



# Socio-Demographic Determinants and Utilization of Social Health Insurance Services among Civil Servants in Bayelsa State

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## Abstract

**Background:** Social health insurance is one of the possible organizational mechanisms for raising and pooling funds to finance health services with a view to improving health and well-being. Socio-demographic factors such as level of education, income status, family size, gender, and other factors all contribute to healthcare utilization. This study assessed the socio-demographic determinants of utilization of social health insurance services among civil servants in Bayelsa State.

**Method:** A descriptive cross-sectional survey design was adopted with a population consisting of seven thousand and sixty (7060) civil servants in Bayelsa State. A sample size of 491 was selected using multistage sampling procedure. Data were collected with a structured questionnaire and analyzed using mean, standard deviation, and point biserial correlation at 0.05 alpha level.

**Results:** The results of the study showed that the level of utilization of the national health insurance scheme among respondents was high ( $3.02 \pm 0.89$ ). Utilization of social health insurance services had a significant relationship with socio-demographic factors such as gender ( $n = 491$ ;  $r = 0.44$ ;  $p < 0.01$ ), household size ( $n = 491$ ;  $r = 0.72$ ;  $p < 0.01$ ), educational status ( $n = 491$ ;  $r = 0.54$ ;  $p < 0.01$ ) and income status ( $n = 491$ ;  $r = 0.50$ ;  $p < 0.01$ ).

**Conclusion:** The socio-demographic determinants of utilization of social health insurance services among civil servants in Bayelsa State were gender, household size, educational status, income status and availability of services. It was concluded among others that the Bayelsa State government should continue to strengthen advocacy programs in support of social health insurance scheme to all the civil servants in the State.

**Keyword:** Socio-demographic; Determinants; Utilization; Health; Insurance

**Abbreviations:** SHI: Social Health Insurance; UHC: Universal Health Coverage; HBM: Health Belief Model; NHIS: National Health Insurance Scheme; SHI: Social Health Insurance.

## Introduction

The health status of any population is one of the key parameters to the development of any nation. It therefore

implies that a planned effort to improve the health status of the people is imperative and this can be achieved through adequate utilization of healthcare services. In all occupations and organizations, workers' health should remain the utmost priority as this may contribute to longevity of life. According to the World Health Organization [1], the concept of health deals with individual makeup and behaviors, environment, and socioeconomic status. Social health insurance was established to help pool financial resources to finance health

services with a view to improve health and well-being. Level of education, income status, household size, gender and other factors all contribute negatively or positively to healthcare utilization US Department of Health and Human Services, Office of Disease Prevention and Health Promotion [2]. People who have unmet social needs are more likely to be unhealthy and may frequently seek medical appointments than those who are able to meet their needs [3,4]. Despite the progress that has been made to reduce unwanted medical expenditures, majority of the population has remained uninsured and some that are insured may not be utilizing the facility as having insurance does not correlate with utilization or burdensome cost-sharing through premium payments and deductibles.

The level of education of civil servants plays an important role in economic growth because of its positive effect on human capital development. Educated people as well as civil servants may have a good understanding and awareness of the importance of keying into health insurance as compared with non-educated ones [5] asserted that willingness to utilize social health insurance is significantly associated with the level of education of workers and a good percentage with higher educational backgrounds understand and utilize health insurance scheme. Tilahun, et al. [6] added that educated workers were over 2 times more likely to get insured and utilize healthcare services than less educated workers Lotfi, et al. [7]. found that low educational level had negative effects on demand for outpatient health services. This implies that educated people are more able to acquire and process information leading to making informed decisions that enhance their well-being [5]. Civil servants who are educated are presumed to have increased purchasing power and access to health insurance information which could result in higher insurance uptake.

Income status is another factor that influences the utilization of social health insurance scheme especially among civil service workers [8]. The income status of civil servants varies as these workers tend to be at different levels of service delivery depending on the interest of the government. Recent evidence presented by Rouyard, et al. [9] indicated that income status or wealth index of workers significantly predicted the enrolment of higher performance in health insurance, while workers with little salary are 7 times less likely to enroll in insurance services. Similarly, Karanjit, et al. [10] found that the wealth index of workers was significantly associated with the utilization of social health insurance. Mwami, and Oleche asserted that workers with higher pay are less likely to visit a health provider which could be associated to their investment in healthy lifestyle.

Another important factor that may determine the utilization of social health insurance scheme is household

size. Household size could be determined by family type such as monogamy and polygamy. The number of people living in the same family or house determines their choice of health care service. Civil servants whose family size is large or too large may not be able to invest into social health insurance scheme as compared with others [8]. According to Lotfi, et al. [7], family size or household can have negative effect on the demand of health care services. Karanjit, et al. [10] indicated in their study that small household is 3 times more likely to invest into health insurance than large household. Tilahun, et al. [6] reported that healthcare utilization among insured households was 50.5% and there is a greater chance of effective utilize of health insurance service as far as the family remains small.

Available evidence suggests that there have been increased report of death and ill-health among workers especially those working in civil service resulting from poor utilization and inadequate healthcare financing [11,12]. It is against this backdrop that the study examined the determinants of social health insurance services among civil servants in Bayelsa state.

### Statement of the Problem

Health care services are inadequate in Bayelsa State due to insufficient budgetary allocation. The social health insurance services in the State are rarely seen and civil servants are less informed on the use of this scheme. Most civil servants find it difficult to insure their health because of insufficient funds. Some workers cannot afford to buy insurance as there is a big gap between their actual income, expenditure and family size. This has led to the challenge of poor utilization of health insurance services. There is a dearth in literature and a gap in knowledge concerning the socio-demographic determinants and the utilization of health insurance services in Bayelsa State. Therefore, this study sought to assess the factors that determine the utilization of social health insurance services among civil servants in Bayelsa State.

### Aim and Objectives of the Study

The aim of this study was to assess the socio-demographic determinants of utilization of social health insurance services among civil servants in Bayelsa State. The objectives of study are to;

1. assess the level of utilization of social health insurance services among civil servants in Bayelsa State;
2. determine the relationship between gender and utilization of social health insurance services among civil servants in Bayelsa State;
3. find out the relationship between household size and utilization of social health insurance service among civil servants in Bayelsa State;

4. determine the relationship between income status and utilization of social health insurance service among civil servants in Bayelsa State;
5. ascertain the relationship between educational status and utilization of social health insurance service among civil servants in Bayelsa State;

### Research Questions

The following research questions were formulated to guide the study

1. What is the level of utilization of national health insurance scheme among civil servants in Bayelsa State?
2. What is the relationship between gender and utilization of social health insurance service among civil servants in Bayelsa State?
3. What is the relationship between household size and utilization of social health insurance service among civil servants in Bayelsa State?
4. What is the relationship between income status and utilization of social health insurance service among civil servants in Bayelsa State?
5. What is the relationship between educational status and utilization of social health insurance service among civil servants in Bayelsa State?

### Review of Related Literature

#### Concept of Health Insurance

Health insurance or medical insurance is referred to as a package that provides for the payments of benefits as a result of sickness or injury [13,14]. It is the insurance for losses from accident, medical expense, disability, or accidental death and dismemberment. Health insurance scheme have been defined as an arrangement in which contributions are made by or on behalf of individuals or group to institution responsible for purchasing covered services from providers [15,16]. A social health insurance scheme involves contributions based on need. It holds strong potentials to improve financial protection and enhance utilization among enrolled populations. This underscores the importance of health insurance as an alternative health financing mechanism capable of mitigating the detrimental effects of user fees, and as a promising means of achieving universal healthcare coverage, [11-17].

As outlined by the 2030 Sustainable Development Goal 3 (Target 3.8), equitable access to quality healthcare and protection against financial risk are central elements of universal health coverage (UHC) (Sustainable Development Goal 3). Many governments in most low and middle-income countries have tried to achieve universal health coverage

(UHC) through making health reforms of their public health insurance system [18] to increase the share of individuals covered by health insurance in their population [19,20]. A particular challenge for these countries has been to expand insurance coverage among informally employed individuals.

The general purpose of National Health Insurance Scheme (NHIS) is to ensure the provision of health insurance which shall entitle insured persons and their dependents to benefit from prescribed good quality and cost-effective services. Some of the benefits of NHIS is to ensure adequate and equitable distribution of healthcare facilities within the country, ensure that primary, secondary and tertiary healthcare providers are equitably patronized in the federation, maintain and ensure adequate flow of funds for the running of the scheme and the health sector in general.

Social health Insurance (SHI) is one of the possible organizational mechanisms for raising and pooling funds to finance health services, along with tax-financing, private health insurance, community insurance, and others [21,22]. It improves access to health services by removing catastrophic health expenditures by pooling funds to allow cross-subsidization between the rich and poor and between the healthy and the sick [23-25]. Such schemes have evolved over the years to represent a variety of funding mechanisms, voluntary or involuntary, with the underlying objective that all people are, or will be over time, offered the right to enrolment in at least one type of mechanism allowing financial risks to be shared [23-26]. This might involve a mix of various forms of insurance funding for some types of health services with others being funded directly from government revenues [27]. In Nigeria, the SHI was designed to take care of both the informal and formal sector [28]. The scheme for the formal sector provides about 5% coverage [27-29], while the informal scheme has posed several challenges due to the people it was designed to cover (urban self-employed; rural community; children under-five, disabled persons; prison inmates; tertiary institutions and others) [30,31]. The major issue has been the generation of financial resources to fund the informal insurance system without placing much burden to the vulnerable [32,33].

### Theoretical Framework

#### Health Belief Model (HBM)

The Health Belief Model (HBM) was used to explain the constructs in this study. The HBM is based on the understanding that persons (workers) will take health action or health related action such as registering for state health insurance and utilizing the services if the workers perceive/belief that it will better their lives.

## Empirical Review

Tilahun et al. [6] investigated the factors associated with healthcare utilization and effect of Mutual Health Insurance on health service utilization in rural community in Ethiopia. A cross-sectional study was conducted. The sample size used for the study was 652 households (326 insured and 326 uninsured households). The researchers reported that a majority, 52.7% of the insured were using healthcare, while 28.3% that were using the facility were uninsured. From the data obtained, it was shown that just a few household in the population sampled were using facility. Generally, there was 25.2% increase in the number of insured households accessing the facility. People with higher educational attainment were more likely to purchase insurance. The researchers concluded that enrolment in insurance increased utilization. This implies that socio-demographic factors that influence utilization should be targeted to improve the use of healthcare facility .

Lotfi et al. [7] conducted research to assess the factors affecting the use of outpatient services and to determine the effect of health insurance on financial support for individuals. The report showed that basic and full insurance coverage was the underlining factor affecting the use of outpatient health services. Furthermore, the age of the people leaving in the house was a major factor that influenced the use of these services. In contrast, educational level and the number of people in the house was shown to impact negatively. The result revealed that there was a link between socioeconomic status and use of outpatient services. For reducing the observed inequalities, policymakers should target households with younger or older people to provide service for possible increase in access to healthcare.

Omoregha and Bassey [8] investigated the reason why orthodox health services are underutilized considering the socioeconomic status. A cross sectional descriptive study design was used with a sample of 400 adults selected in different households. The evidence showed that income level was a major contributory factor to the use of health care services. In conclusion, favorable policy should be made to improve the household income of vulnerable people especially those leaving in rural areas.

Kong and Kim [34] conducted a study aimed at identifying the factors that impact on the utilization of end users of health insurance and medical aid beneficiaries in Korea. The sample size used for the study was 11,793, including 10,838 insurance and 955 beneficiaries of medical aid as represented in the Korea Welfare Panel Study database. The results indicated that the factors that impacted on the number of out patients visits to the health facility for the insured was gender of the respondents, age, type of household size, the

income status and level of education. The major factor that influenced the frequency of hospital visitations and stay were gender. Economic activity, income level, perceived health status, and disability status. The result indicates that there is a marked difference between health insurance subscribers and medical health beneficiaries.

Alesane and Anang [5] carried out a study to assess the use of health insurance by the rural poor in Ghana: determinants and implications for policy. The sample size was 178 respondents randomly selected from two microfinance groups. The result extrapolated from the study revealed that there was a significant uptake of health insurance among younger people. However, the uptake among women was low. Interestingly, the respondents had a total savings of about US\$37 per month, had at least 2 years of formal education and 5 household members. Majority of them were female (77%). Out of the 178 respondents, 34% had health insurance cover. Furthermore, the level of education of the respondents was low although they had formal education and smaller household size. The researchers reported that an additional year of education equally increased the likelihood of the people taking up insurance by 0.26. A large number (38%) of the uninsured were females. An increase in the size of the household also showed a decrease in the level of education of the household. The results suggested that the public needs to be continuously educated on the benefits of the insurance scheme.

Atnafu, et al. [35] conducted a study in Ethiopia to compare the differences between community-based health insurance and households' health insurance subscribers and non-members. The sample size selected were 652 households (326 insured and 326 uninsured households). The results showed that there was a significant difference in the rate of healthcare utilization between the members of households that were insured (50.5%) and those that were uninsured (29.3%) households. There was a significant variance observed between household size, educational level and expected healthcare cost. The result suggested that the utilization of health services among the insured households with community-based health insurance was higher. Interestingly, educational status and family size were part of the factors that influenced the utilization of healthcare services.

Oladigbolu, et al. [36] conducted a study on Socio – economic factors influencing utilization of healthcare services in Sokoto, Nigeria. The objective of the study was to assess the socio – economic factors influencing utilization of healthcare services in Sokoto, Nigeria. Three hundred and sixty (360) household heads in Sokoto were randomly selected. Most of the households, 221 (61.4%) belonged to upper social class (class I –III) and 139 (38.6%) belonged

to lower social class (class IV – V). The findings showed that majority of the households 337(93.6%) paid for their healthcare through user – fees out – of – pocket payment (OOPP). Social class, user – fees and educational status were the three predictors of utilization of healthcare services at the health facilities as households in the lower social class were 2 times the odds to find it difficult in paying for the services utilized at the health facilities (OR = 2.20,  $p = 0.003$ , 95% CI [1.31 – 3.77]). Similarly, households that paid for healthcare with user – fees were 8 times the odds to find it difficult in paying for the services utilized at the health facility (OR = 8.02,  $p = 0.045$ , 95% CI [1.05 – 61.17]) and households with informal education were 2 times the odds to find it difficult in paying for the services utilized at the health facility (OR = 2.23,  $p = 0.008$ , 95% CI [1.24 – 4.16]). Free healthcare services, increased coverage of pre – payment options (NHIS, CBHIS) and creation of more job opportunities to address unemployment thereby upholding the social class of the citizens of Nigeria were suggested.

## Research Methods

A descriptive, cross-sectional design was adopted for the study. The sample size ( $n = 519$ ) was estimated using Taro Yamene formula. Multi- stage sampling technique was used involving two stages. Stage 1: enumeration and selection of the number of offices in each local government area (150 offices) using simple random sampling. Stage 2: stratified

proportionate sampling method was used to select 519 civil servants in each of the eight (8) local government area; Brass local government area (LGA) -80, Ekeremor LGA- 85, Kelga LGA -40, Nembe LGA -65, Ogbia LGA- 50, Sagbama LGA- 55, Southern Ijaw LGA-68 and Yenegoa LGA- 75 from the 150 offices. A self-developed and structured questionnaire, which comprised of close-ended questions was used to collect information from the respondents. Data were collected between May and July, 2023 using a self-administered questionnaire with the help of three trained research assistants and supervised by the researchers. All completed questionnaire were retrieved on the spot with a questionnaire return rate of 94.6% (519 minus 491). Therefore, data retrieved from the 491 respondents were used for analysis in the study. Ethical protocols were observed, which involved obtaining informed voluntary consent from both the local government authorities and the respondents to participate in the study. Descriptive and inferential statistics were used to analyze the research questions. Face validity and content validity of the instrument were established by three health experts, while the reliability coefficient of the instrument was 0.79.

## Data Analysis

Mean and standard deviation showing level of utilization of national health insurance scheme among civil servants in Bayelsa State (Table 1).

SN	Items	x	S. D.	Remark
1	Workers utilize healthcare service to promote good well-being	3.28	0.71	High
2	Decision on insuring health	2.73	0.87	High
3	Social health insurance enables workers to meet the need of hospitalization if utilized	3.41	0.67	High
4	Use of Social health insurance help workers get good treatment	3.28	0.83	High
5	Civil servants may not subscribe to Social health insurance due to low remuneration	2.93	0.96	High
6	Workers salary is not enough to subscribe to Social health insurance scheme	2.87	0.99	High
7	Family demands contribute to the utilization of Social health insurance scheme	2.54	1.09	High
8	Workers income enable them to subscribe to Social health insurance scheme	2.83	0.83	High
9	The use of Social health insurance is to get self-help on health challenges after active civil service	3.24	0.75	High
10	Workers choice of seeking Social health insurance depends on the status of the job	3.2	0.95	High
11	Workers' choice of using Social health insurance may be affected by the place of residence	2.71	1.03	High

12	Use of Social health insurance scheme because it reduces workers' health spending	3.24	0.81	High
13	Able to get medical treatment and collect drugs without money	3.16	0.95	High
14	Use of Social health insurance enable workers get adequate and quality care	3.11	0.79	High
15	Limited amount of money deter health insurance service utilization	3.03	1.2	High
16	Income status deter health insurance service utilization	2.85	0.95	High
	Grand mean	3.02	0.89	High

**Table 1:** Showed the mean and standard deviation indicating level of utilization of national health insurance scheme among civil servants in Bayelsa State. The result showed that the grand mean of  $3.02 \pm 0.89$  is greater than the criterion mean of 2.50 indicating a high level of utilization. The analysis showed that to a high level, workers are able to get medical treatment and collect drugs without money ( $3.16 \pm 0.95$ ) and use of social health insurance enabled workers to get adequate and quality care ( $3.11 \pm 0.79$ ). Thus, the level of utilization of national health insurance scheme among civil servants in Bayelsa State was high.

Point Biserial Correlation showing relationship between gender and utilization of social health insurance service among civil servants (Table 2).

Variables		Utilization	Gender	Remark
Utilization	Pearson correlation	1	0.44	Moderate relationship
	N	491	491	
Gender	Pearson correlation	0.44	1	
	N	491	491	

Guide: 0.00-0.19 = very low, 0.20-0.39 = low, 0.40-0.59 = moderate, 0.60-0.79 = high and  $\geq 0.80$  is high relationship

**Table 2:** Showed the Point Biserial Correlation between gender and utilization of social health insurance services among civil servants. The result revealed a correlation coefficient,  $r = 0.44$  indicating a moderate relationship. Thus, the relationship between gender and utilization of social health insurance services among civil servants in Bayelsa State was moderate.

Point Biserial Correlation showing relationship between household size and utilization of social health insurance service among civil servants (Table 3).

Variables		Utilization	Household size	Remark
Utilization	Pearson correlation	1	0.72	High relationship
	N	491	491	
Household size	Pearson correlation	0.72	1	
	N	491	491	

Guide: 0.00-0.19 = very low, 0.20-0.39 = low, 0.40-0.59 = moderate, 0.60-0.79 = high and  $\geq 0.80$  is high relationship

**Table 3:** Showed the Point Biserial Correlation between household size and utilization of social health insurance service among civil servants. The result revealed a correlation coefficient,  $r = 0.72$  indicating a high relationship. Thus, the relationship between household size and utilization of social health insurance service among civil servants in Bayelsa State was high.

Point Biserial Correlation showing relationship between income status and utilization of social health insurance service among civil servants (Table 4).

Variables		Utilization	Income status	Remark
Utilization	Pearson correlation	1	0.5	Moderate relationship
	N	491	491	
Income status	Pearson correlation	0.5	1	
	N	491	491	

Guide: 0.00-0.19 = very low, 0.20-0.39 = low, 0.40-0.59 = moderate, 0.60-0.79 = high and  $\geq 0.80$  is high relationship

**Table 4:** Showed the Point Biserial Correlation between income status and utilization of social health insurance service among civil servants. The result revealed a correlation coefficient,  $r = 0.50$  indicating a moderate relationship. Thus, the relationship between income status and utilization of social health insurance service among civil servants in Bayelsa State was moderate.

Point Biserial Correlation showing relationship between employment status and utilization of social health insurance

service among civil servants (Table 5).

Variables		Utilization	Employment status	Remark
Utilization	Pearson correlation	1	0.81	High relationship
	N	491	491	
Employment status	Pearson correlation	0.81	1	
	N	491	491	

Guide: 0.00-0.19 = very low, 0.20-0.39 = low, 0.40-0.59 = moderate, 0.60-0.79 = high and  $\geq 0.80$  is high relationship

**Table 5:** Showed the Point Biserial Correlation between employment status and utilization of social health insurance service among civil servants. The result revealed a correlation coefficient,  $r = 0.81$  indicating a high relationship. Thus, the relationship between employment status and utilization of social health insurance service among civil servants in Bayelsa State was high.

## Discussion of Findings

The result revealed that there was a statistically significant relationship between gender and utilization of social health insurance services among civil servants ( $n = 491$ ;  $r = 0.44$ ;  $p < 0.01$ ). The finding of this study gives credence to that of Kong and Kim (2020)[34] whose study on the factors influencing healthcare use by health insurance subscribers in Korea showed a significant relationship between gender and health insurance scheme utilization. The finding of this study is also in tandem with that of Dalinjong et al. whose study on health insurance status in rural poor communities of Northern Ghana revealed a good level of utilization of health insurance, which was associated with socio-demographic factors of the respondents. This similarity might be due to the homogeneity of the study population.

In addition, the result revealed that there was a statistically significant relationship between household size and utilization of social health insurance services among civil servants ( $n = 491$ ;  $r = 0.72$ ;  $p < 0.01$ ). The finding of this study is akin to that of Tilahun, et al. [6] whose study on Mutual Health Insurance on health service utilization in Ethiopia revealed a significant relationship between household size and level of utilization of health insurance. This similarity might be due to the homogeneity of the study population.

The finding of this study is in tandem with that of Karanjit, et al. [10] whose study on the factors affecting the utilization of social health insurance by the general population showed a significant relationship between household and utilization of social health insurance services. This similarity between the present study and the previous one might be due to the close range of the sample size used in both studies.

The result revealed that there was a statistically significant relationship between educational status and utilization of social health insurance services among civil servants ( $n = 491$ ;  $r = 0.54$ ;  $p < 0.01$ ). The finding of this study gives credence to that of Kong and Kim [34,37-43] whose study on the factors influencing healthcare use by health insurance subscribers in Korea showed a significant relationship between educational status and health insurance scheme utilization. The finding of this is akin to that of Tilahun, et al. [6] whose study on Mutual Health Insurance on health service utilization in Ethiopia revealed a significant relationship between educational status and level of utilization of health insurance. This similarity might be due to the homogeneity of the study population. The finding of this study is in tandem with that of Dalinjong et al. whose study on health insurance status in rural poor communities of Northern Ghana revealed a good level of utilization of health insurance which was associated with socio-demographic

factors of the respondents. This similarity might be due to the homogeneity of the study population.

The result revealed that there was a statistically significant relationship between income status and utilization of social health insurance services among civil servants ( $n = 491$ ;  $r = 0.50$ ,  $p < 0.01$ ). The finding of this study is in tandem with that of Dalinjong et al. whose study on health insurance status in rural poor communities in Ghana revealed a good level of utilization of health insurance which was associated with socio-demographic factors of the respondents. This similarity might be due to the homogeneity of the study population. The finding of this is akin to that of Tilahun, et al. [6] whose study on Mutual Health Insurance on health service utilization in Ethiopia revealed a significant relationship between income status and level of utilization of health insurance. This similarity might be due to the homogeneity of the study population. The finding of this study is in contrast with that of Karanjit, et al. [10] whose study on the factors affecting the utilization of social health insurance by the general population in Bhaktapur Municipality showed a significant relationship between income status and utilization of social health insurance service. This similarity between the present study and the previous one might be due to the methodological approaches used.

## Conclusion

Based on the findings of the study, it was concluded that the socio-demographic determinants of utilization of social health insurance services among civil servants in Bayelsa State are gender, household size, place of residence, educational status, employment status, income status, and availability of service.

## Recommendations

Based on the findings of the study, the following recommendations were made:

1. Bayelsa State government should extend the social health insurance scheme to all the civil servants in the State.
2. Gender-based organizations should advocate for gender equality in the delivery of any health service including social health insurance schemes.
3. The healthcare management board should expand the beneficiaries in each civil servant's household to accommodate everyone in each household.
4. The Ministry of Education should collaborate with the Ministry of Health to ensure that individuals at all levels of education benefit from the social health insurance scheme.
5. The Civil Service Commission should collaborate with the Ministry of Health to ensure that all civil servants

benefit from the social health insurance scheme, the employment status notwithstanding.

## References

1. World Health Organization (2017) Health impact assessment (HIA), determinants of health. Geneva, Switzerland: WHO.
2. ODPHP (2017) US Department of Health and Human Services, Office of Disease Prevention and Health Promotion). Foundation health measures: Determinants of health. Washington, DC: US Department of Health and Human Services.
3. Thomas-Henkel C, Schulman M (2017) Screening for social determinants of health in populations with complex needs: Implementation considerations. Washington, DC: Center for Health Care Strategies, Inc.
4. Attafuah PY A, Everink IH, Lohrmann C, Abuosi A, Schols J M (2023) Health and social needs of older adults in slum communities in Ghana: a phenomenological approach used in 2021. Archives of Public Health 81(1): 74.
5. Alesane A Anang TB (2018) Uptake of health insurance by the rural poor in Ghana: determinants and implications for policy. Pan African Medical Journal 20(18): 1-24.
6. Tilahun H, Atnafu DD, Geta Asrade G, Minyihun A, Alemu YM (2018) Factors for healthcare utilization and effect of mutual health insurance on healthcare utilization in rural communities of South Achefer Woreda, North West, Ethiopia. Health Economics Review 8(1):15.
7. Lotfi F, Motlagh S, Mahdavi G, Keshavarz K, Hadian M (2017) Factors affecting the utilization of outpatient health services and importance of health insurance. Shiraz E-Medical Journal 18(8): e57570.
8. Omoregha OA, Bassey AO (2018) Socio-economic determinants of healthcare service utilization among rural dwellers in Akpabuyo LGA, of Cross River State, Nigeria. Academic Journal of Interdisciplinary Studies 7(2): 65-72.
9. Rouyard T, Mano Y, Daff BM, Diouf S, Dia FK, et al. (2022) Operational and structural factors influencing enrolment in community-based health insurance schemes: an observational study using 12 waves of nationwide panel data from Senegal. Health Policy and Planning 37(7): 858-871.
10. Karanjit P, Mali P, Khadka R, Poudel L (2020) Factors affecting the Utilization of Social Health Insurance by the General Population in Bhaktapur Municipality. Nepal



- Medical Journal 3(4): 42-48.
11. Spaan E, Mathijssen J, Tromp N, McBain F, ten Have A, et al. (2012) The impact of health insurance in Africa and Asia: a systematic review. *Bulletin World Health Organization* 90(9): 685-692.
  12. Archibong EP, Ogana JF, Edet AF, Enamhe DC (2023) Health care financing and services utilization in cross river state, Nigeria. *Global Journal of Social Sciences* 22(1): 9-24.
  13. Song SO, Jung CH, Song YD, Park CY, Kwon HS, et al. (2014) Background and data configuration process of a nationwide population-based study using the Korean national health insurance system. *Diabetes & metabolism journal* 38(5): 395-403.
  14. Okunna N, Ezeama NN, Ezeama CO, Munala L (2022) Awareness, knowledge and perceptions of physicians of the National Health Insurance Scheme in Nigeria: an exploratory study. *Int J Health* 8(1): 51-60.
  15. Pitacco E (2014) *Health insurance. Basic Actuarial Models*, Cham, Switzerland: Springer Verlag.
  16. Feng R (2023) *Decentralized Insurance*. In *Decentralized Insurance: Technical Foundation of Business Models* (119-139). Cham: Springer International Publishing.
  17. Yazbeck AS, Soucat AL, Tandon A, Cashin C, Kutzin J, et al. (2023) Addiction to a bad idea, especially in low- and middle-income countries: Contributory health insurance. *Social science & medicine* 320: 115168.
  18. Awosusi A (2022) Nigeria's mandatory health insurance and the march towards universal health coverage. *The Lancet Global Health* 10(11): e1555-e1556.
  19. Okpani AI, Abimbola S (2015) Operationalizing universal health coverage in Nigeria through social health insurance. *Nigerian medical journal: journal of the Nigeria Medical Association* 56(5): 305-310.
  20. Alawode G, Adewoyin AB, Abdulsalam AO, Ilika F, Chukwu C, et al. (2022) The political economy of the design of the Basic Health Care Provision Fund (BHCPF) in Nigeria: a retrospective analysis for prospective action. *Health Systems & Reform* 8(1): 2124601.
  21. Doetinchem O, Carrin G, Evans, D (2010) *Thinking of introducing social health insurance? Ten questions*. Geneva.
  22. Akwaowo CD, Umoh I, Udo AA, Motilewa OO, Dan E, et al. (2023) Willingness to join social health insurance and community-based health insurance among rural residents in Akwa Ibom state, Nigeria. *Ibom Medical Journal* 16(2): 207-217.
  23. Normand CEM, Weber A, Carrin G (2009) *Social health Insurance: A guidebook for planning*. (2<sup>nd</sup> eds.), Bad Homburg VAS, Verl. für Akademische Schriften 158.
  24. World Health Organization (2010) *The World Health Report: Health Systems Financing: the Path to Universal Coverage*. Geneva: World Health Organization.
  25. Ekhatior-Mobayode UE, Gajanan S, Ekhatior C, Ekhatior-Mobayode U, Ekhatior C (2022) Does Health Insurance Eligibility Improve Child Health: Evidence. From the National Health Insurance Scheme (NHIS) in Nigeria. *Cureus* 14(9): e28660.
  26. Dadjo J, Ahinkorah BO, Yaya S (2022) Health insurance coverage and antenatal care services utilization in West Africa. *BMC Health Services Research* 22(1): 311.
  27. Uzochukwu BSC, Ughasoro MD, Etiaba E, Okwuosa C, Envuladu E, et al. (2015) Health care financing in Nigeria: implications for achieving universal health coverage. *Nigerian Journal of Clinical Practice*. 18(4): 437-444.
  28. Olugbenga EO (2017) Workable social health insurance systems in sub-Saharan Africa: insights from four countries. *Africa Development* 42(1): 147-175.
  29. Onyemaechi SB, Ezenwaka UR (2022) Leveraging innovative financing strategy to increase coverage and resources among informal sector for social health insurance within the Nigerian context of devolution: evidence from adoption model implementation. *Frontiers in Public Health* 10: 894330.
  30. Omoruan AI, Bamidele AP, Phillips OF (2009) Social health insurance and sustainable healthcare reform in Nigeria. *Studies on Ethno-Medicine* 3(2): 105-110.
  31. Adepoju P (2022) Nigeria's new law aims to provide health insurance to all. *The Lancet* 399(10341): 2092.
  32. World Health Organization (2003) *Utilization of Health care service*. Regional Office for South-East Asia New Delhi.
  33. Hanson K, Brikci N, Erlangga D, Alebachew A, De Allegri M, et al. (2022) The Lancet Global Health Commission on financing primary health care: putting people at the centre. *The Lancet Global Health*, 10(5): e715-e772.
  34. Kong NY, Kim DH (2020) Factors influencing health care use by health insurance subscribers and medical aid beneficiaries: a study based on data from the Korea welfare panel study database. *BMC Public Health*.

35. Atnafu A Gebremedhin T (2017) Community-based health insurance enrollment and child health service utilization in Northwest Ethiopia: A Cross-Sectional Case Comparison Study. *Clinico Economics and Outcomes Research*: CEOR 12: 435-444.
36. Oladigbolu R, Oche OM, Kaoje A, Gana G (2017) Socio-economic Factors influencing utilization of healthcare services in Sokoto, North-Western Nigeria. *International Journal of Tropical Disease & Health* 27(2):1-13.
37. Adesina D (2009) the national health insurance scheme. Obtained electronically. [www.thenigerian.com](http://www.thenigerian.com)
38. Akinkugbe O, Chama-Hiliba CM, Tlotlego N (2011) Health financing and catastrophic payments for health care: evidence from household-level survey data in Botswana and Lesotho. African Economic Research Consortium (AERC).
39. Amu H, Dickson KS, Kumi-Kyereme A, Darteh EKM (2018) Understanding variations in health insurance coverage in Ghana, Kenya, Nigeria, and Tanzania: Evidence from demographic and health surveys. *PLoS ONE* 13(8): e0201833.
40. Mthetheleli MG, Mash R (2019) The perceptions of general practitioners on National Health Insurance in Chris Hani district, Eastern Cape, South Africa. *South African Family Practice* 61(3):102-108.
41. Okaro AO, Ohagwu CC, Njoku J (2010) Awareness and perception of National Health Insurance Scheme (NHIS) among radiographers in south east Nigeria. *American Journal of Sciences Research* 8(2):18-25.
42. World bank (2007) Tuberculosis and AIDS control projects. What we do. [Project.worldbank.org](http://Project.worldbank.org)
43. World Bank (2008) Community-based health insurance and the poor (English). Africa.

