



A Legislative Agenda for Reducing Existing Disparities in Maternal and Child Health Care in Nigeria

Rifkatu Nghargbu¹, Chukwuemeka Onyimadu^{1*} and Ezechinyere Ibe¹

¹*National Institute for Legislative and Democratic Studies, National Assembly, Nigeria.*

Authors' contributions

Authors RN and CO designed, analysed, interpreted and prepared the manuscript. Author EI collected the data and analysed the manuscript. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JESBS/2020/v33i730244

Editor(s):

(1) Dr. Shao-I Chiu, Da-Yeh University, Taiwan.

Reviewers:

(1) Daniela-Tatiana Agheorghiesei, Alexandru Ioan Cuza University of Iasi, Romania.

(2) Yatin Talwar, India.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/57234>

Received 24 March 2020

Accepted 30 May 2020

Published 15 August 2020

Original Research Article

ABSTRACT

A key indicator of the SDG goal of attaining Universal Health Coverage is the access to quality essential health care services, access to safe, effective, quality, and affordable essential medicines and vaccines for all. Although The Federal Government of Nigeria has adopted the SDGs, data from UNICEF's Multiple Cluster survey 2016 – 2017 indicates a severe disparity in health care service coverage among poor women and children who reside in rural areas. To this end, this communication advocates that the National Assembly ensures that 15% - 20% of health expenditure goes to Primary Health Care. Also, the amendment of the NHIS Act to include community based insurance schemes and employ its powers of scrutiny and oversight functions in order to reduce the dearth in Primary Health care facilities in rural areas.

Keywords: Primary health; universal health coverage; health finance; poverty; gender disparity; child health care; Nigeria.

1. INTRODUCTION

Universal Health Care Coverage (UHC) remains an important component of the Sustainable

Development Goals (SDGs)¹ with a focus of providing access to needed quality health care

¹ Specifically, SDG 3.8

*Corresponding author: E-mail: onyimadu.chukwuemeka@nils.gov.ng, onyimaduchukwuemeka@yahoo.com;

services for all citizens of a country without incurring financial hardship because of using the quality health care. This goal is consistent with the provision of the 1999 constitution in section 17(3) and the NHIS ACT section 5(a) and (b) which stipulates the provision of adequate medical and health facilities for all persons, and protection for families from financial hardship due to huge medical bills.

The goal of the UHC, according to the World Health Organization, (WHO) is to ensure that all people and communities obtain the health services that they desire without undergoing financial hardship. This is in line with the World Health Assembly Resolution 58.33 (WHA 58.33) at its 58th session in 2005 adopted on "Sustainable health financing, universal health coverage and social health insurance" which among other things, urged member states (which includes Nigeria) to ensure that health financing systems include a method of pre-payment of financial contributions to healthcare with a view to sharing risk among the population and avoid catastrophic healthcare expenditure and the impoverishment of individuals as a result of seeking care.

The UHC has two components, the service coverage and financial protection. Service coverage indicators include reproductive and newborn health, infectious disease, tuberculosis treatment and non-health sector determinants of health. Our focus in this communication is to emphasize the status of service coverage in child health care, because health care coverage among women and children is critical to the attainment of UHC. Thus, the objective of this communication is to identify existing disparities that exist in service coverage using universally accepted indicators. Based off the existing disparities, we also intend to highlight issues of concern on the health care coverage and utilization of maternal and child health care services that can aid the National Assembly in making informed decisions, especially in regards to budgetary allocations for UHC.

2. LITERATURE REVIEW

Several studies on maternal and child health care utilization focused on developing countries. This is because maternal mortality is on the average 18 times higher in developing countries as compared to developed countries. The literature has also established that the use of maternal and child services is an effective means of reducing the risk of maternal and child

morbidity and mortality hence solution at addressing disparity in utilization is critical. Several studies on causes of disparity in utilization of maternal and child health care are inequity and inequality studies that have used concentration curves and concentration index to measure the degree of disparities in maternal and child health care utilization [1,2,3,4,5,6]. Other studies on disparity in maternal and child health care focus on socio-economic factors as the major causes of disparities [7,8,9].

Prusty et al. [1] used concentration curves and decomposition analysis to measure regional, economic and educational inequality using District Level Household and Facility Survey (DLHS-III for 2007 to 2008). Results revealed a wide regional variation especially in delivery. Utilization of maternal healthcare services is more concentrated among affluent households. [2] assess social inequalities in the use of antenatal care (ANC), facility based delivery (FBD), and modern contraception (MC) in two contrasting groups of countries in sub-Saharan Africa divided based on their progress towards maternal mortality reduction. Six countries were included in this study. Three countries (Ethiopia, Madagascar, and Uganda) had <350 MMR in 2010 with >4.5% average annual reduction rate while another three (Cameroon, Zambia, and Zimbabwe) had >550 MMR in 2010 with only <1.5% average annual reduction rate. Absolute measures for geographical and wealth-based inequalities remained high invariably in all six countries. The increasing trend in the utilization of maternal care services was found to concur with a steady decline in maternal mortality. Relative inequality declined overtime in countries, which made progress towards reducing maternal mortality. Nghargbu and Olaniyan [3] assesses the degree and patterns of horizontal inequity in maternal and child health care utilization in Nigeria. Horizontal inequity was estimated using concentration curves and a standardized concentration index, which was decomposed into need and non-need variables to capture the major drivers of inequity in utilization. Using the Nigerian DHS from 1999 to 2013, results indicates that there is pro-rich inequity in utilization of antenatal, skilled delivery and immunization, respectively.

Obiyan and Kumar [4] examines the socioeconomic inequalities in the use of antenatal care and medical assistance at delivery in Nigeria, using the multi-rounds of the cross-sectional Nigerian Demographic Health Survey conducted between 1990 and 2008. The results

indicate that the use of antenatal care has stagnated while medical assistance at delivery has increased sluggishly in Nigeria during 1990 to 2008. Stark socioeconomic differences in utilization of antenatal care and medical assistance at delivery services exist with growing inequalities in utilization across household wealth and women's level of education. Memirie et al. [5] measures changes in inequality in access to maternal, child health (MCH) interventions, and the effect of Primary Health Care (PHC) facilities expansion on the inequality in access to care in Ethiopia using DHS. Concentration and horizontal inequity indices revealed wealth-related and socioeconomic factors as the major causes of inequity. Adeyanju et al. [6] estimates socioeconomic inequalities in maternal and child health care in Nigeria over an 18-year period. Studies demonstrate that maternal and child mortality is much higher amongst the poor in low-income countries, with access to health care concentrated among the wealthiest. Evidence suggests that in Nigeria inequalities in access to quality services continue to persist.

Studies focusing on socioeconomic factors revealed that wealth, education and region are the major factors causing disparity in maternal and child health care utilization. Zelalem et al. [10] used a community based cross-sectional survey to identify factors affecting maternal and child health care utilization in kebeles of Kombolcha district of Ethiopia. Results shows that out of 495 women included in the study, about 86.1% had at least one ANC visit during their last pregnancy, 61.7% had less than four visits, which is less than the recommended and 46.2%, started it in the second trimester. Only 25.3% of respondents gave birth in health institutions and rural women were less likely to use institutional delivery 20.9% compared to urban women 35.9%. Kumar and Singh [11] examined the factors explaining the average gap in the use of full antenatal care, medical assistance at delivery and postnatal in India. Results shows that differences in household wealth contribute 37–55% of the gap in the use of the services between the social groups. Yaya et al. [9] examine the utilization and disparities in factors of maternal health care indicators using logistic regression models in Benin. Socio-economic factors were the causes of disparity in utilization.

Concerning improving access to maternity and child care, Okonofua et al. [12] investigated the efficacy of advocacy and public health education is effective in increasing the commitment of

polymakers to provide resources for implementing evidence-based maternal and child health services in Nigeria. Their results showed that advocacy and public health education increased the political will of State governments to invest in public health. Okafor et al. [13] employed retrospective comparative study of the utilizations of free maternal and child healthcare in Enugu State. They found significant increases in the uptakes of antenatal booking and hospital delivery.

Although the literature on the utilization of maternal and child health care is vast, with majority of the studies focusing more on the operationalization of strategies and evaluation of impacts. Despite the appropriateness of these studies, there are few studies with focus on eliciting disparities that may exist in the utilization of maternal and child health care service coverage in Nigeria. This is the main gist of the paper. Another significance of the paper is on the scope of data used and the time period analyzed. Most studies in the literature employed data from the Nigerian Demographic and Health Survey data (NDHS) 2013. However, this paper employed a more current data from the Multiple Indicator Cluster Survey (MICs) for 2016.

3. ISSUES OF CONCERN IN MATERNAL AND CHILD HEALTH CARE SERVICE COVERAGE

Using UNICEF's Multiple Indicator Cluster survey (MICs) for 2016, the following charts discuss key maternal and child health care coverage in full immunization, hospital delivery and antenatal care. In Fig. 1 a total of 2,416 children within the ages of 15-23 months were sampled regarding the receipt of full immunization, 690 children were sampled regarding the treatment for respiratory infection, 3,668 children were sampled regarding treatment for diarrhea, 11,204 children were sampled regarding hospital delivery, while 11,058 children were sampled for antenatal care.

3.1 Full Immunization

As an indicator of service coverage, full immunization indicates when a child at 15-23 months has had BCG, Polio 1-3, DTP/Pental -3 and Measles/MM. Fig. 2 indicates that out of the total 2416 respondents, 36% had received full immunization while 63% had not received full immunization. In terms of wealth status, there exist a clear disparity in receiving full immunization between the poorest and richest in the sampled group. While only 17.51% of the

poorest children had received full immunization at 15 – 23 months, 49.63% of the richest children had received full immunization. Although immunization coverage is lower for poor children relative to richer children, there is still a huge proportion of children (about 63.53% of all children) who have not had access to full immunization as at 2016.

full immunization for children between 15 – 23 months cannot be differentiated by location. In both rural and urban areas, the incidence of children not receiving full immunization is high, with rural residence accounting for 68.23% and urban residence, 55.09%. Although, there is a clear disparity in the service coverage of immunization, the data highlights that this disparity is more severe for poor children who reside in rural areas. These children account for the highest percentages in non-utilization and

Further classification of the data by residence in Fig. 3 shows that the incidence of not receiving

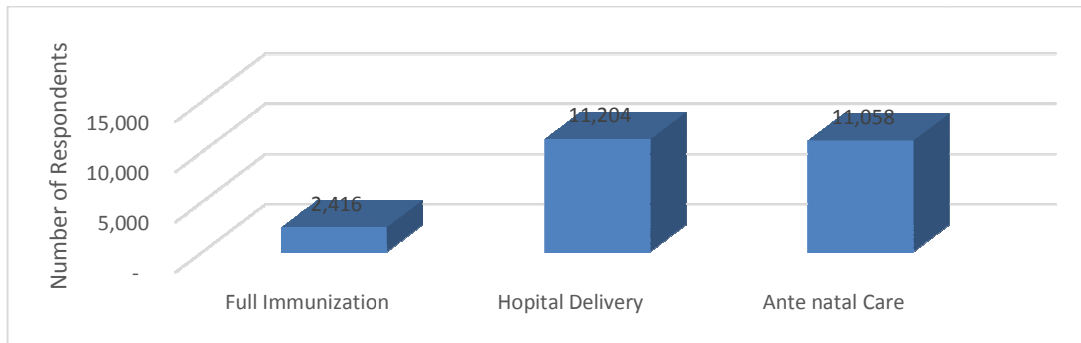


Fig. 1. Total number of respondents in the Multiple Indicator Cluster survey (MICs) for 2016
 Source: UNICEF's Multiple Indicator Survey, 2016-2017

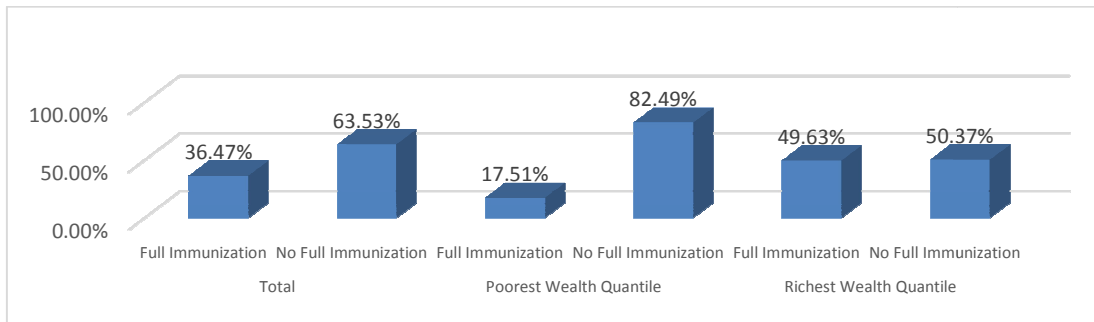


Fig. 2. Full immunization by poorest and richest wealth quantile
 Source: UNICEF's Multiple Indicator Survey, 2016-2017

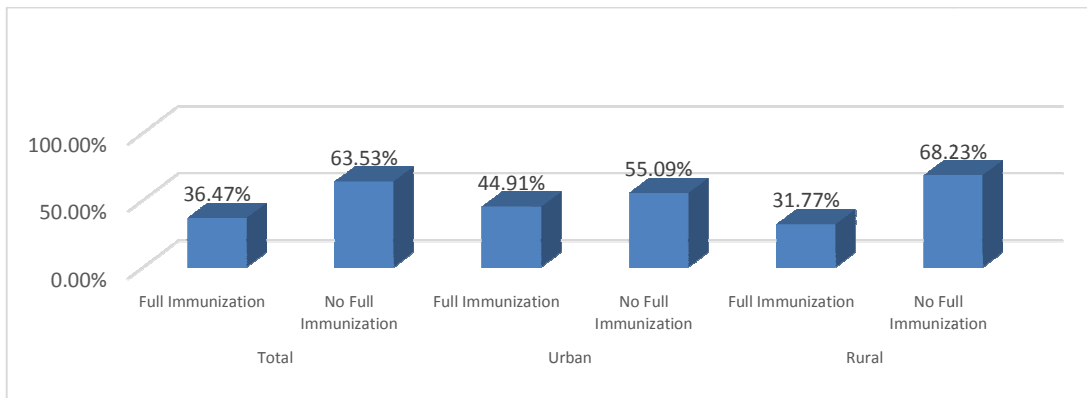


Fig. 3. Full immunization by urban and rural residence
 Source: UNICEF's Multiple Indicator Survey, 2016-2017

low service coverage for immunization (non-utilization and low service coverage of immunization by 82.49% for poorest children and 68.23% for children resident in rural areas).

3.2 Hospital Delivery

Hospital Delivery indicates when women within the age bracket of 15 -49 years who have had a child born in hospital in their respective last pregnancy. This indicator signifies the service coverage for women to some form of formal medical attention during pregnancy, with the aim of reducing neonatal, maternal and child mortality rates. Fig. 4 shows that only 22.95% of all respondents were born in the hospital, with 77.05% born without formal medical attention. The severity of the dearth in service coverage for hospital delivery becomes glaring when respondents are classified by income quantiles. Only 4.76% of children from the poorest households were born in hospitals, with over 95% of them being home delivery. This is in stark contrast to 57.06% of children from the richest households. This is quite hazardous for the Nigerian health system, with an urgent need for a reversal in status quo.

The service coverage disparity also exist when residence is considered. In rural areas, the data in Fig. 5 indicates that only about 15.07% of children were born in the hospital compared to 45% of those living in the area. Conversely, home delivery accounted for 84.93% in the rural area relative to 54.48% in urban residence. Clearly, just as in the case of full immunization, there exist a disparity in service coverage against poor children living in rural areas.

3.3 Antenatal Care

Antenatal Care as an indicator for service coverage captures women within the age bracket 15-49 years who have had at least four antenatal visits in their last pregnancy. The data indicates that over 76.95% of the poorest mothers have not attend at least four visits to a formal medical facility for antenatal care. In comparison, only 14.90% of the richest mothers have not had at least four antenatal visits. The data also revealed a clear disparity in access to antenatal care between the rich and poor. While 48.77% of mothers had not had access to at least four antenatal visits, 76.95% were from poor households. The clear disparity between rich and

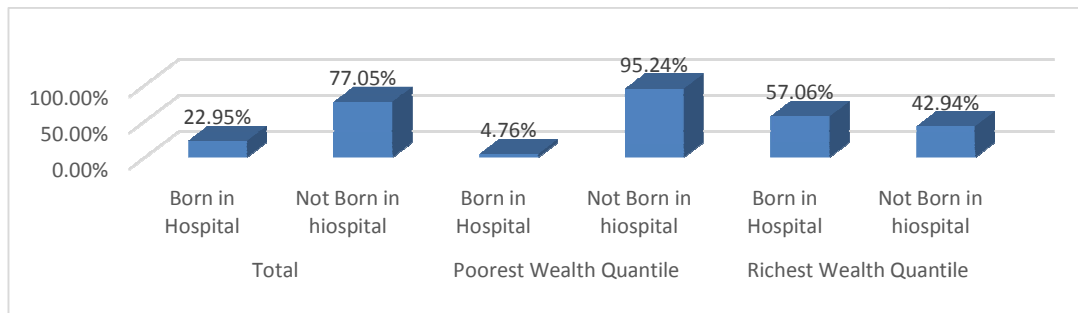


Fig. 4. Hospital delivery by poorest and richest wealth quantile

Source: Source: UNICEF's Multiple Indicator Survey, 2016-2017

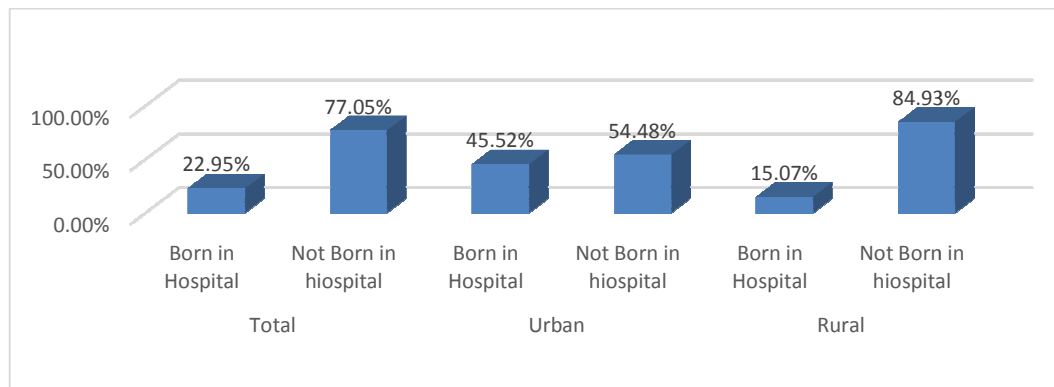


Fig. 5. Hospital delivery by urban and rural residence

Source: Source: UNICEF's Multiple Indicator Survey, 2016-2017

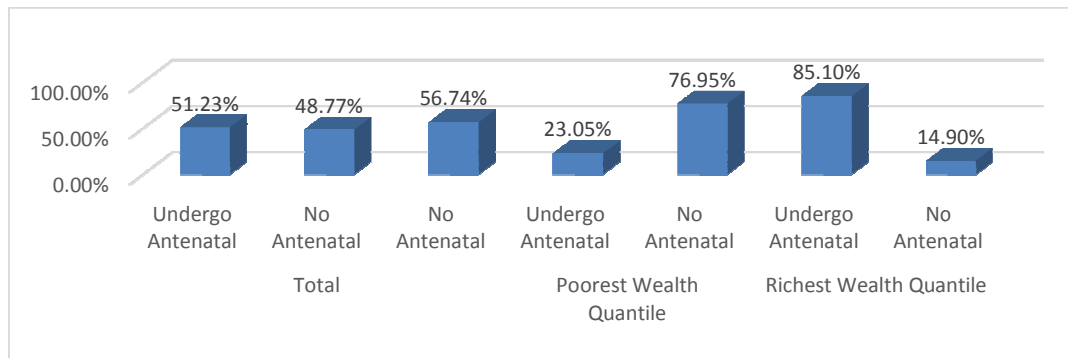


Fig. 6. Antenatal care by richest and poorest wealth quantile

Source: Source: UNICEF's Multiple Indicator Survey, 2016-2017

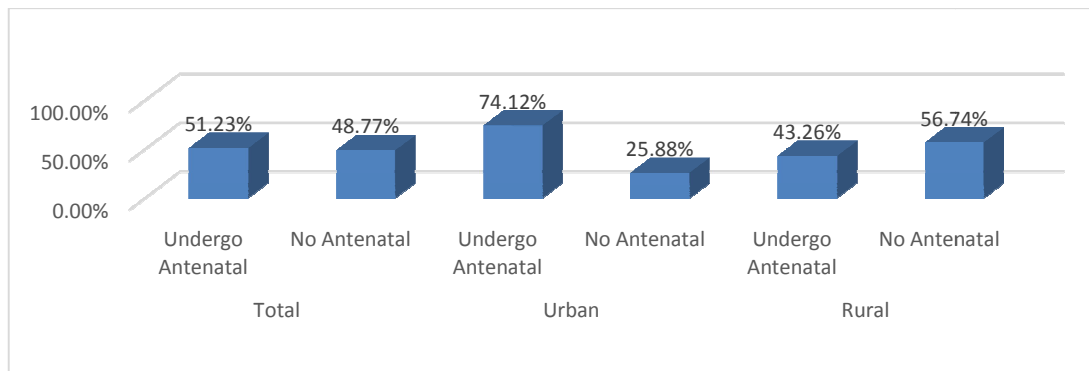


Fig. 7. Antenatal care by urban and rural residence

Source: Source: UNICEF's Multiple Indicator Survey, 2016-2017

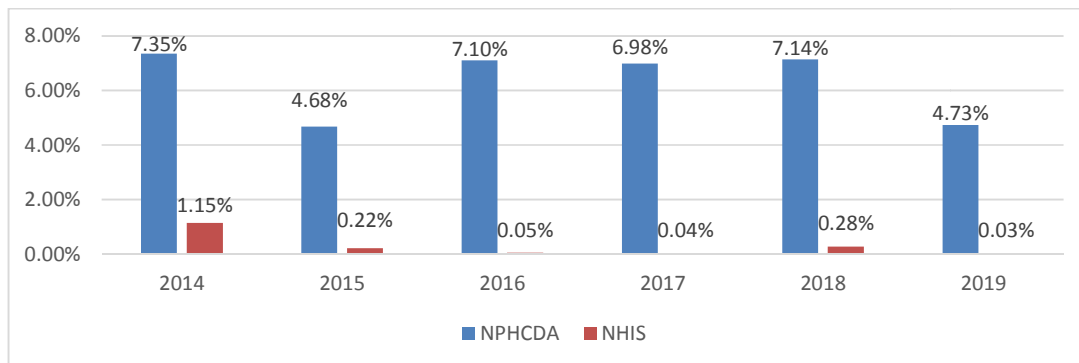


Fig. 8. Share of NPHCDA and NHIS in budgetary allocation to health

Source: 2014 -2018 Appropriation Acts and 2019 Appropriation Bill

Table 1. Health expenditure and health performance index for selected African Countries

Year	Nigeria Health Exp (%GDP)	Nigeria Health Index	Kenya Health Exp (%GDP)	Kenya Health Index	South Africa Health Expenditure (%GDP)	South Africa Health Index
2009	5.8%	47.4%	12.2%	59.5%	8.5%	51.7%
2011	5.3%	48.8%	4.5%	62.2%	8.5%	54.6%
2014	3.7%	50.0%	5.7%	64.2%	8.8%	56.8%

Source: Index Mundi and UNDP Human Development Reports (Health Index)

poor mothers signifies that household income is a key determinant to access to antenatal care.

The service coverage disparity concerning antenatal care also exists when residence is considered. In rural areas, the data in Fig. 7 indicates that about 56.74% of rural mothers do not undergo at least four antenatal visit, while for mothers residing in urban areas it is 25.88%. Just as in other indicators, the existing disparity in health care service coverage is more severe for poor rural dwellers.

4. PUBLIC SPENDING FOR UNIVERSAL HEALTH COVERAGE

The obvious issue of concern is the fact that service coverage and utilization between residence and wealth status shows sharp and wide disparity. The disparities calls for serious concern. Until these disparities in maternal and child health care utilization are addressed, we are far from reaching the UHC target. One of the major contributory factor to the low level of health care coverage disparity is strategic funding of the health care to achieve UHC. Evidence shows that for countries to make progress towards UHC their health system needs to rely predominantly on public revenue sources and less on out-of-pocket health expenditure (see Table 1). By public, we mean those revenue sources, which are prepaid, mandatory and pooled, such as government budgetary allocations and mandatory contributions to health insurance schemes for all citizens. Actually, voluntary or private revenue sources contribute little in terms of helping countries move their health systems towards UHC. This is because health expenditure is highly uncertain and can lead to catastrophic health expenditure.

Evidences also shows that countries that have lower spending levels achieve little or no progress in terms of service coverage and financial protection. The higher the level of public spending in health, more service coverage and financial protection is achieved. Given the fact that the level of public spending is crucial to the achievement of UHC, there is need to ensure sustained increases in the budgetary allocations to both Primary Health Care and NHIS. Fig. 8 highlights the meager shares of Primary Health and NHIS in the health budget, with an average of about 7% of health expenditure going to PHC. This is very different from the findings of the Bill

Gates & Melinda Gates Foundation as well as the World Health Organization (WHO), who advocated for 32.9% of health expenditure going to Primary Health care². With the provisions of Section 80 (1 – 4) and 81 (1 – 2) of the 1999 Constitution of the Federal Republic of Nigeria, the National Assembly has the powers to ensure budgetary allocation and strategic spending for Primary health Care and NHIS is increased adequately to ensure the achievement of UHC targets and consequently SDGs.

5. CONCLUSIONS AND RECOMMENDATIONS

The analysis from the MICs showed that the major constraints to maternal and child health care coverage is household income and location of residence. Specifically, the analysis has shown that there is a disparity in health service coverage for rural poor mothers and children. Therefore, there should be strategic health financing for health care to target these vulnerable women and children in rural areas. This entails the adequate funding of primary health care remains very critical. Thus, the following recommendations are proffered;

1. The National Assembly should ensure sustained and adequate funding for Primary health care, by maintaining a feasible benchmark of 15 – 20% of all health expenditure going to Primary Health care.
2. There is need for emphasizing the dearth of Primary Health Care facilities in the rural area. Although such facilities are visible in previous budgets, the National Assembly should ensure, through effective scrutiny and oversight functions that these facilities are made available.
3. The NHIS Act should be amended to reflect a Community Health Insurance Scheme (CHIS) that would reduce the incidence of high out-of-pocket health expenditure especially for vulnerable women and children in the society, especially in rural areas.

CONSENT

As per the international standard informed and written parental consent has been collected and preserved by the authors.

² [Phcpathways.pai.org/assets/PHC-Consultation.pdf](https://phcpathways.pai.org/assets/PHC-Consultation.pdf)

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Prusty RK, Gouda J, Pradhan MR. Inequality in the utilization of maternal healthcare services in Odisha, India. *International Journal of Population Research*. 2015;10. Article ID: 531485. Available:<http://dx.doi.org/10.1155/2015/531485>
2. Alam N, Hajizadeh M, Dumont A, Fournier P. Inequalities in maternal health care utilization in Sub-Saharan African countries: A multiyear and multi-country analysis. *PloS One*. 2015;10(4):e0120922.
3. Nghargbu R, Olaniyan O. Inequity in maternal and child health care utilization in Nigeria. *African Development Review*. 2017;29(4):630-647.
4. Obiyan MO, Kumar A. Socioeconomic inequalities in the use of maternal health care services in Nigeria: Trends between 1990 and 2008. *SAGE Open*; 2015. DOI:10.1177/2158244015614070sagepub.com
5. Memirie ST, Verguet S, Norheim OF, Levin C, Johansson KA. Inequalities in utilization of maternal and child health services in Ethiopia: The role of primary health care. *BMC Health Services Research*. 2016;16(1):51.
6. Adeyanju O, Tubeuf S, Ensor T. Socio-economic inequalities in access to maternal and child healthcare in Nigeria: Changes over time and decomposition analysis. *Health Policy and Planning*. 2017;32(8):1111-1118.
7. Awasthi A, Pandey CM, Chauhan RK, Singh U. Disparity in maternal, newborn and child health services in high focus states in India: A district-level cross-sectional analysis. *BMJ Open*. 2016;6(8):e009885.
8. Odetola TD. Health care utilization among rural women of child-bearing age: A Nigerian experience. *The Pan African Medical Journal*. 2015;20(151).
9. Yaya S, Uthman OA, Amouzou A, Ekholuenetale M, Bishwajit G. Inequalities in maternal health care utilization in Benin: A population based cross-sectional study. *BMC Pregnancy and Childbirth*. 2018;18:19.
10. Zelalem Ayele D, Belayihun B, Teji K, Admassu Ayana D. Factors affecting utilization of maternal health care services in Kombolcha District, Eastern Hararghe Zone, Oromia Regional State, Eastern Ethiopia. *International Scholarly Research Notices*; 2014.
11. Kumar V, Singh P. How far is universal coverage of antenatal care (ANC) in India? An evaluation of coverage and expenditure from a national survey. *Clinical Epidemiology and Global Health*. 2017;5(1):1-7.
12. Okonofua F, Lambo E, Okeibunor J, Agholor K. Advocacy for free maternal and child health care in Nigeria—results and outcomes. *Health Policy*. 2011;99(2):131-138.
13. Okafor II, Obi SN, Ugwu EO. Impact of free maternal and child healthcare programme on maternal and neonatal healthcare outcome in Enugu State of Nigeria. *Nigerian Journal of Medicine: Journal of the National Association of Resident Doctors of Nigeria*. 2011;20(4):441-443.

© 2020 Nghargbu et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:
<http://www.sdiarticle4.com/review-history/57234>