

DETERMINANTS OF HEALTH CARE UTILIZATION IN KWARA STATE, NIGERIA

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ABSTRACT

Health care, like shelter, clothing and food, constitutes an important basic need for the survival of mankind. This explains why every citizen must enjoy quality and affordable health care. The main objective in this study is to examine the major factors that determine the utilization of health care facilities in Kwara State, Nigeria. We employed primary data that were generated through the administration of questionnaire and Focus Group Discussion (FGD). A sample size of 1,280 respondents was drawn through multi-stage sampling technique. The study employs descriptive and inferential analysis (logit regression analysis) for the analysis of the data. The findings from the study show that the respondents differed in the factors that determined their choice of health care facilities; and age, education, marital status, income level, means of transportation and attitude of the health personnel are significant factors that determine the use of health care facilities in Kwara State. Consequently, the study recommended that mass education should be intensified on the essence of utilization of appropriate health care facilities for both prevention and cure and national policies be strengthened by expanding the NHIS program to include all sectors of the society.

Key words: Health Care, Kwara State, Nigeria, Logit Regression.

JEL Classification: C25, I11, N37

1. Introduction

Good health is one of the essential conditions for the development of socio-economics of individuals and as well as the country as a whole. To be healthy implies more than being free from disease or sickness, it actually involves being in harmony with oneself and the surroundings. In this sense, disease is a threat to harmonious functioning of the body systems. Thus, the protection of the body against sickness and diseases is very important (Insel & Roth, 2002). Hence, good health is very essential for better quality of life as well as labor force for the creation and maintenance of a nation's wealth (Lucas & Gilles, 2004; The World Bank, 1994).

Good health is important both for the individual and the nation as a whole. The reason is that it enables individuals to participate in the production process effectively for the nation. It also allows individuals to enjoy life to its full extent (without pain). Ill-health results in the loss of productivity and the resources contributed into the production, leading to increase in the rate of poverty. Conversely, poverty promotes poor living conditions, malnutrition and illiteracy, thereby causing ill-health, hence the vicious cycle of ill-health and poverty. One of the ways to ensure good health is to make sure every individual has access to quality and affordable health care. It is, therefore, in recognition of this fact that Nigerian governments at various levels have made several efforts towards

the provision of health care facilities to its population. However, this has not really translated to improvement in overall health status of Nigerians. For instance, the recent ranking showed that Nigeria was ranked 187 out of 191, only ahead of Democratic Republic of the Congo, Central African Republic and Myanmar (World Health Organization, 2019).

In the same vein, the health indicators in Kwara State are still below targets which have recorded very slow progress over the years. Health service delivery in Kwara State is fragmented, meager and inefficient, health infrastructure is weak, number of health workforce is inadequate with a skewed distribution in favour of urban settlement (Kwara State Government: Strategic Health Development Plan, 2010). Thus, the presence of facilities did not always guarantee their utilization. Therefore, health services utilization can be seen as a type of individual behavior.

In view of the above, it becomes a source of worry to any well-meaning Nigerian, hence the need to research further into the area of health care facilities utilization. This present study, therefore, was designed to identify the determinants of health care facilities utilization in Kwara State, Nigeria. It further exposed the choice of type of health care facility utilized by the respondents, and finally examines the relationship between health care facilities utilization and its determinants with a focus on all the sixteen local government areas in Kwara State, Nigeria. The rest of the study is divided into five sections: section two presents the review of relevant literature, section three presents the methodology, analysis and discussion of research findings are presented in section four, section five discusses the implications of the research findings and section six contains the conclusion and recommendations of the study.

2. REVIEW OF RELEVANT LITERATURE

2.1 Health Care Delivery System in Nigeria

There are two complementary health care systems in Nigeria, which include the local traditional medicine and orthodox medicine adopted from the colonialists. The patronage of these services cut across class but most of the low income class patronize cheaper local medicine than their wealthy counterparts that mostly patronize orthodox medicine (Nwankwo, 2015). The Nigerian health care system is organized based on the political system of the country, where the health care service is on the list of concurrent responsibility of the three levels of government in the country (Federal Ministry of Health, 2005). The role of the Federal Government (Tertiary Health Care) is mostly concerned with the coordination of the affairs of University Teaching Hospitals, while the State Government (Secondary Health Care) involves the management of the various General Hospitals and the Local Government (Primary Health Care) focuses on dispensaries. However, the inability of the public health providers to meet the need of the people and the fact that Nigeria operates a mixed economy, encourage private health providers to have a visible role in health care delivery in Nigeria.

2.2 Theoretical Framework

This study is anchored on Health Care Utilization or Socio-Behavioral Model by Andersen (1968) because of its relevance to the study. Andersen developed a model of health care utilization, which looks at three categories of determinants: predisposing, enabling and need characteristics. The predisposing characteristics include family composition, social structure and health beliefs. Enabling characteristics include resources found within the family and the community. And the need characteristics include the perception of need for health services, whether individual, social, or clinically evaluated perceptions of need. Thus, some of the relevant variables considered as determinants of health care utilization in this study were based on this theory, in addition to the variables suggested by the related previous studies.

2.3 Empirical Review

Use of health services can be seen as a type of individual character. In general, the behavioral sciences described individual behavior as a function of characteristics of the individual himself, his environment and the interaction of the individual with the societal forces (Moore, 1969; in Andersen, 1973 and Newman, 1973). Thus, the utilization of health care by the people is dependent on their health-seeking behavior, which is determined by many factors (viz: physical, political, socioeconomic and socio-cultural). Studies have identified different factors affecting health services utilization both in developed and developing countries, among them is Elo (1992), who examined education as a socio-economic factor in health care facilities utilization without other factors. Onokerhoraye (1999) investigated the determinants of equity in the planning and distribution of health care facilities in Nigeria with emphasis on Bayelsa State, Nigeria, employing qualitative, cartographic and geographic information system for the analysis of the data collected. The emphasis focused more on spatial location and spread of the facilities rather than the affordability or acceptability of the facilities.

Asteraye (2002) identified the determinants of the medical treatment seeking behavior during illness and the demand for health care services in Woreda town, Western Gojjam. The study employed a maximum likelihood estimation technique to analyse the primary data collected for the study. The study revealed that individual and/or household specific variables such as sex of the patient, severity of illness, monthly income of the household and family size, and distance to reach the nearest health facility have significant effects on the seeking of treatment at the time of illness. Also, choices of health care service providers by the patients are found to be affected by the age of the patient, sex of the household head, the level of education of the patient, medical cost of treatment per visit and waiting time for treatment.

Uzochukwu and Onwujekwe (2004) studied the health-seeking behavior among women in South-Eastern Nigeria on choice of health care facilities and found that the patent medicine dealers were first in contact followed by traditional healers, private clinics and lastly community health workers. The utilization of health facilities provided by the private were preferred to the public ones. The factors in low utilization of health care facilities of the south-western woman were emphasized. Furthermore, Tanimola and Owoyemi (2009) examined the health-seeking behaviour in Anyigba, North-Central, Nigeria and found that economic factors contributed to delay in seeking care or treatment, and that only 50% of the respondents (largely urbanized) reported that distance (accessibility) was responsible for poor patronage of health care.

Similarly, Awoyemi, Obayelu and Opaluwa (2011), in their own work, concentrated on the influence of distance on the usage of health care services in rural areas in Kogi State, Nigeria. They employed descriptive statistics, index of accessibility and the multinomial logit regression. The result from their findings showed that household size, distance and total cost of seeking health care influenced the utilization of government and private hospitals while total cost of seeking health care and the quality of access route influenced the use of traditional care. They concluded that health care services should be established in the core rural areas in order to address the barrier of distance to health care facility utilization in the state.

Okumagba (2011) examined the choice of utilization of health care services by the elderly in Delta State of Nigeria. Data for the study were collected from a sample of 180 rural households utilizing the multi-stage stratified random sampling technique. The descriptive method was employed to analyse the data. The findings showed that distance, belief system, quality of health services received and finance were the major determinants of choice of health care system utilized by the elderly.

Sunday et al. (2015) investigated the factors that determine the demand for health care services among rural household in Ekiti State, Nigeria. The study employed descriptive and multinomial logit model to analyse collected data for the study. The results from the analysis revealed that majority of the respondents are males, married, in their middle age and preferred using Dispensary/Primary health care due to its proximity as source of health care services in the study area. The study further revealed that sex, marital status, household expenditure, and waiting time were

found to be significantly influencing the demand for health care services, among the rural households sourcing health care services from dispensary/Primary health care, private hospitals/clinics, patient medicine stores, general / teaching hospitals and traditional/spiritual homes.

The review of relevant literature above has shown that even though several studies have investigated the determinants of health care facilities utilization both within and outside Nigeria; however, only few of these have a larger coverage for the whole state, most especially in Nigeria. Most of their analyses also were based on descriptive analysis. In addition, another factors that have been largely neglected by the previous studies are the altitude of the health personnel and cultural approval as determinants of health care utilization. This present study, therefore, was designed to fill these gaps as related to the health care facilities utilization in Kwara State, Nigeria.

3.0 Methodology

3.1 Area of Study

This study was conducted in Kwara State, North Central part of Nigeria. The State has a population size of 3.2 million people (National Bureau of Statistics, 2018). It consists of sixteen (16) Local Government Areas for the purpose of its administration. This study, therefore, found it as a matter of convenience to follow this path of demarcated local areas in order to get the study sample. Each of these local government areas is in turn divided into wards originally for the purpose of political administration. The State enjoys tropical climate with two distinct seasons: rainy season (April – October) and dry season (November - March). Agriculture and trading are the predominant occupations of the people and it is also a civil servant state.

3.2 Nature and Sources of Data

In pursuing this research, the study is based on cross sectional data, which were mainly primarily sourced through the use of structured questionnaire to solicit response from all users and non-users of health care facilities (orthodox medicine and traditional care users). Data were collected on the independent variables (socio-economic and demographic characteristics; geographical location and distance of health care facilities; cultural belief of respondents and attitude of health care personnel), which are the determinants of health care facilities utilization while utilization of health care facility is the dependent variable.

3.3 Sampling Procedure

The study employed multi-stage random sampling technique for the selection of one thousand two hundred and eighty (1,280) respondents. The first stage involved the selection of all the sixteen (16) Local Government Areas where respondents were randomly selected for the study using stratified random sampling procedure. At the second stage, simple random sampling technique was employed to select two health care facilities from each of the Local Government Areas. At the third stage, purposive sampling procedure was used to select twenty patients per selected health care facility summing up to forty (40) per Local Government Area. Furthermore, at the fourth stage, twenty households were purposely selected to represent the non-users (traditional care users) in the localities of selected facilities summing up to forty (40) non-users per Local Government Area. Thus, the sample size for the study gave a grand total of one thousand two hundred and eighty (1,280) respondents.

3.4 Method of Data Analysis

This study employed descriptive and inferential analysis. The descriptive analysis was employed to describe the socio-economic characteristics of the respondents while the inferential method was used in estimating the determinants of healthcare facilities utilization. Binary Logit Model (BLM) method of estimation was employed for the analysis of the study due to categorical response nature of research target variable and because the dependent variable is binary, that is, limited to only two values. Health care facilities utilization is the dependent variable while

independents variables include: education, income level, cultural belief, marital status, occupation, religion, distance, age, transport and attitude of health workers. Thus, the model is expressed as follows:

$$P_i = E(I_i = 1/H_i) = \beta_0 + \beta_1 H_i + e_i \dots \dots \dots (1)$$

where P_i is the probability of utilizing healthcare facilities or not, H_i is the vector of indicators of health care facility utilization and $I = 1$ means the Household utilization of health care facilities in the last three months and Zero (0) if otherwise. Further, $H_i = f(E_i, Y_i, C_{Bi}, S_i, O_i, R_i, D_i, A_i, T_i, W_i)$ and can be stated in a functional form as:

$$H_i = \beta_0 + \beta_1 E_i + \beta_2 Y_i + \beta_3 C_{Bi} + \beta_4 S_i + \beta_5 O_i + \beta_6 R_i + \beta_7 D_i + \beta_8 A_i + \beta_9 T_i + \beta_{10} W_i + e_i \dots \dots \dots (2)$$

where H_i is the healthcare facilities utilization, E_i is education, Y_i is income level, C_{Bi} is cultural belief, S_i is marital status, O_i is occupation, R_i is religion, D_i is the distance, A_i is age, T_i is means of transportation and W_i is attitude of the health workers. The a priori expectation for each of the parameters in this model is written as follows:

$$\beta_1, \beta_2, \beta_4, \beta_5, \beta_8 \text{ and } \beta_9 > 0, \quad \beta_3, \beta_7 \text{ and } \beta_{10} < 0, \text{ while } \beta_6 > / < 0.$$

The equation (2) is the BLM that estimates the determinants of health care facility utilization in Nigeria. The maximum likelihood (ML) techniques aid estimation techniques in this instance since ordinary least square (OLS) technique cannot be used to estimate data at micro level i.e discrete data.

4.0 Results and Discussion

4.1 Descriptive Analysis

The descriptive analysis for the socio-economic characteristics of the respondents in this study entails the presentation of the data obtained for each of the variable in the form of table, the results are presented and discussed in the Table 1.

Table 1: Socioeconomic Characteristics of the Respondents

Variable	Frequency	Percent (%)
<u>Gender</u>	-	-
Male	320	25
Female	960	75
<u>Marital Status</u>	-	-
Single	367	28.7
Married	552	43.1
Divorced	361	28.2
<u>Religion</u>	-	-
Christianity	527	41.17
Islam	685	40.6
Traditionalist	68	5.31

<u>Age</u>	-	-
>45	424	33.1
45-60	421	32.9
60 and Above	435	34.0
<u>Educational Qualification</u>	-	-
Informal Education	32	2.5
Formal Education	1,248	97.5
<u>Occupation</u>	-	-
Trading/Business	460	35.9
Civil Servant	520	40.6
Private Employee	300	28.2
<u>Income Level</u>	-	-
Low	798	62.3
Medium	342	26.7
High	140	10.9
<u>Number of Healthcare Facility</u>		-
None	243	18.9
<5	554	43.3
5-10	206	16.1
>10	162	12.7
Undecided	115	9.0
<u>Distance to Healthcare Facility</u>		-
5km	573	44.8
6-10km	294	22.9
>10km	413	32.3
<u>Means of Transportation</u>		-
Trekking	386	30.1
Personal Vehicle	569	44.5
Commercial Vehicle	325	25.4

Source: Field Survey, 2019

The results from the Table 1 reveal that most of the respondents are female (75%) while 25% are male. This may be due to the fact that women are more vulnerable to diseases because of hormonal changes that occur in their body as a result of menstruation, pregnancy, delivery and breastfeeding, among others, which may be responsible to their frequent usage of health care facilities. Age distribution of the respondents shows that majority are 60 years and above (34.0%) followed by less than 45 (33.1%) and 45 - 60 years of age (32.9%). Respondents representing 97.5% have formal education while the remaining 2.5% have informal education. This makes it easy for them to appreciate the need to utilize health care facilities in their localities. 43.1% of the respondents are married, 28.2% are single and 28.2% are divorced. The dominance of married respondents over the other groups may not be unconnected with the fact that the Nigerian society encourages and attaches greater importance to marriage while divorce or separation is discouraged.

Occupational distribution of the respondents shows that 35.9% engage in trading/business; 40.6% are civil servants and 23.4% are private sector employees. This reveals that all the 1,280 respondents are gainfully engaged in one type of occupation or the other. The religious belief of the respondents shows that 41.17% were Christians; 53.52% were Muslims and 5.31% claimed to be traditional religion adherents. This can be explained by the fact that there are more Muslim adherents in the study area than others. Income level distribution of the respondents reveals that 62.3% were low income earners; 26.7% were medium income earners and 10.9% were high income earners. Respondents representing 18.9% claimed there are no health care facilities in their locality; 43.3% have less than 5 health care facilities; 16.1% claimed there are 5 - 10 health care facilities in their locality; 12.7% claimed that there are more than ten health care facilities in their locality and 9.0% claimed ignorance of the availability health care facilities in their locality. The reason for this uneven distribution may be explained by the fact that the political affiliation of localities may determine the number of facilities cited in a locality.

In addition, The distribution of respondents by the distance of their residence to the health care facilities shows that 44.8% reside 5 kilometer away from the health care facilities; 22.9% claimed that their residence is 6-10 kilometers away from the health care facilities and 32.3% claimed that their residence is more than 10 kilometers away from the health care facilities. Finally, the distribution of the respondents based on their means of transportation indicates that 30.1% utilize health care facilities by trekking; 44.5% transported themselves with the use of their personal vehicles while 25.4% transported themselves by the use of commercial transportation system.

4.2 Inferential Analysis

The details of the binary logit estimates for the determinants of health care facilities utilization are presented and discussed in the Table 2.

Table 2 Binary Logit Estimates of Healthcare Facility Utilization in Kwara State, Nigeria

Variable	Coefficient	S.E.	Wald ratio	p – value	Odds ratio
Intercept	1.071	0.282	14.464	0.000	2.919
Age	-1.027	0.321	10.249***	0.001	0.358
Education	.357	0.196	3.318*	0.069	1.430
Marital_Status	-.784	0.380	4.245**	0.039	0.457
Occupation	-.390	0.347	1.269	0.260	0.677
Religion	-.308	0.243	1.606	0.205	0.735
Income_Level	0.403	0.228	3.118*	0.077	1.496
Distance_to_Healthcare	0.237	0.217	1.195	0.274	1.268

Transpotation_Means	2.145	0.391	30.104***	0.000	8.539
Health_Personal_Attitude	-1.139	0.218	27.197***	0.000	0.320
Cultural_Approval	-.014	0.240	0.004	0.953	0.986
N = 1280; Nagelkerke R ² = 0.851					
χ ² = 190.828 (0.000)					

Source: Authors' Computation, 2019.

Note: “***”, “**” and “*” indicated at least significance at 1%, 5% and 10% level.

Reference Category: Yes

Table 2 clearly shows that age, education, marital status, income level, means of transportation and attitude of the health care personnel are significant factors determining the respondents' utilization of health care facilities as shown by the values of wald ratio and p-values, while occupation, religion, distance and cultural approval do not influence respondents' utilization of health care facilities. The result further shows that age, marital status, occupation, distance, cultural approval and altitude of the health care personnel do not have the expected signs with the health care facility utilization while education, income level, means of transportation and religion all have the expected signs.

The overall significance test is shown by the chi square test (X^2). The X^2 shows that when all the parameter estimates are jointly measured in term of importance to the health care facility utilization, they are statistically significant at 1% significance level due to its p-value less than 0.01. The coefficient of determination is measured through “Nagelkerke R Square”, which shows a strong deterministic value of 0.851. This reveals that about 85.1% variations in health care facility utilization in Nigeria are influenced by education, income level, cultural belief, marital status, occupation, religion, distance, age, transport and attitude of health workers.

The odd ratio measures the likelihood that a respondent utilizes health care facilities or otherwise. The results indicate that the respondents with less than 45 years of age are 0.36 times less likely to utilize health care facilities than the respondents with the 45 years and above. Also, the respondents with the formal education are 1.43 times more likely to utilize health care facilities than the respondents with no formal education. In addition, the respondents that are single are 0.46 times less likely to utilize health care facilities than the respondents that are married. The results further show that the respondents with the high income are 1.43 times more likely to utilize health care facilities than the respondents with low income. Furthermore, the respondents with access to the vehicular means of transportation are 8.54 times more likely to utilize health care facilities than the respondents that trek to access health care facilities. Finally, the respondents that are not satisfied with the altitude of health care personnel are 0.32 times less likely to utilize health care facilities than the respondents that are well received by the health care personnel.

5.0 Discussion Of Results And Implication Of Finding

The results from our findings show that utilization of health care facilities was significantly increased by age such that the elderly people from 45 years and above were more likely to utilize health care facilities than the younger ones. This could be as result of old age which requires the increase in the health care services. Education also significantly explained the utilization of health care facilities which implies that respondents with formal education were more likely to use health care facilities than those with informal education. This could be as a result of the fact that education enlightens the people about the benefits of utilizing health care facilities. Marital status was also significant, implying that as the number of households increase because of marriage, their need of health care services will also increase.

Furthermore, increase in the utilization of health care facilities was explained by the increase in individual's income. This could be as a result of high cost of accessing health care since out-of-pocket is the major source of financing health care by the respondents. Also, the greater availability of the means of transportation, the greater the utilization of health care facilities, implying that easy access to the means of transportation improves the utilization of health care facilities. Finally, altitude of the health care personnel towards their clients explained the utilization of health care facilities; that is, caring and compassionate health personnel encourage the utilization of health care facilities.

6.0 Conclusion And Recommendations

The problems of health care facilities utilization in Nigeria have been illustrated by the case of Kwara State, Nigeria. The result from the study has shown that age, education, marital status, income level, means of transportation and attitude of the health personnel are significant factors that determine the utilization of health care facilities in Kwara State. The findings from this study also show that occupation, religion, distance and cultural approval do not influence the utilization of health care facilities.

Therefore, from the findings and subsequent discussions in this study, it is evident that education plays important roles on the utilization of health care facilities; thus, there is the need to intensify mass education on the essence of utilization of appropriate health care facilities for both prevention and cure. Given the resilience of traditional medicine, and the likelihood of continued patronage, there is need for official regulation of traditional healthcare practitioners and a way of harmonizing it with the orthodox in order to serve as a complement rather than alternative. Roads and means of transportation should be made more accessible and available so that individuals who are ill can access health care services without delay. In addition, health care providers need to be sensitized and educated more on the needs of the clients most especially on interpersonal communication and relation. They need to be more compassionate and caring to the needs of the people they serve. Finally, national policies should be strengthened by expanding the coverage of NHIS program to include all sectors of the society, most especially the elderly and married people in order to reduce the burden of out-of-pocket as a means of financing health care.

Reference

- Anderson, R. (1968). *A Behavioural Model of Families' Use of Health Services*. Research Series No. 25. Chicago, IL: Center for Health Administration Studies, University of Chicago.
- Anderson, R. & Newman, J. (1973). Societal and Individual Determinants of Medical Care Utilization. *Milbank Memorial Fund Quarterly*, 51(1), 95-124
- Asteraye, N. (2002). Determinants of Demand for Health Care Services and their Implication on Health Care Financing: The Case of Bure Town. *Ethiopian Journal of Economics*, XI(1), 87-122
- Awoyemi, T. T., Obayelu, O. A. & Opaluwa, H.I., (2011). Effect of Distance on Utilization of Health Care Services in Rural Kogi State, Nigeria. *Journal of Hum Ecol*, 35(1):1-9.
- Elo, I.T. (1992). Utilization of Maternal Health - Care Services in Peru: The Role of Women's Education. *Health Transition Review*, 2(1)
- Federal Ministry of Health (2005). Healthcare in Nigeria. *Annual Bulletin*, Abuja: Federal Ministry of Health.
- Insel, P.M. & Roth, W.T. (2002) *Core Concepts in Health*, 9th Edn. McGraw-Hill Companies Inc. Kwara State Government (2010). Strategic Health Development Plan (2010-2015), Kwara State Ministry of Health, 2010.
- Lucas, A.O. & Giles, H.M. (2004) Short Textbook of Public Health Medicine for the Tropics, 4th Edn. Book Power.

- National Bureau of Statistics (NBS) (2018). Demographic Statistics Bulletin, Abuja, Nigeria, <https://nigerianstat.gov.ng>
- Nwankwo, I. U. (2015). Effects of Globalization on National Healthcare Delivery Systems: The Nigerian Experience, *Global Journal of Human Social Science: Interdisciplinary*, 15(5), 8-15
- Okumagba, P. O. (2011). Choice of Health-Care Service Utilization by the Elderly in Delta State of Nigeria, *Journal of Sociology and Anthropology*, 2(2): 131-138.
- Onokerhoraye, A.G. (1999). Access and Utilization of Modern Health Care Facilities in the Petroleum-Producing Region of Nigeria: The Case of Bayelsa State. Research Paper No.
162. Takemi Program in International Health Harvard School of Public Health.Sunday, A. O., Waheed, O. O., Isiaka, I. &Oluremi, A. S. (2015). Determinant of Demand for Health Care Services among Rural Household in Ekiti State, Nigeria. *Journal of Biology, Agriculture and Healthcare*, 5(7), 154-157.
- Tanimola, M. A. &Owoyemi, J.O. (2009). Health - Seeking Behaviour in Anyigba, North – Central, Nigeria. *Research Journal of Medical Sciences*, 3(2): 47–51.
- Uzochukwu, B.S.C. and Onwujekwe, O.E. (2004). Socio-economic Differences and Health Seeking Behavior for the Diagnosis and Treatment of Malaria: A case of four Local Government Areas Operating the Bamako Initiative Program in South – East Nigeria, *International Journal for Equity in Health*, 3(6).
- World Bank, (1994). Better Health in Africa: Experience and Lessons Learned.
- World Health Organization, (2017). Measuring Overall Health System Performance for 191 Countries. Discussion Paper Series: No. 30EIP/GPE/EQC