



Evolutionary Study of Chronic Non-Communicable Diseases Policy as Healthcare Intervention in Ghana (2000-2019)

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Qualitative Study

Abstract

The incidence of chronic non-communicable diseases (NCDs) such as diabetes, hypertension, cancers and cardiovascular diseases in Ghana has created a new mix of healthcare challenge for the country. Owing to the fact that NCDs have caused significant illness and deaths for decades and robbed people off their social satisfaction in life, several healthcare interventions have been initiated to stem the tide of these diseases. One of such interventions is the Non-communicable Diseases Control and Prevention Policy, which was adopted in the year 2012. A strategy for management, prevention and control of chronic NCDs document that contained plan of actions to be pursued from 2012 to 2016 accompanied the policy document and geared towards the facilitation of NCDs programs in the policy. However, it appeared that within the stipulated period, the set of actions spelt out in the policy and strategic document remained a mirage. This paper revolves around two critical questions on how policy makers have mulled over this issue; Does the NCDs policy have the historical evidence of being productive? What factors have posed as constraints to the policy implementation? The authors employed a qualitative research approach predicated on both primary and secondary sources for the study. In that stead, an electronic search was conducted through the database and archives of the World Health Organization (WHO), United Nations (UN), Ghana's Ministry of Health (MoH), the Ghana Health Service (GHS), the Ghana Statistical Service (GSS) and the Ghana Medical Journal (GMJ) among others to collect data for analysis and discussions. While the NCDs policy has the historical evidence of being productive given its strategic areas and plan of actions for implementation, legislative, leadership and governance, cultural and socio-economic factors were spot on as constraints to implementation. Policy makers and stakeholders alike are reminded to reflect soberly on these constraints in their quest to design and implement robust interventions for the management, prevention and control of NCDs in Ghana.

Keywords: Non-communicable diseases, Constraints, Healthcare Intervention, Policy Implementation, Ghana

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Introduction

Ghana is among one of the developing countries in Africa that have made significant strides as far as healthcare is concerned. The country's formal healthcare system has

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witnessed several transformations, which encompassed structural, technological and policy reforms. Notable among them are the introduction of the National Health Insurance Scheme (NHIS), Health Sector Medium Development Plans (HSMDPs), formulation of national health policies and strategies, the decentralisation of governing structures and more recently, the introduction of medical drones. At the core of these reforms has been the goal to improve the health outcomes of Ghanaians, remove inequalities and ensure a responsive, efficient, equitable and sustainable healthcare system (Saleh, 2013). With the upsurge of NCDs in the 1990's, the healthcare system of the country at that time responded largely to communicable diseases since such diseases constituted the major healthcare challenge (de-Graft Aikins and Koram, 2017). Presently, NCDs co-exist with communicable diseases to cause greater morbidity and mortality among Ghanaians.

Ideally, non-communicable diseases have become a global healthcare challenge especially among developing countries. Not only do they pose as a threat to healthcare but also detrimental to socio-economic development (Nugent, 2008; Ezzati et al., 2005). This results from the nexus between health and socio-economic development as expressed in the adage 'a healthy population is a wealthy population' (WHO, 2006). The burden of NCDs made them appear on top of public health discourse at the United Nation's (UN) high-level meeting held in 2011 (Atun et al., 2013).

The burden of NCDs on healthcare systems and economies of countries has been a negative one. Thus, the prevalence of NCDs have culminated to an increase in expenditure in the health sector and this has affected the ability of countries to consistently advance their universal healthcare coverage (de-Graft Aikins et al., 2014). It is not surprising that NCDs have been conceptualized as "global emergency requiring urgent action" (Bosu, 2013). In

2008, global deaths from NCDs were estimated at over 36million where nearly 80% of deaths occurred in lower and middle-income countries (Kankeu et al., 2013). In addition, worldwide deaths that resulted from NCDs recorded a steady increase from 26.6million representing 57.2% of 46.5million deaths to 34.5million representing 65.5% of 52.8million deaths in 1990 and 2010 respectively (Atun et al., 2013). Reporting on same, the World Health Organization (WHO) recognised that the number of people who died as a result of cardiovascular diseases alone were 17.5 million representing 31% of global deaths in the year 2012 (WHO, 2018). In the same year, nearly half a million deaths from stroke in sub-Saharan Africa was also reported (Africa Check, 2018). Economically, the projected cumulative global loss of economic output due to NCDs from 2011 to 2030 was estimated over US\$40 trillion with around US\$21.3 trillion in lower and middle-income countries (Atun et al., 2013).

In Ghana, non-communicable diseases constitute a public health and developmental challenge as they have caused significant illness and deaths for more than a decade (de-Graft Aikins, 2007; Bosu, 2013). According to Ghana's Ministry of Health (MoH), NCDs claimed the life of about 86,200 persons in Ghana with 55.5% of them aged less than 70 years as of 2012 (MoH, 2012). In retrospect, the WHO reported in 2010 that NCDs killed 78,000 persons in Ghana every year (WHO, 2011). Again, NCDs in Ghana caused 2.32 million Disability Adjusted Life Years (DALYs) in 2012 (MoH, 2012). Correspondingly, between 1990 and 2010, the top 25 causes of premature deaths included seven NCDs successively (de-Graft Aikins and Koram, 2017). Within the same period, the top twenty-five causes of DALYs included eleven NCDs (Ibid.). In 2008, the Centre for Health Information Management (CHIM) of the Ghana Health Service (GHS) clearly communicated that cardiovascular diseases (CVDs) were the leading cause of deaths in health facilities (GHS, 2010).

NCDs have struck individuals with physical challenges as they have robbed them of their social satisfaction in life (de-Graft Aikins, 2007). de-Graft Aikins (2007) has pointed out that these challenges have their psychological impact on the lives of affected individuals in respect of mobility and productivity. As exemplified in her study, in 1981, an assessment of the health impact of diseases in Ghana in the order of healthy days of life lost per 1000 persons per year revealed that 17,500 days, 10,400 days and 5,100 days of healthy life was lost through sickle-cell disease, cardiovascular and hypertensive diseases respectively (de-Graft Aikins, 2007). The economic setbacks from NCDs also affect family livelihood and relations. de-Graft Aikins (2007) postulated that treating NCDs in Ghana is expensive and that managing a condition can cost more than what an individual earns. For instance, in 2001, the cost of care for one diabetic case stood between US\$180 to US\$420 while in 2007, the cost of caring for the same disease per month ranged from GH¢100 equivalent to US\$106 to GH¢600 equivalent to US\$638 at that time. (de-Graft Aikins, 2007)

In a similar study conducted by Tagoe (2012), it was revealed that households with NCDs incurred a mean healthcare cost of GH¢13.09 as compared with healthier household with a mean cost of GH¢8.76. In a situation like this, the WHO (2005) echoed that the poor largely suffer in terms of funding for NCDs care hence, deepen poverty and damage long-term economic prospects.

Undoubtedly, people with conditions such as diabetes often rely on their family members for financial assistance. For this reason, the dependence on family members and relatives who themselves are financially handicapped breeds tensions between families and in extreme cases, such victims are abandoned and left in isolation (de-Graft Aikin, 2007). Significantly, scholars have noted the societal stigma that people with NCDs conditions have faced over the years

especially women. Individuals with NCDs conditions like cancer and diabetes have become laughing stocks in their communities (Ibid.). The stigma associated with NCDs can be intense to an extent where individuals with life partners eventually abandoned them (de-Graft Aikin, 2007). This situation is mostly peculiar with women. In addition, individuals living uncontrolled diabetes faced HIV/AIDS-related stigma due to rapid and extreme loss of weight.

Others have argued that policy changes that occurred in Ghana's healthcare system from the 1990s compounded the burden of living with NCDs. Tagoe (2012) have argued among other things that the out of pocket fees introduced in public health facilities in 1992 led to a reduction in health subsidies from the government. He stressed that the policy culminated to the pricing of drugs and pharmaceuticals at full cost and that the introduction of the National Health Insurance Scheme (NHIS) led to a 39% reduction in government's expenditure on health (Tagoe, 2012). Not only did it lead to a reduction in government's expenditure on healthcare but also to an increase in household healthcare cost. Tagoe (2012) further elaborated that in situations where 'home-based' care was required, both the infected and affected persons were significantly burdened. As pointed out by him, people living with NCDs with unemployment status at the time of his study constituted a percentage of 59. These unemployed with such health conditions had to depend on distant and close relatives for treatment, care and support. This placed persons living with NCDs conditions and their family especially the poor at a disadvantaged position in the society.

Kankeu et al. (2013) also made similar observations when they indicated that poorer households living with NCDs suffer more than richer households do. This assertion was consistent with the position of the WHO (2005) that poor people were the most vulnerable to suffer financially from NCDs.

Kankeu et al. (2013) stressed that NCDs can cost individuals to lose their work, reduce productivity and income since their treatment requires frequent visits to health facilities in addition to the inability to work due to poor health. On this note, we may ascribe to the position of the WHO that care for NCDs draws people further into poverty. Adding to the above, de-Graft Aikins (2005) asserted that majority of households spent greater proportion of their income on medications for diabetes in Ghana as at 2005. This is evident in the expenditure on insulin, which constituted about 60% of the monthly income of people (de-Graft Aikins, 2005).

Research has revealed that NCDs have had significant impact on maternal health and pregnancy outcomes. Kapul (2015) noted that NCDs such as diabetes, obesity, hypertension and hyperglycaemia considerably caused maternal morbidity and mortality. He reported that women especially expectant mothers with severe anaemia were at a higher risk of developing chronic pregnancy-related disease like pre-eclampsia (Ibid.). Again, he asserted that NCDs risk factor like obesity placed expectant mothers at an increased risk of pre-eclampsia, induction of labour, post-partum haemorrhage, intensive care admission, thrombosis and caesarean section. He went on to indicate, by drawing evidence from existing research that hypertensive pregnancy disorders accounted for 10% and 15% of maternal deaths in developing countries. Similarly, medical reports from the Korle Bu Teaching Hospital in the 1980s and 1990s revealed several maternal deaths to be caused by hypertension (Agyei-Mensah and de-Graft Aikins, 2010).

To respond to the burden of NCDs on the health and wellbeing of Ghanaians, policy makers have initiated several interventions including the NCDs prevention and control policy. Despite the existence of several interventions from the 1990s, Ghana had no single policy on NCDs until 2012 (de-Graft Aikins, Boynton and Atanga, 2010). In the

same year, a strategy document that contained plan of actions geared towards the implementation of the policy from 2012 to 2016 was also drafted. However, since the adoption of the NCDs policy in 2012, it appeared that the policy's intentions seem to be a mirage. This paper revolves around two critical questions that are of interest to policy makers; Does the non-communicable diseases policy has the historical evidence of being productive? What factors have posed as implementation gaps in the policy? This paper answers these questions through thematic analyses of the policy with prime focus on the strategic areas to identify possible constraints concerning implementation.

Methods

The authors employed a qualitative research approach predicated on both primary and secondary sources for the research. The primary sources of data collection include reports and documents from local and international organisations and government. The secondary sources include books and journal articles. The authors conducted an electronic search in the database and archives of the World Health Organization (WHO), Ghana's Ministry of Health (MoH), the Ghana Health Service (GHS) and the Ghana Statistical Service (GSS) among others. Alternatively, they conducted literature search on various online database including Ghana Medical Journal (GMJ), PubMed and BMC under the headings; "Non-communicable or chronic diseases," "Non-communicable diseases in Ghana," "Chronic diseases in Ghana," "Non-communicable diseases interventions in Ghana," "Health Policies in Ghana" among others. Our search for data extended to the year 2000, the year that marked the beginning of the twenty-first century. In addition, major changes in the country's healthcare system took place after 1995.

The search for data was limited to medical and social science research. The authors organised the information siphoned from these sources for the analysis and discussions

on the constraints to the policy's implementation.

The non-communicable diseases prevention and control policy was analysed within the context of other health related national policy documents, government of Ghana documents, reports and resolutions from both national and international organisations to examine the strategic areas of the policy in order to ensure a balanced discourse. These reports and documents include the GHS annual reports, the national health policy, reports and resolutions on NCDs for the African region from the WHO specifically from World Health Assembly (WHA) meetings. The work of Shaw, Elston and Abott (2004) on the analysis of health policy implementation guided the authors in their analyses. The authors read the policy document severally to gain sufficient knowledge and understanding of its contents. We revisited the document several times together with other supplementary documents to make sure key issues were identified for coherent analyses.

Background of the National Policy for the Prevention and Control of Chronic Non-communicable Diseases in Ghana

The National Policy for the Prevention and Control of NCDs was adopted in 2012 after several drafts in the form of policy frameworks had been prepared in 2002, 2006 and 2007 (MoH, 2012; Bosu, 2012). This policy was drafted jointly with a national strategy document for the management, prevention and control of NCDs. The strategy document contained plan of actions to spearhead the implementation of the policy objectives enshrined in the strategy document from 2012 to 2016. The set objectives were to: improve funding for NCDs interventions; strengthen the monitoring of NCDs (their determinants and the national capacity to respond to NCDs); build on clinical management and outcomes of NCDs; improve early detection of NCDs; reduce exposure to risk factors for NCDs; improve

awareness and knowledge of NCDs; to improve governance and coordination of NCDs (MoH, 2012).

By 2011, Ghana had developed a draft of this policy and strategy documents with support from the West African Health Organization (WAHO) (GHS, 2012). By 2014, both the policy and strategy document had completely been finalized (GHS, 2015). The preparation of the policy document began with a joint workshop for Anglophone West Africa in Banjul, The Gambia from March to April 2010 with support from the WAHO and WHO (MoH, 2012). The final fold of the policy document in 2012 entailed review of existing national policies and strategies, international resolutions, strategic plans of various programmes and general literature review to identify cost-effective interventions.

This notwithstanding, both documents were not formally launched until 2016 (GHS, 2017). It is important to note that the MoH awarded these documents together with a national cancer plan for contract to the Ghana Health Service (GHS) (Ibid.). This underpins the fact that the GHS is pivotal in the implementation of the policy. The objectives of the NCDs policy were to reduce; the occurrence of NCDs, exposure to unhealthy lifestyles linked with NCDs, morbidity from NCDs and improves the quality of life in persons with NCDs at large.

Analyses of the Strategic Areas of the NCDs Policy

The NCDs policy in question related to five main strategic areas. They include primary prevention, early detection and clinical care, health system strengthening, research and development and surveillance of NCDs and their risks factors.

Primary Prevention

The primary prevention strategy related to policies directed toward tobacco and alcohol control, diet, physical activity and immunisation (MoH, 2012). As part of the strategies outlined to meet the set objectives

of the policy, emphasis was placed on health promotion through education and programs, advocacy, fiscal control measures, legislations and multi-sectoral actions. The implication was to promote the practice of healthy lifestyles among Ghanaians. In line with the above, experts reckoned that the effectiveness of health promotion as a tool to reducing the incidence of NCDs depends on the extent to which such activity is carried out at the national, community and individual levels (National Department of Health, 2013). This certainly was in response to the recommendation made by the WHO on primary preventive measures. The WHO recommended the necessity for a multi-sectoral approach to combating NCDs after recognising that the basic determinants of NCDs burden lie outside the health sector (WHO, 2005). In addition, most of the causal factors associated with NCDs are influenced by sectors such as transport, trade and agriculture. Clearly, the products from these sectors accompanied with advertisements have largely influenced the lifestyles of individuals. This implies that the quest to reduce the incidence of NCDs and improve health for that matter requires the collaborative efforts of all sectors of the economy. In 2014, the European report on NCDs control and prevention communicated clearly, on how most countries in Europe successfully addressed this burden through a multisector collaboration other than health ministries (WHO, 2014). The use of certain fiscal mechanisms also influences the prices of foods, which in turn influences consumers' choice of food. Price control mechanisms such as taxation and subsidies have historically influenced healthy eating and physical activity predicated on the availability, access and consumption of various foods (WHO, 2006). By 2010, 80% of countries in Europe had used fiscal interventions such as taxation on alcohol, tobacco products and beverages with high sugar content to influence individuals' behavioural change (Ibid.).

Significantly, the behavioural practices enshrined in the policy reflected the lifestyle practices that have contributed to major ill health specifically NCDs in Ghana. In the 1990s, a National Plan of Action on Food and Nutrition (NPAFN) document (1995-2000) mentioned excessive alcohol consumption, drug abuse, lack of regular physical activity and eating of unhealthy diets such as those high in fat as major contributors of ill health in Ghana (GoG, 1996). Given the World Health Assembly resolution in 2004, WHA57.16 on health promotion, Ghana's MoH sought to prioritise the promotion of healthy lifestyles both in and out of school youth (WHA, 2004). With recourse to the National Health Policy 2007, the primary prevention interventions of the NCDs policy were consistent with the objective four under the healthy lifestyles and environment section (MoH, 2007). This notwithstanding, scholars have argued that we cannot regulate the social life of people by simply educating them on behavioural modification stressing on the need to encourage people to take ownership of their behaviours and choices with a supportive environment (Adobor, 2018; NDH, 2013). However, they agreed that education could be extended to them on the dangers of practicing certain lifestyles that are deleterious to health with the availability and accessibility of healthy diets and essential facilities for physical activities that are within their reach (Ibid.).

To address cervical cancer among females, the introduction of human papilloma virus (HPV) vaccine by the MoH to prevent cervical cancer was under two conditions (MoH, 2012). The first was the availability of the outcome of a multi-country trial that had already begun. The second was a reduction in price of the vaccine reflecting its uncertainty in the NCDs policy. The introduction of HPV has been recognised as a highly cost effective population-based intervention (NDH, 2013). To this end, the primary prevention strategy of the NCDs policy indicated a commitment to other

national health policies in Ghana and in other jurisdictions.

Early Detection and Clinical Care

Under early detection and clinical care, the policy measures were directed at two groups of people (MoH, 2012). They include those with NCDs and those without NCDs but are at risk. The key policy options identified for the encouragement and improvement of early detection and clinical care respectively were public education, expansion of screening services across the country, expansion of NCDs special clinics, multidisciplinary approach to the management of NCDs, provision of palliative care and elevation of NCDs care into primary health care (Ibid.). Accordingly, the WHO has emphasised on the cost-effectiveness and effectiveness of primary health care (PHC) to ensure quality healthcare delivery (WHO, 2010). Consequently, given the kind of care that patients with NCDs and even those at risk require, the WHO has expressively echoed that it is only through PHC that can help meet such care.

Assuredly, the policy made recourse to the WHO Package of Essential NCDs Interventions. As part of the WHO's stepwise approach to combating NCDs, emphasis was laid on the training of health workers at the primary care level on NCDs management and referrals, the provision of palliative care services and the preparation of NCDs evidenced-based treatment guidelines (WHO, 2005). The palliative care as endorsed by the WHO relates to the control of pain and other symptoms as well as to permit death with dignity. Although the policy did not explicitly mention the training of primary health care workers in the management of NCDs and referrals, the strategy document 2012 - 2016 recorded the education of the public and traditional herbalists (THs) on NCDs to enable people with NCDs report to health facilities early and allow alternative healers to make early referrals (MoH, 2012). This is to emphasize that certain details

omitted from the NCDs policy were captured in the strategy document. On the surface, the NCD policy under clinical care committed to the WHO recommendations on a comprehensive approach to the management of NCDs including Sickle Cell Disease. This notwithstanding, the Innovative Care for Chronic Conditions Framework of the WHO illustrated that managing NCDs is not dependent on good clinical diagnosis and interventions but on a planning and supportive environment that understands the difficulties of long term cases as well as partnerships between health personnel, the community, patients and families in particular (NDH, 2013).

Strengthening of Health Systems

According to the WHO, strong health systems are fundamental to maintain good health and manage threats to health (WHO, 2014). The National Department of Health of South Africa defined a health system as the "structured and interrelated set of all actors and institutions contributing to health improvement" (NDH, 2013). This definition underpins the fact that ensuring quality health is not only incumbent on the health ministry but on all other government and non-governmental agencies. The South African strategy for prevention and control of NCDs from 2013 to 2017 highlighted on strengthening health systems as preventive and control mechanism for reducing NCDs (NDH, 2013). Legetic and others identified the main functions of health systems to include health promotion, health financing and stewardship (Legetic et al., 2016). However, they maintained that one of the core objectives of healthcare systems is to protect persons from the financial risks associated with healthcare.

In the area of strengthening of health systems to assist in the management of NCDs, the major components of the policy included human resource capacity, provision of essential drugs and supplies, service integration, partnerships and funding (MoH,

2012). In that regard, the policy aspirations encompassed equitable distribution of human resources across the country to manage NCDs, advocate for training institutions to be tutored on NCDs, intensify health worker-patient relationship, access to NCDs drugs, tax regulations to minimize the cost of NCDs care, build and foster partnership with other health stakeholders.

It was expected to intensify community participation in planning and supervision of NCDs programs and the revision of national health accounts to include NCDs funding on one hand. The strategy document on the other hand proposed health system strengthening to address the lacunae in the components of the health systems that ranged from funding to service delivery (MoH, 2012).

Alternatively, the Ghana's National Health Policy provided that "the role of households and communities as social capital and primary producers of health should be incorporated in all health programmes" (MoH, 2007). The policy corresponded to this provision as it sought to engage the community in planning and monitoring of health programs including NCDs. According to the WHO, community participation has played a very crucial role to the successful implementation of NCDs interventions (WHO, 2005). In line with this, the WHO acknowledged the difficulty in imposing interventions on communities because of the fact that they genuinely don't demand for them (WHO, 2014). Thus, whenever communities are involved in the planning and decision making of interventions, such interventions to a higher degree succeeds especially when such approaches are based on traditional values. Therefore, implementable policies such as the NCDs policy require genuine partnership with communities.

A report by the WHO African Region issued in the year 2000 urged member states including Ghana to integrate traditional medicine into their health systems after recognising their role in healthcare (WHO

AFR/RC50/9, 2000). In the same manner, the National Health Policy signalled the promotion of traditional medicines (MoH, 2007). On the contrary, in the strategy document of the NCDs policy, the MoH committed to strengthen the Traditional Medical Council as a regulatory body not to encourage but to prevent exposure to herbal medicines (MoH, 2012). Regarding same, the policy was silent on traditional medicine (TM) as an alternative to NCDs care. Meanwhile, there exist published traditional herbal pharmacopoeia in Ghana for the treatment of NCDs such as hypertension, diabetes and sickle cell in addition to herbal clinics in various hospitals (Kasilo et al., 2010). Again, Ghana has TM policy as well as centres for national research on TM yet there have been limited institutionalisation of TM into the country's formal health system (Ibid.). This could, perhaps be attributed to the limited national organisational mechanisms and research data on the safety, efficacy and quality of TM. This notwithstanding, opportunities exist for the use of traditional medicines and qualified practitioners for which evidence of effectiveness is widely accepted. Another issue that was spot on was that there was no Traditional Medical Council (TMC) representative on the Technical Working Group (TWG) of the NCDs policy. This could be a great set back in the policy, as TM has been essential in providing support for biomedical and behavioural interventions required to address NCDs in several jurisdictions across the globe (NDH, 2013).

Research and Development

Under this strategic area, research on various areas that shape the NCDs environment was emphasised. Notable among them were epidemiological, qualitative, economic and basic science research. There was the urge to create a platform to diffuse the outcome of every research. This certainly was a commitment to assess NCDs interventions through inter-sectoral and multidisciplinary

research. Ideally, in our quest to modify health behaviours, research can be a useful tool for establishing the basis upon which several determinants of health behaviours rest. For instance, research aimed at assessing the level of impact of self-efficacy in the management of NCDs has the tendency to provide significant insights into modifying health behaviours among the chronically ill (Marks and Allegrante, 2005). Significantly, scholars have eloquently highlighted on the vital role of research in the health system in respect of innovation, development of knowledge among practitioners and in achieving the goals of the policy (Whitehead, Taket and Smith, 2003). Hence, a research and development programme is ideal to implementing the policy. What we need to know is that research has had significant impact on health promotion aspects of several NCDs policy especially in evaluating health promotion related programmes (Ibid.).

According to the South African National Department of Health, evidenced based research is ideal in identifying cost-effective and efficient interventions for prioritisation purposes (NDH, 2013). It also established the comprehension of the nexus between the health of the population and their social, economic and political environments (NDH, 2013). Undoubtedly, research has formed the bases of policy implementation mechanisms in respect of support and evaluation among others especially in policy reviews (WHO, 2006; 2014). In a resource constraint setting like Ghana with multiple competing health problems, research is essential to offer an understanding and to demonstrate how NCDs interventions can be implemented effectively (NDH).

Surveillance

Prior to the final draft of this policy, Ghana had put in place a NCDs surveillance system in 2008 (Opare et al., 2013). This system was part of the District Health Information Management System (DHIMS) under the aegis of the GHS. The objectives were to detect and monitor

morbidity, mortality and risk factor trend for evidence-based public health decision making. This notwithstanding, stakeholders were oblivious of the effectiveness of the NCDs surveillance system in realizing its set objectives by 2013 (Opare et al., 2013). In addition, there existed demographic surveillance sites at Navrongo, Kintampo and Dodowa with the objective of monitoring transitions in health behaviour and outcomes (Bosu, 2013). The NDH of South Africa eloquently posited that the ultimate goal of disease surveillance systems is to study disease trends in order to identify the harm caused by an outbreak or epidemic and to examine the effectiveness of current health services (NDH, 2013). Again, available data on living conditions can be obtained through the surveillance system in order to help take the appropriate public health action (NDH, 2013; Legetic et al., 2016). Significantly, monitoring has been effective in gathering information on the extent of progress made in policy and evaluate where and how productive outcomes can be achieved (WHO, 2010; 2014; NDH, 2013).

The Fifty-Seventh World Health Assembly in resolution WHA 57.16 on health promotion and healthy lifestyles urged member states to develop an appropriate data collection mechanisms to ensure effective societal and lifestyle changes (WHA, 2004). Concerning same, the WHA in 2007 in resolution WHA 60.23 urged member states to pay critical attention to monitoring and evaluative systems to facilitate decision making when it comes to NCDs prevention and control (WHA, 2007). The NCDs policy responded to the stepwise approach to surveillance proposed by the WHO to conduct surveys on risk factors of NCDs (WHO, 2005). In view of this, the policy set out to strengthen surveillance systems to monitor the mortality and morbidity of NCDs, which is a laudable one.

Discussions on Constraints to Implementation of the National Policy for the Prevention and Control of chronic Non-Communicable Diseases in Ghana

Most of the country's intervention policies for

several decades tends to be good and may not have weaknesses in them but their implementation has remained a challenge. Although the NCDs policy has the historical evidence of being productive and sustainable given the strategic areas and the laid down plan of actions, it is imperative to pay attention to some constraints that have and continue to create implementation gap between the policy's intentions and practice.

Legislation

The WHO has purported that policy frameworks should specify enforcement mechanisms and establish systems for their implementation including sanctions and a system for reporting complaints (WHO, 2010). This suggests that using legislation, as an implementation mechanism is not only incumbent on existing national regulations but also those of the policies. In light of the above, strengthening the compliance of and the amendment of existing legislation from the national to community levels regarding certain policies have a very great potential to achieve the set goals and objectives regarding NCDs (NDH, 2013).

Laws have historically played significant role in some of the greatest achievements in public health (WHO, 2005). For instance, advanced countries like the United States and Canada used laws to regulate the sale and consumption of alcohol (Adobor, 2018). However, in the Ghanaian context, weak legislation and enforcement engulf most of the country's policies and this has militated against successful and progressive implementation of several well-informed interventions including the NCDs policy. The weakness of rules and regulations in the country is witnessed in the situation where citizens of the country feel no compulsion to revere them (Adobor, 2018). In this stead, the feasibility of regulatory and legislative interventions relating to alcohol and tobacco use is largely dependent on the enforcement of punitive measures.

Ghana has taken significant steps toward

legislations on tobacco and other NCDs related risk factor products. In 2012, Ghana passed the Public Health Act with the commitment to achieve strong tobacco control legislation (WHO, 2014). This ACT contained a consolidation of nine separate public health laws including a series of tobacco control measures such as bans on all tobacco advertising, promotion and sponsorship. Prior to the passage of the Public Health Act which includes a tobacco legislation, Ghana had ratified the World Health Organization's (WHO) Framework Convention on Tobacco Control (FCTC) in 2004 making Ghana the 39th country to do so (MoH, GHS and WHO, 2010). However, the FCTC came under enforcement in 2005, the year that the convention became an international law. Following the launch of the national alcohol policy in 2017, the Food and Drugs Authority (FDA) initiated a ban on the advertisement of alcoholic beverages before 8pm on the media both radio and television including live presentation mention effective 2018 (GhanaWeb, 2017; MoH, 2017). This notwithstanding, these advertisements continued to flout the media before the stated time at the time of this study. Compelling evidence had it that by 2013, "laws against exaggerated health benefits (including aphrodisiac properties) of products such as alcoholic bitters" were in place but were hardly enforced (Bosu, 2013). Bosu (2013) contended that the content of most processed foods in the country as of 2013 were largely unlabelled because of unclear regulations regarding the labelling of such foods.

The threat from trans-national industries such as the tobacco industry appears to thwart efforts at enforcing regulations. The Fifty-Fourth World Health Assembly, in resolution WHA 54.8 on transparency in tobacco control process issued a caution to member countries on the intensions of the tobacco industry to undermine tobacco control measures following the findings of a Committee of Experts on the tobacco industry (WHA, 2001). This is to emphasise that while advocacy

geared towards law enforcements were in place, the activities of multi-national corporations militated against them.

Culture

The usual way of doing things among a group of people including their beliefs influences policy implementation especially in relation to attitudes toward policy adoption. The cultural constraint relates to some practices and beliefs of Ghanaians held in high esteem when it comes to healthcare. As indicated earlier, the WHO for the African region has acknowledged the fact that "imposing interventions on communities is difficult and often not sustained because there is no genuine demand for them" (WHO, 2014). This underpins the fact that whenever communities adopt and support interventions, such interventions stand the highest chance of succeeding. This is made possible when the community is involved in the planning and decision-making of policy interventions. This is to reemphasise that the lack of involvement of the community in health decision making has undermined the national capacity to address NCDs and health challenges in general. For instance, between 1972 and 2013, community-based interventions in Finland, Indonesia, India and Iran illustrated significant changes in health behaviour and outcomes (Bosu, 2013). In accordance with what works for the African region when it comes to health, the WHO eloquently expressed that identifying whom the society trust for health related advice and interventions and why increases the opportunities for achieving good and quality health (WHO, 2014).

While the policy intended to intensify education and health promotion to enable people with NCDs to report early to health facilities, comply and adhere to medical treatment, recourse to Traditional Medicine (TM) in the absence of diagnosis appeared to be a barrier. It is imperative to hint that TM will continue to remain a challenge to NCDs management as posited by some health

professionals if only credence is not given to the services rendered through it and its role in healthcare provision. Research has established that about 80% of the African population depends on TM to address their Primary Health Care (PHC) needs (Kasilo et al., 2010). In the same manner, the Ghana Statistical Service (GSS) reported in 2018 that the proportion of the ill or injured who were likely not to consult a medical doctor or even visit a health facility for treatment especially among the rural population were on the rise (GSS, 2018).

A recent study on the spiritual and indigenous healing practices among the Asante people of Kumase by Adu-Gyamfi (2015) concluded that the belief in healing have not shifted entirely from faith or spiritual healing even in the twenty-first century. There exists evidence of published TM notably herbal pharmacopoeia for the treatment of NCDs such as hypertension, diabetes and sickle cell (Kasilo et al., 2010). Accordingly, a study by O'Brien et al. (2012) revealed the role of Traditional Herbalists (THs) in cancer management. These studies among several others brought to the fore that even in the twenty-first century, TM has thrived as a cultural heritage in the health seeking behaviour among Ghanaians. This brings to the fore the need to take into consideration the cultural environment of a particular people in designing policies. In view of this, the country must respond to the WHO's recommendation to integrate TM especially herbal medicines into the management of NCDs (WHO AFR/RC50/9, 2000). Marks and Allegrante (2005) has argued that medical and surgical interventions alone have failed to address the burden of NCDs. Therefore, the opportunity exists to utilize the services of traditional health practitioners (THPs).

At this point, there is the need to pose some questions concerning how the Chinese and Indians have been able to develop their TM; Acupuncture and Ayurveda medicines to address their health care needs including

NCDs. Ghana has a TM policy and has established TM clinics in hospitals as well as centres for national research on TM yet there have been limited institutionalisation of TM into the country's formal health system (Kasilo et al., 2010; WHO, 2014). This is due partly to limited national organisational mechanisms and research data on the safety, efficacy and quality of TM over the years. Ghana can learn from her African neighbours such as Mali, Senegal, Uganda and the United Republic of Tanzania. These countries have created formal networks of medical doctors and traditional health practitioners working together in patient diagnosis and treatment (WHO, 2014). In Senegal for instance, medical doctors measured the patients' vital signs such as blood pressure, pulse, respiratory cycle and made a diagnosis after analysis of laboratory tests have been made but did not take part in treatment. The role of the medical doctor was to make an initial diagnosis and send the patient to the qualified THP. After treatment, the THP sent the patient back to the medical unit to measure the impact of the traditional medicine treatment (WHO, 2014).

Socio-economic Factors

As found by the study, social and economic factors appeared to influence the implementation gap between policy intentions and practice. This emerges from the factors that lie outside the health sector such as financial, physiological and psychological circumstances that shape the NCDs environment. By this, we establish the link between the social determinants of health, which has in it economic factors and NCDs. The social determinants of health are defined as the conditions in which people are born, grown up, live, work and age including the role of health systems in dealing with diseases and ailments (WHO, 2014; Legetic et al., 2016). Legetic and others (2016) outlined such determinants to include geographic distribution, governance, public policies, level of education, employment status, health

insurance and social classes within the society. Scholars and experts for that matter have contended that these determinants have created inequalities within the healthcare system hence, have had a significant impact on the management of diseases (Legetic et al., 2016). This notwithstanding, experts have indicated that the relationship between the social determinants of health and NCDs are complex and is not yet fully understood (Ibid.).

Concerning the social and economic dimensions of NCDs, Legetic and others proposed three indicators that can be used to measure same (Legetic et al., 2016). They include; public sector investments in NCDs prevention and health promotion, the affordability of a healthy diet, the proportion of households experiencing extreme health expenditures due to NCDs. The first indicator related to the amount of public sector investment in the prevention and control of NCDs in the form of government spending to create a healthful environment. The second encompassed the proportion of the population unable to afford and consume healthy diet. This indicator appealed to poverty and focussed on prevention of NCDs through nutrition and multisector collaborations. The third reflected growing concerns about the impoverishing effects of NCDs on the most vulnerable notably the poor in the society. The above, undoubtedly affirmed the notion that NCDs push people further into poverty. For instance, out of pocket payments for the treatment of NCDs have historically caused impoverishment and financial distress to people with limited income because of the nature of care associated with NCDs (Legetic et al., 2016; de-Graft Aikins, 2007 and WHO, 2005).

The National Plan of Action on Food and Nutrition (1995-2000) have recorded that food consumption has both financial and physical connotations (GoG, 1996). The financial aspect related to the ability of individuals to produce or purchase sufficient, safe and good quality food while the physical

component related to the access of food in a particular environment to ensure healthy diet. This plan of action, despite its longevity corresponds to the indicators proposed by Legetic and her counterparts stressing that caring for persons with NCDs go hand in hand with their economic status and social life (NDH, 2013). The NDH of South Africa simply conceptualized this with reference to a situation where an individual living with NCDs condition adhered to the prescribed medication but simultaneously had poor diet, lack of exercise and uses tobacco and excessive alcohol (Ibid.).

Significantly, the socio-economic challenges of life such as unemployment, extreme poverty and problems in relationship have placed people at risks of developing diseases like hypertension and heart disease (NDH, 2013). This is premised on the fact that these challenges exposed them to adopt deleterious lifestyles such as excessive alcohol intake and smoking. Experts has reached a consensus on same, and acknowledged that personal behaviours are not only contingent upon personal choice but also the interplay of social and economic forces (WHO, 2009). For example, the 1980's and 1990's economic recession in sub-Saharan Africa led to a deterioration in the health of the people as the region witnessed rampant unemployment coupled with food shortage among other several economic challenges (WHO, 2014). Therefore, national interventions to control social and economic issues of life that largely lies outside the health sector are essential to managing NCDs stressing that the policy on NCDs can effectively function with support from all other sectors of the economy as done in the European region.

Leadership and Governance

The WHO has defined leadership and governance as the role governments play in supporting the provision of healthcare and its relationship to other stakeholders whose activities impact on healthcare (WHO, 2014).

Thus, although policies define the governing bodies to see to their implementation, it takes governments to provide leadership to spearhead the achievement of policy objectives. While political commitments to addressing healthcare issues have been witnessed greatly in childcare, maternal care and communicable diseases, commitment to non-communicable diseases has not been realised (WHO, 2014). The WHO in 2006 contextualised the role of governments as essential in achieving lasting public health changes through the building of structures, setting up of national coordination mechanisms and providing financial support to address issues relating to nutrition and physical activity (WHO, 2006). In the same year, the WHO recognised governments as key players in providing a healthy environment to enable individuals make healthy choices and to see to the availability of appropriate health promotion and education programmes (WHO, 2006). In effect, good governance is a key determinant of good health outcomes in countries and this is manifested through policies and legislation in all areas having a direct or indirect bearing on the health of people (WHO, 2014).

The use of certain fiscal mechanisms by governments goes a long way to influence the cost of food, which in turn affects consumer choice. Policies that were effected through price control mechanisms such as taxation and subsidies influenced healthy eating and physical activity which is predicated on the availability, access, consumption of various foods (WHO, 2006). Owing to the fact that the determinants of health in the African region are complex and numerous, the WHO called on leaders to stay committed and dedicated to addressing health risks that pose as a threat to socio-economic growth (WHO, 2014). The NDH of South Africa clearly communicated the matter by stating that "people must be encouraged to take ownership of their behaviours and choices and the environment should be supportive and enable people to

make healthy choices.” (NDH, 2013).

In Ghana, the initial failure of the Non-communicable Diseases Control and Prevention Programme (NCDCP) in 1992 was due to internal leadership problems and crippled funds to run the activities of the department (Bosu, 2013). According to Bosu (2013), NCDs were included in several national health policies during the 1990s but practical attention to their control was hindered by low political will and limited funding. In addition to, this were weak and inefficient coordinating systems for the implementation of NCDs control and prevention programmes. In 2007, the Sixtieth World Health Assembly in resolution WHA 60.23 on prevention and control of non-communicable diseases-implementation of the global strategy observed that member states apportioned minimum proportions of their health budget to the prevention and control of NCDs (WHA, 2007). This, in part portrayed that NCDs were not considered as a health priority and hence, affected its funding. In 2016, the Ghana Health Service (GHS) eloquently expressed that the management of NCDs receive little priority in the health sector. The deficit in the funding of NCDs activities at that time represented a setback to the preventive and control measures put in place.

Conclusion

The quest to stem the tide of the incidence of non-communicable diseases in Ghana led to the initiation of several interventions including the NCDs prevention and control policy. Within the purview of the policy environment through the historical lens, several factors have been spot on as contributing to the inability of policies to yield their expected gains. At the core of the NCDs policy was the commitment to already existing national and international health policies and international resolutions respectively. At this point, we may state that the policy was a replicate of several WHO's recommendations and national policy

frameworks as well as proposals. In addition, certain intervention strategies and plan of actions were not explicitly expressed in the policy but such were done in the strategy for management, prevention and control document (2012-2016) of the policy. It is troubling to state that the policy made no recourse to traditional medicine as an alternative to NCDs care despite the WHO's recommendation to its member countries including Ghana to integrate TM specifically herbal medicines into the management of NCDs through effective and efficient mechanisms.

In retrospect, the NCDs policy has the historical evidence of being productive given the strategic areas and the plan of actions for its implementation. However, implementation issues regarding legislation, cultural environment, socio-economic and governance as evidenced in the study must not be glossed over for their historical tendency of creating implementation gaps between the policy's intentions and its practice. It is incumbent for policy makers to reflect soberly on these constraints in their quest to design and implement robust interventions on NCDs as done in other jurisdictions across the globe.

Limitations: None of the technical members who drafted the policy was involved in the analysis of the policy hence, certain information and details relevant to the study may be omitted.

Conflict of Interest

Authors have no conflict of interests.

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