javanparast, S., et al. (2011). "A policy review of the community health worker programme in Iran." Journal of public health policy 32(2): 263-276.
- 8. Kruk, M. E., et al. (2010). "The contribution of primary care to health and health systems in low-and middle-income countries: a critical review of major primary care initiatives." Social Science & Medicine 70(6): 904-911.
- Lewis, M. (2007). "Informal payments and the financing of health care in developing and transition countries." Health Affairs 26(4): 984-997.
- 10. Madani, K. (2014). "Water management in Iran: what is causing the looming crisis?" Journal of environmental studies and sciences 4(4): 315-328.
- 11. Mehralian, G., et al. (2012). "Intellectual capital and corporate performance in Iranian pharmaceutical industry." Journal of Intellectual Capital 13(1): 138-158.
- 12. Mehrdad, R. (2009). "Health system in Iran." JMAJ 52(1): 69-73.
- 13. Nasseri, K., et al. (1991). "Primary health care and immunisation in Iran." Public health 105(3): 229-238.
- 14. Nelson, O. (2014). "Quality of Medicines: Everyone a Stakeholder?".
- 15. Nickerson, J. W., et al. (2015). "Assessments of health services availability in humanitarian emergencies: a review of assessments in Haiti and Sudan using a health systems approach." Conflict and health 9(1): 20.
- 16.Organization, W. H. (1999). "Health workers for change: workshops make a difference: stories of how health workers changed their workplaces."
- 17. Organization, W. H. (2010). "Country cooperation strategy for WHO and Islamic Republic of Iran: 2010–2014."
- 18. Organization, W. H. (2010). Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies, World Health Organization.
- 19. Organization, W. H. (2010). World health statistics 2010, World Health

- Organization.
- 20. Organization, W. H. (2013). "Essential nutrition actions: improving maternal, newborn, infant and young child health and nutrition."
- 21.Organization, W. H. (2016). World health statistics 2016: monitoring health for the SDGs sustainable development goals, World Health Organization.
- 22. Oseji, U. (2017). "Exploring the Growing Market of the Nigeria Health Sector."
- 23. Sharifi, V., et al. (2015). "Twelve-month prevalence and correlates of psychiatric disorders in Iran: the Iranian Mental Health Survey, 2011." Archives of Iranian medicine 18(2): 76.
- 24.Thompson, K. "More than a Building Block: Inclusive, Responsive Leadership for Health System Strengthening More than a Building Block: Inclusive, Responsive Leadership for Health System Strengthening."
- 25. Zaidi, S., et al. (2014). "Integration of non-communicable diseases into primary health care: a snapshot from Eastern Mediterranean region."