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SOCIAL HEALTH INSURANCE IN AFRICA: LESSON FROM GHANA

Abstract. *This paper discusses social health insurance, healthcare utilization, financial protection and quality of care. The primary purpose of the research is to provide an overview of evidence from up-to-date studies about the effects of Ghana's Social Health Insurance Scheme on improving access to healthcare, reducing financial hardship, and providing quality care for the insured. Systematization of the literary sources indicates that healthcare costs hinder poor people from accessing healthcare services when needed. Social health insurance is one intervention used to support individuals to access healthcare services irrespective of their socioeconomic status. The methodological basis of this study is a systematic literature review through the searches of PubMed and Google Scholar databases. The author included studies that assessed the effects of SHI on financial protection, access to healthcare and quality of care. He also excluded studies with limitations that will hinder the reliability of the review's findings. The author screened, extracted data and cross-checked the extracted data. The systematic review presents the results of an empirical analysis, which identified 209 articles and included 14 studies in this review: financial protection (7 studies), healthcare utilization (4 studies) and quality of care (4 studies). Among these studies, one study reported both utilization and financial protection. These studies were published between 2014 and 2020. social health insurance provides strong evidence of a positive impact on improving access to healthcare and protecting insurees against financial hardship. However, most insured people were not satisfied with the quality of care from the social health insurance providers. The results of this review remain relevant to policymakers, especially in developing countries where social insurance is not available for poor and vulnerable people. With the political will and determination, social health insurance is possible in any developing country.*

Keywords: financial hardship, healthcare, insurees, SHI, utilization.

Introduction. Half of the world's population cannot access essential healthcare services because they are poor, and many are being driven into poverty because they must pay for their medical fees out of their own pockets (World Bank, 2017). Poor people suffering from poor health due to poverty are predominantly in developing countries (Ngoma and Mayimbo, 2017; Peters et al., 2008). For instance, in Nigeria, the poor hardly have access to healthcare services because they lack the financial power to pay for healthcare services (Adedini et al., 2014; Akpomuvie, 2010). Likewise, in Ghana, a study that used geospatial analysis to assess the relationship between poverty and access to essential surgical care found that the northeast region with a higher concentration of poverty had worse access to critical surgical care (Tansley et al., 2017).

In Ghana, due to the inability of the poor and the financial burden attached to the poor in accessing healthcare services when needed, the Ghanaian government in 2013 established the National Health Insurance Scheme (NHIS) Act 650. The Act intended to «ensure equitable and universal access for all residents of Ghana to an acceptable quality of essential healthcare» (Nguyen et al., 2011; Okoroh et al., 2018). The Ghanian government designed the NHIS to accommodate different principles, one of which is solidarity, a desired virtue in Social Health Insurance (SHI) (Ministry of Health, 2004).

Before introducing the SHI Scheme in Ghana, the cash-and-carry system had constituted a barrier to healthcare utilization (Mensah et al., 2010). The cash and carry system demands that people must pay money before obtaining healthcare services (Kipo-Sunyehzi et al., 2020). For instance, research indicates

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that many low-income households frequently delay medical treatment under the system. Others resort to self-medication, patronize unlicensed traditional medical practitioners, spiritualists, and open space drug dealers (Mensah et al., 2010).

Empirical evidence has shown that health insurance in developing countries can improve health outcomes. For instance, a study that used a systematic review to assess the impact of health insurance in Africa and Asia showed a piece of solid evidence that health insurance improved service utilization and protected members financially by decreasing their out-of-pocket spending (Spaan et al., 2012). The study's findings also revealed that health insurance improved resource mobilization, quality of care and social inclusion (Spaan et al., 2012).

Various studies have evaluated the impact of Ghana's SHI. Unfortunately, this review found these findings incapacitated by multiple limitations. For instance, Akazili et al. (2017) evaluated the SHI with data from 2005 and 2006, and this was when the scheme was at its early stage; because of this, their findings cannot be generalized in the analytical term. Another study that assessed the effect of SHI on financial protection in two rural districts showed that the study's outcomes were marred by the lack of income and expenditure data. (Ngoma and Mayimbo, 2017). A recent systematic review on the SHI on out-of-pocket expenditures showed that the authors concluded that only three were of high quality among the review's included studies, which made their findings incomplete (Okoroh et al., 2020). Besides, most studies on the impact of Ghana's SHI are pretty outdated.

This study provides an up-to-date analysis of the impact of the SHI on a holistic set of domains to address these gaps. In doing so, it aims to answer the following research questions.

To what extent does Ghana's SHI improve access to healthcare services?

What evidence is there that SHI is providing financial protection to the insured against catastrophic health expenditures?

To what extent are the insured satisfied with the functional quality of healthcare services offered by the SHI?

Literature Review. Out-of-pocket expenditures are deemed the leading healthcare financing model in developing countries than government expenditure (Sirag and Nor, 2021). Evidence has shown that this method of financing healthcare is one of the main reasons for household impoverishment (Hamid et al., 2014; McIntyre et al., 2006; Wagstaff and van Doorslaer, 2003). Poor people get much less from their health systems than the wealthier people, and «they may not have access to the same providers as the rich and get substandard care as a result» (Cotlear et al., 2015).

A significant and increasing body of literature has examined the relationship between OOPE and impoverishment (Sirag and Nor, 2021). For instance, Hailemichael et al. (2019) used a comparative cross-sectional survey comprising 128 households of persons with depression and 129 hours without depression. Using the Patient Health Questionnaire, the study found that OOPE at the 10% threshold level, 24% of the households of persons with depression and high disability encountered financial burden compared with 15.3% depression and low disability and 12.1% for control households ($p=0.041$). Thus, the study concluded that around 5.8% of persons with depression and high disability were pushed into poverty because of catastrophic health payments compared to 3.5% for households with depression and low disability and 2.3% for control households (Hailemichael et al., 2019).

Mchenga et al. (2017) show that OOPE can expose households to the risk of incurring large medical bills, which may push persons in these households below the poverty line in Malawi (Mchenga et al., 2017). Their study based on data collected from 12,271 households revealed that OOPE pushed between 9.37 and 0.37% of households into catastrophic health payments. The survey analysis considered people in rural areas and middle-income households were at higher risk of incurring financial burden due to illnesses. In Rezapour et al. (2020) assessment, their descriptive-analytical and cross-sectional study found that the prevalence and burden of cardiovascular diseases in Iran exposed 24.6% of households to

catastrophic health expenditures.

Several studies have reported households borrowing and selling assets to pay for medical bills. For instance, Kruk et al. (2009) report on the frequency of borrowing or selling assets to access healthcare services in forty low-and-middle-income countries. On average, they found 25.9% of households borrowed money or sold items to pay for healthcare. Health financial burden was higher among the poorest households and in countries with fewer health insurance schemes. In Joe's (2015) study, he finds that households in India used distressed financing in borrowing, sale of household assets and contribution from friends and family members as coping strategies for hospitalization. This accounted for 58 and 42% share in total OOPE in rural and urban India.

Every year a comparably modest number of individuals suffer from severe illness and disability (Hsiao et al., 2007). Unfortunately, their medical conditions can result in substantial medical expenses that most individuals cannot afford but confronted with life and death choices (Hsiao et al., 2007). As a result, individuals will seek costly medical services even though the cost may bankrupt patients and their families (Hsiao et al., 2007). Policymakers who framed this situation as a problem may look at Germany, which took several years to develop its SHI scheme. Germany first sickness law was enacted in 1883, covering around 10% of the population from the start (Carrin, 2002). The coverage climbed to 35% in 1914 and increasedm88% in 1987 and 98% in 2017 (Busse et al., 2017). The uniqueness of the German SHI has made some countries imported the model to increase their population health coverage and improve health outcomes. In this study, social health protection is considered to be all forms of health financial protection systems. These include private health insurance, statutory social health insurance, tax-based financing, community health insurance, and different fee exemptions for healthcare utilization (Scheil-Adlung et al., 2006), encompassing the journey to universal health coverage (UHC).

Evidence has shown that SHI can protect insured people against financial hardship when seeking healthcare. Most of the studies assessing the impact of SHI programmes on financial protection use OOPE as the primary outcome indicator (Cotlear et al., 2015). Other studies also used measures such as catastrophic expenditures or impoverishment expenses based on OOPE (Cotlear et al., 2015). Some studies examine financial protection outcomes beyond OOPE by investigating health-related debt, asset accumulation, and changes in non-health consumption (Cotlear et al., 2015). Barnes et al. (2017) examine the impact of SHI on financial risk by utilizing data from a natural experiment. Results from the impact evaluation showed that SHI led to a decrease in the frequency of money borrowed for health usage. In conclusion, the study discovered that the value of financial risk reduction overshadowed the total per household cost of the intervention by two to five times. Furthermore, in Vietnam, the country's social health insurance decreased OOPE for outpatient and inpatient care.

Tangcharoensathien et al. (2020) use data from a 15-year annual national household survey in Thailand between 1006 and 2015. Their study shows that catastrophic spending climbed down from 6% in 1996 to 2% in 2015. The study also reveals that impoverishment against the national poverty line decreased significantly from 2.2% in 1996 to around 0.3% in 2015. The significant reduction in the incidence of catastrophic health expenditure and impoverishment was due to the intentional design of Thailand's SHI, which provides a holistic benefit package and zero co-payment at the point of services.

Other studies have found no or very weak evidence of social health insurance schemes on financial protection indicators (Cotlear et al., 2015). For example, in Nicaragua, scientists found that there was no decrease in OOPE associated with social health security overall. However, they seem to be a decrease in expenditure for laboratory tests. In addition, in China, (Leive and Xu, 2008) report that New Cooperative Medical Scheme did not reduce OOPE. Finally, in Vietnam, voluntary health insurance did not positively affect OOPE for outpatient and inpatient care (Nguyen et al., 2011).

Some studies have accessed the impact of Ghana's SHI on financial risk protection. For instance, in the Greater Accra region, a study at the Korle-Bu Hospital revealed that insured patients under Ghana's

SHI were less likely to face financial hardship than the uninsured (Okoroh et al., 2018). However, more than 60% of the insured patients suffered financial hardship on surgery at the Korle-Bu Hospital. One limitation of the study is that it only captured inpatients for interviews without outpatients (Okoroh et al 2018). The SHI provided financial protection against out-of-pocket healthcare expenditure in the Kwaebibirem, Asutifi and Savelugu-Nanton districts (Kusi et al., 2015). The incidence of financial hardship was minimal among insured households (2.9%0) as against the partially insured (3.7%) and then non-insured (4.0%). For those that sought healthcare services from SHI accredited health facilities, financial hardship was significantly lower among fully insured households (6.0%) as against the partially insured (10.1%) and the non-insured households (23.2%). However, the study's finding also asserted that the SHI has not entirely reduced the financial burden for insured households (Kusi et al., 2015).

Bayuo (2017) reports financial hardship in accessing healthcare services among older people was in the Asante Akyem North District. The existence of the SHI did not support older people to access healthcare services because of the high cost associated with healthcare utilization (Bayuo, 2017). On the contrary, in the Eastern and Central regions, the SHI reduced out-of-pocket expenditure by 86% and protected insured households against financial hardship and poverty by 3.0% and 7.5%, respectively (Aryeetey et al., 2016).

Primary healthcare is vital in meeting the health needs of the population. One study reported out-of-payment in primary healthcare utilization (Kanmiki et al., 2019). The impact evaluation findings show that out-of-payment decreased by 63% and 62% between 2010 and 2014. Similarly, another study that used the Ghana Living Standards Survey 2012-2013 to estimate the effect of the SHI on financial protection showed that the scheme helped insurees spend less on healthcare services (Fiestas Navarrete et al., 2019). However, the scheme did not benefit vulnerable persons equally from financial hardship (Fiestas Navarrete et al., 2019). A cross-sectional survey from 4,226 households found that the SHI gave financial protection to insured outpatients and inpatients treating malaria in the Kassena-Nankana districts (Dalaba et al., 2014). The study findings showed that the insured spent less on treating malaria ($1.7) than the non-insured ($2.1). The average health cost for insured households was $2.1, while the non-insured households were $4.3. The different (p0.2330) was not statistically significant (Dalaba et al., 2014).

Methodology and research method. Criteria for considering studies for inclusion. This systematic review included studies that use a cross-sectional, qualitative approach and mixed methods to assess the effects of SHI on healthcare utilization, financial protection, and quality of care in Ghana. Children, older people, and adults constituted the participants of this review, and the intervention used by these participants was Ghana's National Health Insurance Scheme, also known as social health insurance.

Search methods for identification of studies. The searches for relevant studies were conducted on PubMed using the following topics:

- The impact of Ghana's national health insurance;
- The effects of Ghana's national health insurance on health utilization;
- The effects of Ghana's national health insurance on out-of-pocket payment;
- Ghana national insurance and satisfaction with care.

The review also conducted subsequent searches on Google Scholar with the keywords «quality of care» and «satisfaction of care» under the Ghana national health insurance scheme. The author used the following filters to search for relevant studies:

- Health insurance topics - Ghana national insurance and satisfaction with care.
- Types of questions – effectiveness.
- Publication date range – 2014-2020.

The author screened the titles and abstracts found in PubMed and Google Scholar databases to identify studies that appear to meet the inclusion criteria. Following this process, the second round of screening was done on the titles and abstracts of studies that were initially excluded to reduce selection

bias. For studies to meet the inclusion criteria of this systematic review, the author screened the full text of studies retained to identify their eligibility. Through the screening of the full text of relevant studies, the author removed studies that did not meet the inclusion criteria.

A standardized data extraction was used to extract the following salient information: study citation (including author(s)' name and date of publication). Others were sample size, outcomes measured (health utilization, financial protection, quality of care) and types of study (cross-sectional, mixed methods, qualitative analysis).

Data synthesis. The included studies used different study designs to estimate the effect of SHI on utilization, financial protection, and quality of care. Due to this, it was not proper to statistically combine the findings of the studies. To synthesize findings from the included studies, the author used a narrative synthesis to summarise the estimated effect of SHI on utilization, financial protection and quality of care and present the main findings of each study in a narrative synthesis.

Results. Figure 1 presents the search strategy we adopted for the review. Through the searches of academic and grey literature databases (PubMed and Google Scholar), it were identified 209 studies for eligibility. After screening the titles and abstracts,there wereI excluded 183 studies. The author assessed the full text of 26 studies for eligibility. The author found 12 studies not to meet the inclusion criteria after the full-text screening, and excluded them. Only 14 studies met the inclusion criteria for the review.

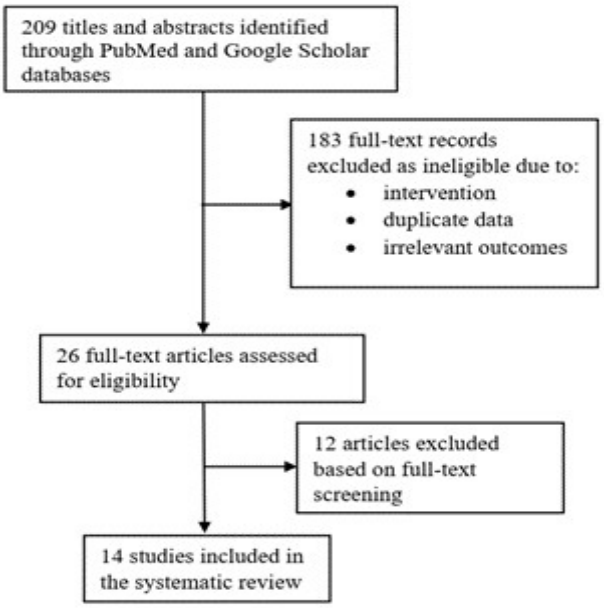

Figure 1. Flow diagram

Sources: developed by the authors.

Characteristics of included studies. A total of 14 studies met the inclusion criteria, and these studies were conducted in different regions in Ghana (Table 1). The publication date of studies included in the review ranged from 2014 to 2020. Most of the studies collected their data from households with interviews, and the most common types of study design employed were cross-sectional and quantitative descriptive analyses. The majority of the studies assessed the impact of SHI financial protection. Four studies each assessed healthcare utilization and quality of care

Table 1. Characteristics of included studies

Author	Year	Region	Study sample	Study design/ methods	Data collection methods	Outcomes measured
Abuosi et al.	2016	Upper East, Brong Ahafo and Central regions	17 general hospitals. 817 respondents	Cross sectional	Interview	Quality of care
Aryeetey et al.	2016	Eastern and Central regions	12,810 individuals	Mixed methods	Survey	Financial protection
Badu	2018		380 respondents	Quantitative method	Questionnaires	Quality of care
Bayuo	2017	Ashanti	Agogo Presbyterian Hospital	Qualitative approach	Interview	Financial protection
Bonfrer et al.	2015	National	4916 women	Quantitative descriptive	Household survey	Utilization
Bosomprah et al.	2015	National	10,627 women	Quantitative descriptive	Multiple Indicator Cluster Survey	Utilization
Dalaba et al.	2014	Upper East region	4,226 households	Cross-sectional	Household survey	Financial protection
Dalinjong et al.	2017	Upper East region	55,992 household members	Cross-sectional	Household survey	Utilization
Duku et al.	2018	Greater Accra and Western regions	1,920 households	Quantitative descriptive	Structured questionnaire	Quality of care
Fenny et al.	2014	Three ecological zones	2430 households	Quantitative descriptive	Household survey	Quality of care
Kanmiki et al.	2019	Upper East region	106 community-based healthcare compounds	Quantitative descriptive	Panel data from public primary healthcare facilities	Financial protection
Kusi et al.	2015	Brong-Ahafo Eastern, Northern regions	2,430 households	Cross-sectional	Household questionnaire	Financial protection
Navarrete et al.	2019	Ten geographic regions	72 372 individuals	Quantitative descriptive	Household survey	Utilization and financial protection
Okoroh et al.	2020	Greater Accra	196 patients	Cross-sectional survey	Survey	Financial protection

Sources: developed by the authors.

Impact on financial protection. Seven studies reported the impact of SHI on financial protection in different regions. In the Greater Accra region, a study at the Korle-Bu Hospital revealed that insured patients under Ghana's SHI were less likely to face financial hardship than the uninsured (Okoroh et al., 2020). However, more than 60% of the insured patients suffered financial hardship on surgery at the Korle-Bu Hospital. One limitation of the study was that it only captured inpatients for interviews without out-patients (Okoroh et al., 2020). The SHI provided financial protection against out-of-pocket healthcare

expenditure in the Kwaebibirem, Asutifi and Savelugu-Nanton districts (Kusi et al., 2015). The incidence of financial hardship was minimal among the fully insured households (2.9%) as against the partially (not all household members are insured) insured (3.7%) and the non-insured (4.0%) (Kusi et al., 2015). The study's finding also claimed that the SHI did not entirely reduce financial hardship for insured households, and few accredited health services for SHI further rendered SHI less effective (Kusi et al., 2015).

A study reported financial hardship in accessing healthcare services among older people in Asante Akyem North District (Bayuo, 2017). The existence of the SHI did not support older people to access healthcare services because of the high cost associated with healthcare utilization for older people (Bayuo, 2017). On the contrary, in the Eastern and Central regions, the SHI reduced out-of-pocket expenditure by 86% and protected insured households, including young and old against financial hardship and poverty by 3.0% and 7.5%, respectively (Aryeetey et al., 2016).

Primary healthcare is vital in meeting the health needs of the population. One study reported out-of-payment in primary healthcare utilization (Kanmiki et al., 2019). The study's findings revealed that out-of-payment decreased by 63% and 62% between 2010 and 2014. Similarly, another study that used the Ghana Living Standards Survey 2012-2013 to estimate the effect of the SHI on financial protection showed that the scheme helped the insured spent less on healthcare services (Fiestas Navarrete et al., 2019). However, the SHI scheme did not benefit vulnerable persons equally from financial hardship (Fiestas Navarrete et al., 2019). A cross-sectional survey from 4,226 households found that the SHI gave financial protection to insured out-patients and inpatients treating malaria in the Kassena-Nankana districts (Dalaba et al., 2014). The study's findings showed that the insured spent less on treating malaria ($1.7) than the non-insured ($2.1). The average health cost for insured households was $2.1, while the non-insured households were $4.3. However, the difference (p0.2330) was not statistically significant (Dalaba et al., 2014).

Impact on healthcare utilization. Four included studies reported outcomes on healthcare utilization from the SHI. The findings obtained by Bonfrer et al. (2016) showed that the SHI significantly increased antenatal care visits by seven percentage points and had a significant effect on attended deliveries by ten percentage points. The analysis of the SHI scheme at the national level in Ghana showed mixed results. SHI increased access to maternal and child healthcare services, but there was no positive evidence of the relationship between the scheme and under-five mortality (Bosomprah et al., 2015). The evaluation of the SHI scheme in rural Northern Ghana showed a positive effect on healthcare utilization (Dalinjong et al., 2017). The scheme increased the odds of utilizing out-patient and inpatient healthcare services by 2.51 (95% CI 2.3–2.8) and 2.78 (95% CI 2.2–3.6), respectively (Dalinjong et al., 2017). The analysis performed by Fiestas Navarrete et al. (2019) concluded that the SHI led to a significant increase in medical utilization.

Impact on quality of care. The author included four studies that assessed the effects of SHI on quality of care (Abuosi et al., 2016; Badu et al., 2019; Duku et al., 2018; Fenny et al., 2014). In Upper East, Brong Ahafo and Central regions, there was no difference in perceptions of the quality of care between the insured and non-insured (Abuosi et al., 2016). This was because of the lack of medical doctors and inadequate drugs (Abuosi et al., 2016). Similarly, the study of Badu and colleagues showed that 53.12% of insured individuals were not satisfied with Ghana's SHI service providers (Badu et al., 2019). The dissatisfaction resulted from a high premium (contribution rate) and the benefits package of the SHI (Badu et al., 2019). The study in Greater Accra and Western regions showed that the insured people of SHI have negative perceptions of the quality of care than the non-insured (Duku et al., 2018).

In contrast to the study of Fenny et al. (2014), most insured patients in three ecological zones (coastal, forest and savannah) were satisfied with the quality of healthcare services compared to the non-insured patients. At the same time, the study of Duku et al. (2018) reported high premium and the benefits package of the insurance scheme as the significant reasons for insurees dissatisfaction with the quality of care.

The study of Fenny et al. (2014) mentioned that insurees were satisfied with the quality of care because of the friendliness of members of staff, waiting time and consultation process.

Conclusions. Since the introduction of Ghana's SHI in 2003, past and current studies have evaluated the scheme's impact on different domains. Most of these studies focused more on one or two domains without taking cognizance of the scheme's general objectives, which is beyond the two most common variables (utilization and financial protection) they have used to assess the performance. This review added the quality of care to the two most common variables to assess Ghana's SHI scheme. Also, from my understanding, this is the first systematic review to use the three main components of universal health coverage (accessibility, financial protection, and the quality of care) to assess the SHI scheme in Ghana.

The author included 14 studies from different regions in Ghana that have evaluated the SHI scheme on healthcare utilization, financial protection, and perceptions of the insured of the quality of healthcare services. Financial hindrance is one of the main barriers to access to healthcare in developing countries for vulnerable groups in society where healthcare expenditure is a leading cause of impoverishment (Xu et al., 2003). This is one of the reasons while the Ghanaian government introduced the SHI to improve access to healthcare for all residence of Ghana irrespective of socioeconomic status.

Financial protection. This review's findings show that the SHI scheme in different districts in Ghana reduces the impoverishing effect of healthcare payments by giving financial protection to the insured compared to the non-insured. Some systematic reviews evidence also supported my findings on health insurance protecting insurees from financial hardship (Adeniji and Awojobi, 2019; Awojobi, 2019; Spaan et al., 2012). Despite the SHI protecting insurees from financial catastrophe, two included studies asserted that the vulnerable in Ghana were not protected from financial hardship (Bayuo, 2017; Fiestas Navarrete et al., 2019).

Healthcare utilization. The review's findings show that the SHI scheme improved the accessibility to healthcare services for the insurees on healthcare utilization. Access to healthcare services is a huge problem for the poor in developing countries. Ghana's SHI scheme is moving towards universal health coverage as the study's findings from the four included studies show that both the urban and rural dwellers have utilized the scheme to increase their access to healthcare services. These results agree with the study of (Spaan et al., 2012). Their study used a systematic review to assess the impact of health insurance in Africa and Asia. Their findings showed a piece of solid evidence that health insurance improved service utilization (Spaan et al., 2012). A similar study by Adeniji and Awojobi (2019) showed that community health increased healthcare utilization in sub-Saharan Africa.

Quality of care. In moving towards universal health coverage, quality of care should be taken into consideration. Among the four studies that assessed the quality of care of the SHI, three studies showed that insurees were dissatisfied with the quality of healthcare services (Abuosi et al., 2016; Badu et al., 2019; Duku et al., 2018). Their dissatisfaction ranged from waiting time, inadequate doctors and drugs, high premiums, and the health benefits package. These findings are contrary to the finding of (Adeniji and Awojobi, 2019; Awojobi, 2019; Spaan et al., 2012), as their studies showed that insurees were satisfied with the quality of care.

The author conducted comprehensive searches for relevant studies on two databases. However, it is possible that during the screening process of the relevant studies to determine their eligibility, I might have excluded some studies with helpful information. This information would have supplemented the information provided by the included studies. Notable limitations discovered in some of the included studies were lack of comparative analysis, socioeconomic disparities among the insured and non-insured, selection bias and household heads were responsible for answering interview questions for their households. Despite these limitations, the evidence from this review has demonstrated the effectiveness of SHI in improving access to healthcare services and protecting insurees against financial hardship.

The existing body of evidence from the review, which is based on several study designs, suggests that SHI can improve access to healthcare services and protect people from financial hardship. However, most of the insurees were not satisfied with the quality of care from the SHI providers. These results remain relevant to policymakers, especially in developing countries.

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References

Abuosi, A. A., Domfeh, K. A., Abor, J. Y., & Nketiah-Amponsah, E. (2016). Health insurance and quality of care: Comparing perceptions of quality between insured and uninsured patients in Ghana's hospitals. International journal for equity in health, 15(1), 1-11. [Google Scholar] [CrossRef]

Adedini, S. A., Odimegwu, C., Bamiwuye, O., Fadeyibi, O., & Wet, N. D. (2014). Barriers to accessing health care in Nigeria: implications for child survival. Global health action, 7(1), 23499. [Google Scholar] [CrossRef]

Adeniji, O. A., & Awojobi, O. N. (2019). Community-based Health Insurance and Health Outcomes in sub-Saharan Africa: Evidence from a Systematic Review. International Journal of Community Research, 8(2), 48–58.

Akazili, J., Ataguba, J. E. O., Kanmiki, E. W., Gyapong, J., Sankoh, O., Oduro, A., & McIntyre, D. (2017). Assessing the impoverishment effects of out-of-pocket healthcare payments prior to the uptake of the national health insurance scheme in Ghana. BMC international health and human rights, 17(1), 1-8. [Google Scholar] [CrossRef]

Akpomuvie, O. B. (2010). Poverty, access to health care services and human capital development in Nigeria. African Research Review, 4(3). [Google Scholar] [CrossRef]

Aryeetey, G. C., Westeneng, J., Spaan, E., Jehu-Appiah, C., Agyepong, I. A., & Baltussen, R. (2016). Can health insurance protect against out-of-pocket and catastrophic expenditures and also support poverty reduction? Evidence from Ghana's National Health Insurance Scheme. International journal for equity in health, 15(1), 1-11. [Google Scholar] [CrossRef]

Awojobi, O. N. (2019). A systematic review of the impact of the National Health Insurance Scheme in Nigeria. Research Journal of Health Sciences, 7(1), 1-9. [Google Scholar] [CrossRef]

Badu, E., Agyei-Baffour, P., Ofori Acheampong, I., Opoku, M. P., & Addai-Donkor, K. (2019). Perceived satisfaction with health services under National Health Insurance Scheme: Clients' perspectives. The International journal of health planning and management, 34(1), 964-975. [Google Scholar] [CrossRef]

Barnes, K., Mukherji, A., Mullen, P., & Sood, N. (2017). Financial risk protection from social health insurance. Journal of health economics, 55, 14-29. [Google Scholar] [CrossRef]

Bayuo, J. (2017). Experiences with out-patient hospital service utilisation among older persons in the Asante Akyem North District-Ghana. BMC health services research, 17(1), 1-12. [Google Scholar] [CrossRef]

Bonfrer, I., Breebaart, L., & Van de Poel, E. (2016). The effects of Ghana's national health insurance scheme on maternal and infant health care utilization. PloS one, 11(11), e0165623. [Google Scholar] [CrossRef]

Bosomprah, S., Ragno, P. L., Gros, C., & Banskota, H. (2015). Health insurance and maternal, newborn services utilisation and under-five mortality. Archives of Public Health, 73(1), 1-7. [Google Scholar] [CrossRef]

Busse, R., Blümel, M., Knieps, F., & Bärnighausen, T. (2017). Statutory health insurance in Germany: a health system shaped by 135 years of solidarity, self-governance, and competition. The Lancet, 390(10097), 882-897. [Google Scholar] [CrossRef]

Carrin, G. (2002). Social health insurance in developing countries: a continuing challenge. International social security review, 55(2), 57-69. [Google Scholar] [CrossRef]

Cotlear, D., Nagpal, S., Smith, O., Tandon, A., & Cortez, R. (2015). Going universal: how 24 developing countries are implementing universal health coverage from the bottom up. World Bank Publications. [Google Scholar]

Dalaba, M. A., Akweongo, P., Aborigo, R., Awine, T., Azongo, D. K., Asaana, P., ... & Oduro, A. (2014). Does the national health insurance scheme in Ghana reduce household cost of treating malaria in the Kassena-Nankana districts?. Global health action, 7(1), 23848. [Google Scholar] [CrossRef]

Dalinjong, P. A., Welaga, P., Akazili, J., Kwarteng, A., Bangha, M., Oduro, A., ... & Goudge, J. (2017). The association between health insurance status and utilization of health services in rural Northern Ghana: evidence from the introduction of the National Health Insurance Scheme. Journal of Health, Population and Nutrition, 36(1), 1-10. [Google Scholar] [CrossRef]

Duku, S. K. O., Nketiah-Amponsah, E., Janssens, W., & Pradhan, M. (2018). Perceptions of healthcare quality in Ghana: does health insurance status matter?. PloS one, 13(1), e0190911. [Google Scholar] [CrossRef]

Fenny, A. P., Enemark, U., Asante, F. A., & Hansen, K. S. (2014). Patient satisfaction with primary health care–a comparison between the insured and non-insured under the National Health Insurance Policy in Ghana. Global Journal of Health Science, 6(4), 9. [Google Scholar] [CrossRef]

Fiestas Navarrete, L., Ghislandi, S., Stuckler, D., & Tediosi, F. (2019). Inequalities in the benefits of national health insurance on financial protection from out-of-pocket payments and access to health services: cross-sectional evidence from Ghana. Health policy and planning, 34(9), 694-705. [Google Scholar] [CrossRef]

Hailemichael, Y., Hanlon, C., Tirfessa, K., Docrat, S., Alem, A., Medhin, G., ... & Hailemariam, D. (2019). Catastrophic health expenditure and impoverishment in households of persons with depression: a cross-sectional, comparative study in rural Ethiopia. BMC public health, 19(1), 1-13. [Google Scholar] [CrossRef]

Hamid, S. A., Ahsan, S. M., & Begum, A. (2014). Disease-specific impoverishment impact of out-of-pocket payments for health care: evidence from rural Bangladesh. Applied health economics and health policy, 12(4), 421-433. [Google Scholar] [CrossRef]

Hsiao, W. C., Shaw, R. P., & Fraker, A. (2007). Social health insurance for developing nations. World Bank. [Google Scholar]

Joe, W. (2015). Distressed financing of household out-of-pocket health care payments in India: incidence and correlates. Health policy and planning, 30(6), 728-741. [Google Scholar] [CrossRef]

Kanmiki, E. W., Bawah, A. A., Phillips, J. F., Awoonor-Williams, J. K., Kachur, S. P., Asuming, P. O., ... & Akazili, J. (2019). Out-of-pocket payment for primary healthcare in the era of national health insurance: Evidence from northern Ghana. PloS one, 14(8), e0221146. [Google Scholar] [CrossRef]

Kipo-Sunyehzi, D. D., Ayanore, M. A., Dzidzonu, D. K., & AyalsumaYakubu, Y. (2020). 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. [Google Scholar] [CrossRef]

Kruk, M. E., Goldmann, E., & Galea, S. (2009). Borrowing and selling to pay for health care in low-and middle-income countries. Health Affairs, 28(4), 1056-1066. [Google Scholar] [CrossRef]

Kusi, A., Hansen, K. S., Asante, F. A., & Enemark, U. (2015). Does the National Health Insurance Scheme provide financial protection to households in Ghana?. BMC health services research, 15(1), 1-12. [Google Scholar] [CrossRef]

Leive, A., & Xu, K. (2008). Coping with out-of-pocket health payments: empirical evidence from 15 African countries. Bulletin of the World Health Organization, 86, 849-856C. [Google Scholar] [CrossRef]

Mchenga, M., Chirwa, G. C., & Chiwaula, L. S. (2017). Impoverishing effects of catastrophic health expenditures in Malawi. International journal for equity in health, 16(1), 1-8. [Google Scholar] [CrossRef]

McIntyre, D., Thiede, M., Dahlgren, G., & Whitehead, M. (2006). What are the economic consequences for households of illness and of paying for health care in low-and middle-income country contexts?. Social science & medicine, 62(4), 858-865. [Google Scholar] [CrossRef]

Mensah, J., Oppong, J. R., & Schmidt, C. M. (2010). Ghana's National Health Insurance Scheme in the context of the health MDGs: An empirical evaluation using propensity score matching. Health economics, 19(S1), 95-106. [Google Scholar] [CrossRef]

Ministry of Health. (2004). National Health Insurance Policy framework for Ghana. Retrieved from [Link]

Ngoma, C., & Mayimbo, S. (2017). The negative impact of poverty on the health of women and children. Annals of Medical and Health Sciences Research, 7(6). [Google Scholar]

Nguyen, H. T., Rajkotia, Y., & Wang, H. (2011). The financial protection effect of Ghana National Health Insurance Scheme: evidence from a study in two rural districts. International journal for equity in health, 10(1), 1-12. [Google Scholar] [CrossRef]

Okoroh, J., Essoun, S., Seddoh, A., Harris, H., Weissman, J. S., Dsane-Selby, L., & Riviello, R. (2018). Evaluating the impact of the national health insurance scheme of Ghana on out of pocket expenditures: a systematic review. BMC health services research, 18(1), 1-14. [Google Scholar] [CrossRef]

Okoroh, J., Sarpong, D. O. B., Essoun, S., Riviello, R., Harris, H., & Weissman, J. S. (2020). Does insurance protect individuals from catastrophic payments for surgical care? An analysis of Ghana's National Health Insurance Scheme at Korle-Bu teaching Hospital. BMC health services research, 20(1), 1-11. [Google Scholar] [CrossRef]

Peters, D. H., Garg, A., Bloom, G., Walker, D. G., Brieger, W. R., & Hafizur Rahman, M. (2008). Poverty and access to health care in developing countries. Annals of the new York Academy of Sciences, 1136(1), 161-171. [Google Scholar] [CrossRef]

Rezapour, A., Arabloo, J., Soleimani Movahed, M., Bagheri Faradonbeh, S., Alipour, S., & Alipour, V. (2020). Catastrophic Health Expenditure and Impoverishment Among Households with Cardiovascular Patients in Tehran, 2017. Shiraz E-Medical Journal, 21(1). [Google Scholar] [CrossRef]

Scheil-Adlung, X., Carrin, G., Juetting, J., & Xu, K. (2006). What is the impact of social health protection on access to health care, health expenditure and impoverishment? A comparative analysis of three African countries. [Google Scholar]

Sirag, A., & Nor, N. M. (2021). Out-of-Pocket Health Expenditure and Poverty: Evidence from a Dynamic Panel Threshold Analysis. In Healthcare (Vol. 9, No. 5, p. 536). Multidisciplinary Digital Publishing Institute. [Google Scholar] [CrossRef]

Spaan, E., Mathijssen, J., Tromp, N., McBain, F., Have, A. T., & Baltussen, R. (2012). The impact of health insurance in Africa and Asia: a systematic review. Bulletin of the World Health Organization, 90, 685-692. [Google Scholar] [CrossRef]

Tangcharoensathien, V., Tisayaticom, K., Suphanchaimat, R., Vongmongkol, V., Viriyathorn, S., & Limwattananon, S. (2020). Financial risk protection of Thailand's universal health coverage: results from series of national household surveys between 1996 and 2015. International Journal for Equity in Health, 19(1), 1-12. [Google Scholar] [CrossRef]

Tansley, G., Stewart, B. T., Gyedu, A., Boakye, G., Lewis, D., Hoogerboord, M., & Mock, C. (2017). The correlation between poverty and access to essential surgical care in Ghana: a geospatial analysis. World journal of surgery, 41(3), 639-643. [Google Scholar] [CrossRef]

Wagstaff, A., & Doorslaer, E. V. (2003). Catastrophe and impoverishment in paying for health care: with applications to Vietnam 1993–1998. Health economics, 12(11), 921-933. [Google Scholar] [CrossRef]

World Bank. (2017). World Bank and WHO: Half the world lacks access to essential health services, 100 million still pushed into extreme poverty because of health expenses. Retrieved from [Link]

Xu, K., Evans, D. B., Kawabata, K., Zeramdini, R., Klavus, J., & Murray, C. J. L. (2003). Household catastrophic health expenditure: A multicountry analysis. Lancet, 362(9378), 111–117. [CrossRef]

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Соціальне медичне страхування в Африці на прикладі Гани

У статті досліджуються наукові аспекти соціального медичного страхування, використання медичної допомоги, фінансового захисту та якості медичної допомоги. Основною метою дослідження є літературний огляд сучасних досліджень щодо впливу Ганської схеми соціального медичного страхування на покращання доступу до медичної допомоги, зменшення впливу фінансової кризи та надання якісної допомоги застрахованим особам. Систематизація літературних джерел засвідчила, що витрати на охорону здоров'я заважають бідним людям отримувати доступ до медичних послуг у разі потреби. Соціальне медичне страхування є одним з інструментів, що допомагає людям отримувати доступ до медичних послуг незалежно від її соціально-економічного статусу. Методологічною основою дослідження став систематичний огляд літератури за допомогою баз даних PubMed та Google Scholar. Автор включив дослідження, у яких оцінений вплив соціального медичного страхування на фінансовий захист, доступ до медичної допомоги та якість медичної допомоги. Виключені дослідження з обмеженнями, які заважають надійності одержаних результатів. В аналіз включено 209 статей та 14 досліджень: фінансовий захист (7 досліджень), використання медичної допомоги (4 дослідження) та якість медичної допомоги (4 дослідження). Серед цих досліджень одне дослідження повідомляло як про використання, так і про фінансовий захист. Ці дослідження були опубліковані між 2014 та 2020 роками. Соціальне медичне страхування є вагомим доказом позитивного впливу на покращання доступу до медичної допомоги та захисту страхувальників від фінансових труднощів. Проте більшість застрахованих людей не задоволені якістю медичної допомоги від постачальників соціального медичного страхування. Результати цього огляду є актуальними для політиків, особливо в країнах, що розвиваються, де соціальне страхування недоступне для бідних і вразливих людей. За політичної волі та рішучості соціальне медичне страхування можливе у будь-якій країні, що розвивається.

Ключові слова: фінансова криза, охорона здоров'я, страхувальники, соціальне медичне страхування, використання.