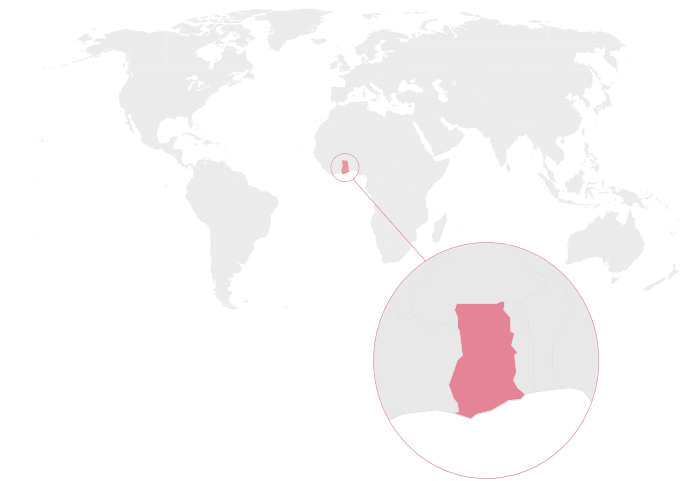


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Sarah Mensah Asantewaa

The Health Care System in Ghana



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THE HEALTH CARE SYSTEM IN GHANA

Sarah Mensah Asantewaa*

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1. COUNTRY OVERVIEW



Source: On the world map <https://ontheworldmap.com/ghana/map-of-ghana-1100.jpg> (Accessed: June 2, 2022)

- » Sub-Region: Sub-Saharan Africa
- » Capital: Accra
- » Official Language: English
- » Population size: 31.7 million (UN 2021)
- » Share of rural population: 42.65 % (UN 2021)
- » GDP: 68.338 billion US \$ in 2019 (Word Bank 2021)
- » Income group: Lower Middle Income
- » Gini Index: 43.5 in 2016 (World Bank 2021)
- » Colonial period and independence: Formal colonialism first came to the region we today call Ghana (formerly Gold Coast) in 1874. On 6 March 1957, Ghana gained independence from Britain.

Source: UN 2021; World Bank 2021

2. SELECTED HEALTH INDICATORS

	Ghana	Global Average
Male life expectancy (2020) ^a	63	71
Female life expectancy (2020) ^a	65	75
Under-5 mortality rate, per 1,000 live births (2020) ^a	45	37
Maternal mortality rate modelled estimates (per 100,000 live births) in 2017	308	211
HIV prevalence (2020) ^c	1.7 % (15-49 age range)	0.7 % (15-49 age range)
Tuberculosis prevalence (2020) ^b	143 per 100,000 people	127 per 100,000 people

Source: World Bank 2021

3. HEALTH CARE IN GHANA AFTER INDEPENDENCE

Healthcare in Ghana has taken diverse forms over the past decades. During the pre-colonial era, traditional priests, clerics, and herbalists were the major caregivers and health advisors in Ghana. Subsequently, Ghana was designated as a British colony in 1874; the British Colonial Administration found the Ghanaian environment extreme for them as it was prone to dangerous diseases. This triggered the British Colonist to establish a Medical Department, which resulted in the introduction of a formal medical system in Ghana. Hence the modern history of healthcare in Ghana was influenced by the international actors such as European colonists, Christian missionaries and World Bank among others (MacLean 2017).

In 1957, Ghana became the first African country to attain independence from colonial forces and has been responsible for its own public policies, including policies regarding healthcare (Nsiah-Boateng and Moses 2018). At the time of independence, Ghana's health policy was "free health care for all." The implementation of the 'free health care for all' was limited to the public health facilities (hospitals, clinics), with commercial health facilities, particularly the private health facilities, playing a minimal role (Kipo-Sunyehzi et al. 2019; Ministry of Health Ghana 2004). Health services at the time were totally funded through general taxation, hence every person had access to free health care at all government hospitals at no cost.

However, the country's economic downturn in the 1970s and 1980s cut this aim short. The country encountered financial difficulty as a result of free public healthcare and massive government spending. The Ghanaian economy was strained further by falling global prices of its cash crops. This period also witnessed dramatic cuts in health investment by the government and was characterised by medicine stockouts, low morale of health care workers and a freeze on health care expansion plans. User fees for hospital services were therefore implemented during this time (Kipo-Sunyehzi et al. 2019; Koduah, van Dijk, and Agyepong 2015).

In 1966, subsequent governments decided to continue to keep the out-of-pocket fees low in addition to making cuts in the government healthcare spending with the 1969 Hospital Fees Decree and the 1970 Hospitals Fees Act in the hopes of recovering fees and bolstering the economy (Akortsu and Abor 2011). Despite the reductions in government spending, the economy and the health care services continued to deteriorate. Many social services, comprising healthcare, were insufficient and could not provide sufficient care and drugs, irrespective of the fact that healthcare was largely free in the 1980s. In 1981, healthcare had deteriorated to the point where hospitals lacked basic supplies and health care personnel were fleeing the nation in droves. Patients in some public hospitals were required to furnish their own food, medicine, and bedding, and were subject to detention until their hospital bills were fully paid. Due to hefty prescription expenses, unaffordability drove others towards self-medication (Lambon-Quayefio and Owoo 2017).

Following the passage of structural adjustment reforms (due to pressures from the World Bank and the International Monetary Fund on the government to cut public spending), the new regime enacted the Hospital Fees Regulation in 1985, resulting in higher out-of-pocket costs in order to fund the drugs and resources required by the healthcare system (WHO 2021). It was designed to assist the government in recouping 15 % of healthcare service expenditures that had been lost in previous years. Ghana expanded user fees to all the public health care services in 1985 during the Rawlings administration, a system known locally as the 'Cash and Carry System'. With regards to this system, Ghanaians were obliged to pay out-of-pocket fees at each point of service. However, many Ghanaians using public healthcare could not afford to pay these fees, causing many lower and middle-class Ghanaians to be dissatisfied with the cash-and-carry system. Structural adjustment programs led to a decrease in Ghanaian healthcare expenditure from 10 % in 1983 to 1.3 percent by 1997 (Konadu-Agyemang and Kwaku Takyi 2018). As a result, the use of health services fell dramatically under this system, especially in rural regions and among persons over 45 years old.

A Health Fund was established in 1997 to offer a pool of funds for the health sector. Despite increases in exemptions and infrastructure that enhanced healthcare access, out-of-pocket costs remained a significant barrier. The Cash and Carry System was hugely unpopular and socially a regressive practice largely due to the fact that the poor and other marginalized communities had little access to mainstream health care and the model created disincentives for providing health care in rural areas. To address the shortcomings a new healthcare reform was introduced, the National Health Insurance Scheme in Ghana to replace the cash and carry system of payment for accessing health services during the point of delivery (Boamah 2015).

4. LEGAL BEGINNING OF THE SYSTEM

Name and type of legal act	National Health Insurance Scheme, Act 650
Date the law was passed	August, 2003
Date of <i>de jure</i> implementation	2004 (exact date not stated)
Brief summary of content	The National Health Insurance Authority Scheme was passed by the government of Ghana in 2003, with the authorization of the establishment of Mutual Health Schemes on district basis. This scheme is targeted at universal health insurance by having about 50 % to 60 % of the Ghanaian population to be enrolled and covered by health insurance packages within duration of ten years of its implementation. The policy is introduced to replace the hostile cash and carry system of payment for accessing health during the point of delivery.
Socio-political context of introduction	Ghana is the first Sub-Saharan African country which introduced the National Health Insurance Scheme. The National Health Insurance Scheme policy was started by the Ghanaian government, as a fundamental policy aimed at eliminating the out-of-pocket payment of health care. The main purpose of the introduction of the National Health Insurance Scheme in Ghana is to replace the cash and carry system of payment for accessing health during the point of delivery. Ghana's healthcare system was chronically understaffed, under stocked, and generally failed to meet the population's basic health needs that it was designed to address in the first place. The National Health Insurance System (NHIS) was therefore designed to address the shortcomings of the cash-and-carry system. During the general election in Ghana in 2000, the New Patriotic Party (NPP) campaigned and won on a platform promising to end cash-and-carry and replace it with a pro-poor health insurance scheme. At the launch of the National Health Insurance Scheme on 18th March 2004, the President of Ghana at the time, President Kufuor, attributed an 'unacceptable' 80 per cent of ill-health and early deaths in Ghana to infectious diseases, pregnancy and child-related problems and accidents. He stated that similar conditions would be covered by the Health Insurance Scheme in the future. Before the NHIS, there were pilot programs in the Greater Accra Region's Dangme West District and the Brong Ahafo Region's Nkoranza District to build the groundwork for the National Health Insurance Scheme.

5. CHARACTERISTICS OF THE SYSTEM AT INTRODUCTION

a. Organisational structure

The NHIS is decentralised into district mutual health insurance scheme (DMHIS) that operate under the National Health Insurance Authority (under Act 650). The NHIS compliments an additional scheme for the formal sector and is administered by the National Health Insurance Authority, which also manages the public and private health care providers at all levels of the healthcare system.

In 2003, under Act 650, most of the Community Based Health Insurance schemes transitioned into the district mutual health insurance schemes (DMHISs), in every district of the country, which maintained a level of independence by having their own governance and management structures. Until 2012, Ghana had about 145 DMHISs (some with satellite offices) that were individually registered as companies limited by guarantee. The District Assembly identify promoters to initiate action for the registration of the scheme as a company limited by guarantee under the Companies Act, 1963 (Act 179) for the relevant district within sixty days of the coming into force of this Act or within a further period that the Council may direct. The Council may permit the establishment of units of a scheme within a district as it considers necessary for the effective management of the scheme. The district mutual health insurance scheme has its headquarters within the district and notifies the Authority of the addresses and any other particulars of the headquarters as the Council may prescribe.

The National Health Insurance schemes is regulated and supervised by the NHIA, which also distribute subsidies to DMHISs for exempt enrollees. Under Act 650, the NHIA is governed by a board, which reports to the minister of health. The board includes representation from a wide range of stakeholders including the Ministry of Health (MOH), Ghana’s public provider network (Ghana Health Service), private providers, insurance schemes, the National Insurance Commission, and consumers.

» Coverage

Percentage of population covered by social insurance schemes (in 2006)	20 %
Percentage of population uncovered	80 %

Source: World Bank 2021

All residents of Ghana, including non-citizens, are eligible for the NHIS coverage, in order to achieve the goal of universal health coverage (NHIA 2012). Though all residents are eligible for coverage, there exist low enrolment among the residents. The low enrolment on the National Health Insurance Scheme is attributed to socio-demographic factors (such as income level, education) and other significant factors such as the lack of understanding of the insurance benefit packages and concept, long queues accompanied with long waiting time, inadequate consumer information, delayed issuance, expensive premiums, negative attitudes of health professionals, lack of insurer trust, institutional rigidities, perceived poor quality drugs, unfavourable timing of insurance premium payments, poverty among others (Dalinjong and Laar 2012; Nguyen and Knowles 2010; Gottret and Schieber 2006).

b. Provision

Number of physicians (per 1,000 people) in 2007	0.073
Number of nurses/midwives (per 1,000 people) in 2008	0.969
Number of beds in public hospitals (per 1000 people) in 2011	9.0

Source: GSS 2014

» Service Package

Subscribers of the National Health Insurance Scheme benefit from numerous packages. The benefit packages are universal and equal for all subscribers. The pre-defined packages cover about 95 % of the common diseases significantly reported by the health care facilities in Ghana (Boamah 2015). Additionally, the package covers maternal and reproductive care, overall in-patient and out-patient care, dental care, emergency and eye care across health centres in Ghana (Boamah 2015; Alhassan, Nketiah-Amponsah and Arhinful 2016). Moreover, the list of relevant medicines is covered under the benefits to be accrued subscribers.

However, the service package under the National Health Insurance Scheme is not comprehensive. This is because the service package excludes health problems that are relatively costly which comprise cancer treatments, organ transplant, dialysis for chronic kidney failure and photography, HIV/AIDS treatment, family planning services and immunization. Therefore, the average Ghanaian is not able to secure health care from the National health Insurance Scheme, when suffering from these extreme health challenges. As a result, such individuals resort to donations from the public and philanthropists to acquire the needed funding for treatment.

c. Financing

Ghana is the only country in the world to finance its health scheme predominantly through value-added tax (VAT) revenue (Huihui, Otoo and Dsane-Selby 2017). The Government of Ghana’s overall expenditure on health in 2006 was 3.96 % of Gross Domestic Product (NHIA 2012). The NHIS is financed through a central National Health Insurance Fund (NHIF) which is sourced from the National Health Insurance Levy (NHIL) of 2.5 % tax on selected goods and services; 2.5 % of Social Security and National Insurance Trust (SSNIT) contributions, largely by the formal sector workers; payment of premiums, and donor funds. Individuals who are employed in

the formal sector and contribute to SSNIT are exempted from premium payment. As at 2012, over 70 % of the NHIS financial inflows came from the NII; 17.4 % from SSNIT contributions and 4.5 % from premium payments.

Other sources of funding to the NHIF include money allocated by the parliament of Ghana, grants, donations, gifts/voluntary contributions, and interests accrued from investments.

d. Regulation

The Ministry of Health oversees healthcare organizations with private and public ownership in the country. The Ghana Health Service therefore supervises public healthcare in Ghana by implementing health policies and improving universal health access to all people resident in the country. Through the Ghana Health Service, The National Health Insurance Authority (NHIA) is mandated by law to secure the implementation of the National Health Insurance Scheme. The Authority is responsible for the registration, licensing and regulation of health insurance schemes in the country. It also grants credentials to healthcare providers and monitor their performance for efficient and quality service delivery. It is responsible for managing the National Health Insurance Fund and devising mechanisms to ensure that indigents are adequately catered for under the NHIS (GSS 2014; NHIA 2012).

The governing body of the Authority is a Board consisting of a Chairperson, the Chief Executive and other members drawn from various stakeholder organisations. The Board is appointed by the President of the country and is responsible for the proper and effective functioning of the Authority (NHIA 2012).

6. SUBSEQUENT HISTORICAL DEVELOPMENT OF PUBLIC POLICY ON HEALTH CARE

Name and type of legal act	National Health Insurance Act 852
Date the law was passed	August, 2012
Date of <i>de jure</i> implementation	October 31, 2012
Brief summary of content	Act 852 has replaced Act 650 in October 2012 to consolidate the NHIS, remove administrative bottlenecks, introduce transparency, reduce opportunities for corruption and gaming of the system, and make for more effective governance of the scheme.
Population coverage	All residents of Ghana, including non-citizens
Type of benefits	The benefit packages are the same for all population groups. The benefits cover 95 percent of health conditions affecting the population and include most necessary outpatient diagnostic and curative services, medicines, inpatient services, emergency care (such as road accidents), maternity care, and oral health. Also, under the free NHIS for pregnant women policy, pregnant women are exempt from NHIS premium payment. Again, the benefit covers premium exemptions for persons with mental health. Lastly, the benefit package covers relevant family planning packages.
Socio-political context of introduction	Challenges associated with the implementation of the NHIS necessitated a review of the delivery of services under the scheme which in 2012 resulted in the enactment of the NHIS Act 850. The Act 650 enabled all districts in Ghana to establish their own mutual health insurance schemes (DMHIS). The DMHIS were autonomous from each other but operate under the National Health Insurance Authority (NHIA). There was fragmentation in Ghana's Health Insurance scheme which led to the creation of multiple health insurance funds. The fragmentation of the Health Insurance Scheme was as a result of the autonomous district health insurance schemes that operated under the NHIA. The fragmentation led to numerous challenges including lack of transparency in operations, inequitable benefit packages for different segments of the population, administrative bottlenecks, a low financial protection against healthcare expenditures for the insured persons and a notable rate of insurance coverage duplication. The Government saw the need to revise the law in 2012 (Act 852) to bring the district insurance schemes into to a single pooled fund, thus eliminating fragmentation. The reform was therefore made to consolidate the NHIS, remove the administrative bottlenecks, reduce opportunities for corruption and gaming of the system, introduce transparency and make for more effective governance of the schemes. Also, the policy reorientation of the NHIS aimed to achieve improvements in efficiency and quality of health service delivery.

7. DESCRIPTION OF CURRENT HEALTH CARE SYSTEM

a. Organisational structure

The National Health Insurance Scheme (NHIS) was implemented into the health system as part of the government's endeavour to guarantee equitable access to health in Ghana (NHIA, 2012). The scheme's main purpose is to promote the affordability and use of pharmaceuticals and health services in Ghana, particularly among the poor and most vulnerable people.

The NHIS operates Ghana's public healthcare system and allows three different kinds of insurance plans (District Mutual Health Insurance Schemes, or DMHIS; private mutual insurance schemes; and private commercial insurance schemes). The most popular plan is the DMHIS, which operates in every district in Ghana. The other insurance plans cover less than 1 percent of the insured population. Each DMHIS is in charge of accepting and processing memberships, collecting premiums, and processing claims from accredited facilities.

District mutual health insurance scheme exists in every district of the country, a mutual health insurance scheme for the residents of the district. The District Assembly identifies promoters to initiate action for the registration of the scheme as a company limited by guarantee under the Companies Act, 1963 (Act 179) for the relevant district within sixty days of the coming into force of this Act or within a further period that the Council may direct. The Council may permit the establishment of units of a scheme within a district as it considers necessary for the effective management of the scheme. The district mutual health insurance scheme has its headquarters within the district and notifies the Authority of the addresses and any other particulars of the headquarters as the Council may prescribe.

» Coverage

Percentage of population covered by social insurance schemes (in2019)	66.5 %
Percentage of population covered by private schemes (in2019)	34.8 %
Percentage of population uncovered (in 2019)	31.2 %

Source: World Bank 2021

All residents of Ghana, including non-citizens, are eligible for NHIS coverage, but not all enrollees are required to pay premiums. SSNIT contributors do not pay premiums, nor do enrollees under the age of 18 or over the age of 70. Indigent people, institutionalized people and beneficiaries of social protection programs may also be exempted from premium payments.

b. Provision

Physician per 1,000 inhabitants (in 2019)	0.106
Nurses per 1,000 inhabitants (in 2019)	2.711
Public hospital beds per 1,000 inhabitants (in 2019)	0.9

Source: World Bank 2021

» Service Package

The NHIS has a single benefit package that was established by the Legislative Instrument 1809 and is stated by the NHIA as covering “95 percent of disease problems” that affect Ghanaians. The NHIS does not attempt to treat all diseases suffered by the insured members. However, many of the common diseases such as malaria, upper respiratory tract infections and diarrheal diseases, are covered by the NHIS benefits list. The benefit package covers ‘Outpatient services’ (General and specialist consultations, diagnostics, medicines, HIV/AIDS symptomatic treatment for opportunistic infections, etc.), Inpatient services (General and specialist inpatient care, diagnostics, medicines, etc.), Oral health and Eye care, Maternity care (including caesarean session) and Emergencies (Crises situations such as Medical and surgical emergencies as well as Road accidents). Also, under the free NHIS for pregnant women policy, pregnant women are exempt from NHIS premium payment. Diseases such as cancers, which are relatively not common, are not covered by the NHIS. Again, the benefit covers premium exemptions for persons with mental health and benefit package relevant family planning packages. Overall, more than 60 % of active members of the NHIS are under the premium exemption category (i.e., people under 18 years or 70+ years; pregnant women and indigents).

The reform paved way for additions to the already existing benefit packages. The initial benefits covered 95 percent of health conditions affecting the population and include most necessary outpatient diagnostic and curative services, medicines, inpatient services, emergency care (such as road accidents), maternity care, and oral health. Additional benefit packages that were to be enjoyed by NHIS subscribers after the new reform included the exemption of pregnant women from NHIS premium payment, premium exemptions for persons with mental health and relevant family planning packages.

Though other benefits were added under the new law, the service package still remains incomprehensive. This is because the NHIS package still excludes some very costly procedures such as cancer treatments certain surgeries, dialysis, organ transplants, non-vital services such as cosmetic surgery; and some high-profile items such as HIV antiretroviral drugs (which are heavily subsidized by the separate National AIDS Program). How-

ever, some of these health challenges have become rampant in Ghana, causing a threat to human lives. Also, the NHIS imposes insurance premiums as a requirement for accessing health care, and this remains an obstacle for poor people's access to health care. The poor informal sector workers may not be able to afford the premiums or qualify for the premium subsidies for the indigent. For example, reports by GSS (2014) indicate that among the 33 % of the population who are currently not enrolled by the health insurance scheme, the majority (56 %) attributed their non-enrolment on the scheme to economic reasons.

c. Financing

The Government of Ghana's overall expenditure on health in 2019 was 3.4 % of Gross Domestic Product. The NHIS is financed through a central National Health Insurance Fund (NHIF) which is sourced from the National Health Insurance Levy (NHIL) of 2.5 % tax on selected goods and services; 2.5 % of Social Security and National Insurance Trust (SSNIT) contributions, largely by formal sector workers; payment of premiums, and donor funds. Individuals who are employed in the formal sector and contribute to SSNIT are exempted from premium payment. In 2012, over 70 % of the NHIS financial inflows came from the NHIL; 17.4 % from SSNIT contributions and 4.5 % from premium payments. Other sources of funding to the NHIF include money allocated by the parliament of Ghana, grants, donations, gifts/voluntary contributions, and interests accrued from investments.

The current NHIS operates under the one-time premium policy, where people make one payment for a lifetime of healthcare. The one-time premium policy was used as a way to increase access to healthcare services to those "outside formal sector employment".

d. Regulation of dominant system

The Ministry of Health oversees the healthcare organizations with private, public and traditional ownership in the country. The Ghana Health Service therefore supervises public healthcare in Ghana by implementing the health policies and improving universal healthcare access to all people resident in the country. Through the Ghana Health Service, the National Health Insurance Authority (NHIA) is mandated by the law to secure the implementation of the National Health Insurance Scheme. The Authority is responsible for the registration, licensing and regulation of health insurance schemes in the country. It also grants credentials to healthcare providers and monitor their performance for efficient and quality service delivery. It is responsible for managing the National Health Insurance Fund and devising mechanisms to ensure that indigents are adequately catered for under the NHIS. The governing body of the Authority is a Board consisting of a Chairperson, the Chief Executive and other members drawn from various stakeholder organisations. The Board is appointed by the President of the country, responsible for the proper and effective performance of the functions of the Authority. Generally, there are no changes in terms of regulation after the NHIS reform in 2012.

8. CO-EXISTING SYSTEMS

Free Maternal Health Policy: A free maternal health policy was implemented in Ghana in July 2008 under the National Health Insurance Scheme (NHIS). The policy allows all pregnant women to have free registration with the NHIS after which they would be entitled to free services throughout pregnancy, childbirth and 3 months post-partum. The policy was one of Ghana's key strategies for the achievement of the Millennium Development Goals (MDGs) and now, the Sustainable Development Goals (SDGs), specifically the reduction of maternal and child deaths and the achievement of universal health coverage (UHC).

9. ROLE OF GLOBAL ACTORS

The World Health Organization (WHO), the United Nations Children's Fund (UNICEF), the United States Agency for International Development (USAIDS) and the United Nations Development Programme (UNDP) are active global actors who provide resources and support to the Ghana Health Service, through the Government of

Ghana. These actors provide financial and technical assistance to the Ghana Health Service for the elimination of diseases and the improvement of healthcare standards.

REFERENCES

- Akortsu, A. M. & Abor, P. A. (2011). Financing Public Healthcare Institutions in Ghana. *Journal of Health Organization and Management* 25 (2): 128–41. <https://doi.org/10.1108/14777261111134383>.
- Alhassan, R. K., Nketiah-Amponsah, E. & Arhinful, D. K. (2016). A Review of the National Health Insurance Scheme in Ghana: What Are the Sustainability Threats and Prospects? *PLOS ONE* 11 (11): e0165151. <https://doi.org/10.1371/journal.pone.0165151>.
- Boamah, E. O. (2015). Enrolment of Urban Poor in National Health Insurance Scheme in the Ga East Municipality. PhD diss., University of Ghana.
- Ghana Statistical Service. (2014). 2010 Population & Housing Census: Regional Analytical Report (Vol. 1). Ghana Statistical Service.
- Kipo-Sunyehzi, D. D., Ayanore, M. A., Dzidzonu, D. K. & AyalsumaYakubu, Y. (2019). Ghana's Journey towards Universal Health Coverage: The Role of the National Health Insurance Scheme. *European Journal of Investigation in Health, Psychology and Education* 10 (1): 94–109. <https://doi.org/10.3390/ejihpe10010009>.
- Koduah, A., van Dijk, H. & Agyepong, I. A. (2015). The Role of Policy Actors and Contextual Factors in Policy Agenda Setting and Formulation: Maternal Fee Exemption Policies in Ghana over Four and a Half Decades. *Health Research Policy and Systems* 13 (1): 27. <https://doi.org/10.1186/s12961-015-0016-9>.
- Konadu-Agyemang, K. & Takyi, B. K. 2018. Structural Adjustment Programs and the Political Economy of Development and Underdevelopment in Ghana. In: Konadu-Agyemang K. (ed.), *IMF and World Bank Sponsored Structural Adjustment Programs in Africa - Ghana's Experience, 1983-1999*, 17–40. Routledge Revivals. London: Routledge.
- Lambon-Quayefio, M. & Owoo, N. S. (2017). Determinants and the Impact of the National Health Insurance on Neonatal Mortality in Ghana. *Health Economics Review* 7 (1): 1-16. <https://doi.org/10.1186/s13561-017-0169-z>.
- MacLean, L. M. (2017). Neoliberal Democratisation, Colonial Legacies and the Rise of the Non-State Provision of Social Welfare in West Africa. *Review of African Political Economy* 44 (153): 358–80. <https://doi.org/10.1080/03056244.2017.1319806>.
- Ministry of Health Ghana (2004). National Health Insurance Framework for Ghana. Accra: Ministry of Health.
- National Health Insurance Authority (NHIA) (2012). 2012 annual report.
- Nsiah-Boateng, E. & Aikins, M. (2018). Trends and Characteristics of Enrolment in the National Health Insurance Scheme in Ghana: A Quantitative Analysis of Longitudinal Data. *Global Health Research and Policy* 3 (1): 1-10. <https://doi.org/10.1186/s41256-018-0087-6>.
- On the world map (2022). Map of Ghana. <https://ontheworldmap.com/ghana/map-of-ghana-1100.jpg>.
- UN (2021). Ghana. United Nations Statistics Division. <https://data.un.org/en/iso/se.html>.
- WHO (2021). Global Health Expenditure Database. World Health Organization.
- World Bank (2021). World Development Indicators. World Bank. <https://databank.worldbank.org/source/world-development-indicators>.