

Collaborative work between traditional healers and medical doctors in coming up with a cure and treatment plan among the Dagomba of Ghana since 1900

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Abstract

This study is a historical investigation into the contribution of traditional medicine in proffering healing solutions among the Dagomba people of Northern Ghana. The discussion of the paper is centered on the healing occupations such as traditional bonesetters, traditional birth attendants, diviners and the nature of their knowledge, practice, and their relationship with the formal health sector practitioners. Significantly, the study paid particular attention to the collaborative work between traditional healers and formal sector doctors in a rapidly changing socio-medical systems in coming up with a treatment plan and cure among the Dagomba. The study employed a qualitative research approach which dwelled on both primary and secondary sources to respond to the questions posed in the study. A careful analysis of primary and secondary data revealed that indigenous medicine has been the dominant tool the Dagomba people have utilized in proffering healing solutions to their primary health care needs since time immemorial. The study concludes among other things that collaborations should be encouraged between universities or training institutions, the ministry of health and the

relevant international actors such as the World Health Organization to appraise and further roll out disciplines on indigenous knowledge and medicine, and to provide perspectives on health, illnesses and cultural orientations about health that are more useful in contemporary times within the local context.

Keywords: Traditional healers, collaboration, medical doctors, Dagomba

Received: 20.March.2024

Accepted: 17.April.2024

doi: <https://dx.doi.org/10.4314/aa.v22i2.6>

Introduction

The UN Sustainable Development Goals (SDGs), in particular, Goal 3, aims at ensuring healthy lives and promote well-being for people of all ages. Achieving this goal requires the attainment of a number of targets such as achieving universal health coverage and addressing the disparities in the health sector (UN Sustainable Development Goals 3). To achieve this, there is the need for a cooperation between health practitioners including formal health sector doctors and the traditional medical practitioners in a changing medical world. Ghana has committed itself to achieving the SDGs including Goal 3. Historically, the findings of the WHO revealed that a significant number of the African population and the Ghanaian population in particular, depend on traditional medical practitioners who treat diseases similar to those treated by the formal healthcare sector (WHO 1978, p.10). It is against this backdrop that the WHO placed much emphasis on traditional medicine as the surest way to achieve total health coverage for the ever-growing populations of Africa.

Notwithstanding the above, there is no one magic bullet that can alleviate the health challenges of Ghana especially when there are alternatives. It is true that Ghana has health or medical alternatives, which she could explore to provide meaningful whole healthcare services for her citizens. Besides, orthodox medicine alone has failed to control the burden of disease or generally the sicknesses that are endemic in Ghana. The literature on traditional and biomedical healing practices among the Dagomba in Northern Ghana reveals a case of medical pluralism, where multiple systems not only coexist but interact in ways that profoundly influence health outcomes. The synthesis of traditional healing methods with biomedical approaches is highlighted by Kpobi and Swartz (2019) who emphasized the coexistence and acceptance of multiple healthcare systems within African communities. This integration reflects a broader cultural acceptance and practical use of medical resources that are available, which points to a form of healthcare pragmatism that is deeply rooted in community needs and realities (Kpobi and Swartz 2019, p.1).

However, the interaction between these systems is not without tensions. Adu-Gyamfi (2016) provides a historical perspective on how colonial influences attempted to marginalize traditional medicine, favouring Western medical practices that were deemed more 'scientific' and 'reliable.' This historical conflict has laid the groundwork for a contemporary exploration of how these systems can be reconciled and integrated in Ghana. Twumasi (2005) adds that the successful integration of these practices depends significantly on the cultural sensitivity of health interventions, which suggest that an understanding and respect for traditional beliefs are crucial for any biomedical practice to be effective in such contexts (Twumasi, 2005, p.15).

Further deepening this discussion, the work of Hsu (2008) on medical pluralism explores how traditional and biomedical systems can complement each other, with each system addressing aspects of health and disease that the other may overlook. For

instance, in Africa and Ghana in particular, traditional healers often provide psychosocial and spiritual support that is lacking in the biomedical approach, which tends to focus on pathophysiology and often neglects the patient's emotional and spiritual needs (Hsu, 2008, p.318).

Contrasting the earlier views, Farmer et al. (2006) argued from a critical medical anthropology perspective that power dynamics between traditional and biomedical systems need to be carefully managed. They point out that without equitable respect and recognition of the value of traditional medicine, any integration efforts are likely to fail, as they may be perceived as another form of cultural imperialism. This is particularly relevant in the context of the Dagomba, where traditional healers hold significant authority and respect within their communities (Farmer et al., 2006, p.1686).

Furthermore, Gyasi et al. (2013) highlight the practical aspects of this integration, noting that patients often navigate between systems based on accessibility, cost, and perceived efficacy which suggests a patient-centered approach to healthcare. This navigation reflects an innate understanding among the Dagomba that different health issues may require different expertise, whether that include the spiritual healing of a traditional healer or the clinical intervention of a biomedical doctor. In spite of the existence of an immense literature on traditional healers and their therapeutic practices among Africans and Ghana in particular, limited research has been conducted to evaluate the collaborative or the co-operative work between healers and medical doctors in coming up with cure for sicknesses among indigenous populations in Ghana (Gyasi et al., 2013, p.124).

Based on this, this paper positions the Dagomba medical system within the frameworks of critical medical anthropology and Leininger's theory of culture care diversity and universality. These theoretical lenses provide the necessary tools to analyze the socio-cultural dimensions that influence health practices- by examining the structural

and cultural dynamics that facilitate or hinder effective healthcare delivery among the Dagomba people of Northern Ghana. This paper is driven by several key objectives that guide the research focus and methodology. Firstly, the study seeks to investigate the historical contributions of traditional medicine, especially traditional bone setting, traditional birth attendance, and divination among the Dagomba. This involves a deep dive into how traditional healing practices have been a cornerstone of healthcare and how they have addressed the community's health needs through time. Another critical objective is to analyze the collaborative dynamics between traditional healers and medical doctors within the Dagomba community. It advocates for an integrated healthcare approach that respects and utilizes the strengths of both traditional and biomedical practices that could enhance healthcare delivery not only among the Dagomba but in similar contexts globally.

Theoretical underpinnings of the study

Understanding the intersection between traditional healing practices and formal healthcare systems in the Dagbon of Ghana requires a robust theoretical framework. This section elaborates on the two primary theoretical approaches employed in this study: critical medical anthropology (CMA) and Leininger's theory of culture care diversity and universality. These frameworks provide the necessary lenses to analyze the complex socio-cultural and political dimensions influencing health practices among the Dagomba.

Critical Medical Anthropology (CMA) scrutinizes the interplay between health, illness, and socio-political-economic structures. CMA goes beyond the immediate clinical and biological aspects of health to investigate how broader systemic forces shape health outcomes and healthcare practices (Baer, Singer, and Johnsen, 1986, p.25-26). This approach is pivotal for understanding the collaborative dynamics between traditional

healers and medical doctors in the Dagbon region. A central concept within CMA is structural violence, introduced by Johan Galtung and later expanded by scholars like Paul Farmer. Structural violence refers to social structures—economic, political, legal, religious, and cultural—that stop individuals, groups, and societies from reaching their full potential. These structures indirectly harm individuals by preventing them from meeting their basic needs (Baer, Singer, and Johnsen, 1986, p.29). In the context of Dagbon, structural violence manifests through colonial legacies, economic disparities, and political marginalization, which collectively influence health outcomes.

Farmer et al. (2006) describe structural violence as “social arrangements that put individuals and populations in harm’s way.” These arrangements are structural because they are embedded in the political and economic organization of our social world (Farmer et al., 2006, p.1687). For instance, the colonial history of Ghana imposed Western medical practices while marginalizing indigenous healing systems, leading to structural inequities that persist today. This historical context is crucial for understanding the current health landscape in Dagbon, where traditional healers still play a significant role despite the dominance of biomedical practices. CMA also explores power dynamics within healthcare systems. In Dagbon, traditional healers often hold significant authority within their communities due to their cultural and spiritual roles. However, this authority can clash with the formal medical establishment, where biomedical doctors are typically seen as the ultimate authority on health matters.

By examining these power dynamics, CMA helps to uncover the tensions and potential for collaboration between these two groups of practitioners. For example, the referral system between traditional healers and medical doctors illustrates both conflict and cooperation. Traditional healers, recognized for their accessibility and cultural resonance, often serve as the first point of contact for patients. When cases exceed their scope, they refer patients to biomedical practitioners, thereby acknowledging the limits

of their practice and the value of biomedical interventions. Conversely, biomedical practitioners refer patients to traditional healers for conditions like chronic ailments and spiritual afflictions, recognizing the efficacy of traditional methods in these areas. This mutual referral system exemplifies pragmatic pluralism, where the primary goal is the patient's well-being rather than the supremacy of one medical system over another. CMA also emphasizes the influence of socio-economic factors on health. In Dagbon, poverty, lack of infrastructure, and limited access to formal healthcare facilities often compel individuals to rely on traditional healers. These healers provide affordable and culturally appropriate care, and in long run fill the gaps left by the formal healthcare system.

Leininger's theory of culture care diversity and universality focuses on the importance of cultural competence in healthcare. Developed by Madeleine Leininger, this theory posits that effective healthcare must align with the cultural values, beliefs, and practices of patients. It highlights the need for healthcare providers to understand and integrate cultural factors into their care delivery, ensuring that treatment is culturally congruent and thus more effective. Leininger's theory denotes that for nursing care to be meaningful and therapeutic, professional knowledge must fit with the cultural values, beliefs, and expectations of clients (Leininger and McFarland, 2006, p.3-4). This is particularly relevant in Dagbon, where traditional healers operate within a rich cultural and spiritual setting. Traditional healing practices are deeply embedded in the community's way of life, encompassing not only physical but also spiritual and emotional dimensions of health. Incorporating cultural competence into healthcare means acknowledging and respecting these dimensions. For instance, traditional healing rituals, use of medicinal plants, and spiritual practices are integral to the Dagomba understanding of health and illness. Medical doctors working in this context must be aware of these practices and find ways to integrate them with biomedical treatments. This

approach enhances the effectiveness of healthcare by ensuring that it resonates with the patients' cultural context.

Leininger's theory equally advocates for a holistic approach to healthcare, which goes beyond the biomedical focus on the mind and body to include the spirit and cultural context (Leininger and McFarland, 2006, p.7). This holistic approach aligns with the practices of traditional healers in Dagbon, who view health as a balance between physical, spiritual, and social well-being. By integrating this holistic perspective, healthcare providers can offer more comprehensive and culturally appropriate care. For example, a traditional bonesetter in Dagbon not only treats fractures but also performs rituals and uses herbal medicines to promote healing. These practices are rooted in a deep understanding of the patient's cultural and spiritual needs. Biomedical practitioners who collaborate with traditional healers can enhance their care by incorporating these holistic practices to provide a more rounded and effective treatment.

By integrating critical medical anthropology and Leininger's theory of culture care diversity and universality, this study provides a robust framework for analyzing the collaborative efforts between traditional healers and medical doctors in Dagbon. This integrated approach would allow for a comprehensive understanding of the structural and cultural dimensions influencing health practices.

Method of study

This article is based on an ethnographic fieldwork that was carried out in the Dagomba traditional area. A qualitative research design was employed to write this empirical research. The study employed both primary and secondary sources of data. The primary data consists of oral interviews, and participant observation. Initially, we engaged in participant observation to immerse ourselves in the Dagomba medical culture and

understand its practices experientially. This direct observation allowed us to see firsthand how traditional medical practices are performed and to identify key cultural nuances. Following this, we conducted interviews with prominent traditional medical practitioners in Dagbon, including priests (Tindanas), and residents who had vast knowledge about Dagomba medical culture. This sequence ensured that our interviews were informed by our observations, allowing us to ask more relevant and insightful questions.

In order to have a methodical interview process, a sample of 45 constituents were selected. They included 15 indigenous medical practitioners, many of whom doubled as traditional rulers and 30 community members. They were selected based on purposive sampling and snowballing techniques. The snowballing technique was used to identify the indigenous medical practitioners in the study area. Again, the criterion for the selection of the indigenous healers was based on their years of experience in the field of indigenous healing including the perceived efficacy and testimonies from their patients. Most of the interviews conducted included open-ended questions with further probing. Practitioners were asked questions pertaining to the origins of their practice, spiritual persuasions and efficacy of their medicines and possible changes of their practices over time, including testimonies about the efficacy of their medicines. Similarly, patients and other interviewees were asked questions about their experiences of the medical field in Dagbon, especially concerning the activities of practitioners. A phone recorder was used to record all interviews in the official Dagbani language from the field. These were later transcribed and translated into English language to allow for critical examination. The interview enabled the researchers to set the records straight and eliminate some distortions, and inaccuracies in chronology including exaggerations.

Sourcing for more primary data, the researchers utilized the Public Records and Archives Administration Department (PRAAD) in Tamale to obtain further in-depth

information on the practice of indigenous medicine among the Dagomba. The archival data were sourced from files grouped under Northern Region Group (8) with information on health and British administrative policies in the Northern Region of Ghana. However, most of these files were worn-out. It will be useful to digitize them to prevent further deterioration. File numbers were very faint and important pages of the same were misplaced.

To search for secondary data, the researchers read books on traditional medicine from the Ghana Collection Section of Prempeh II Library at Kwame Nkrumah University of Science and Technology (KNUST), scholarly articles, journals and publications from institutions such as the Ghana Health Service, Ministry of Health and the World Health Organization to obtain information that are germane to the topic under study. Additionally, in order to avoid the repetition of other researchers' works, we did a literature search which was limited to the history of medicine in Ghana and Northern Region in particular in social science journals. This was necessary since it helped us identify literature gaps and then conceptualized and contextualized the study. The collected data was meticulously examined, interpreted, and presented in a historical context.

Medical systems in the Dagomba society

Significantly, prior to the 1900s, the major tool that was used in Ghana for the treatment of ailments was traditional medical therapeutics. This was considered a dominant healing system prior to the incursion of the British especially when Asante was toppled in 1901 and a further annexation of both Asante and the northern territories. In Ghana and Dagbon traditional area in particular, external influences have exerted much pressure on their medical beliefs and practices. Influences from colonialism, Christianity and Islam

brought some social change and transformations on their medical culture. From the onset, Europeans set out to either purposely or ignorantly suppress indigenous African systems including traditional medicine. This attitude by the Europeans hindered the progress of African medicine, focusing and tagging most African healing expressions as backward and driven by superstition and belief in witchcraft (Konadu, 2008, p.46-48). Significantly, the expansion of western culture brought European medicine and other forms of healing into direct confrontation with traditional medicine during the early 1900s.

Additionally, Islam has had a profound impact on the socio-religious lives of the Dagomba. For instance, the Islamization of Dagbon gave Muslim clerics and scribes opportunity to occupy positions among the chiefly class. To this end, many Islamic based indigenous healers known as Mallams were common among the Dagomba and other parts of Ghana during the 1920s, making the Dagomba society medically pluralistic (Kwame, 2016, p.60). Key among them are biomedical practitioners, spiritualists, faith healers, traditional birth attendants, bonesetters, herbalists and diviners.

After Ghana gained independence in 1957, there was a significant shift in the approach to healthcare. The Nkrumah government, recognizing the limitations of purely biomedical approaches in addressing the health needs of the entire population, showed renewed interest in integrating traditional medicine into the national healthcare system. One of the major milestones was the establishment of the Ghana Psychic and Traditional Healers Association in 1961, which aimed to bring together various practitioners under a unified body. This organization sought to promote the use of traditional medicine and ensure that practices were standardized and regulated to some extent (Gyasi, Tagoe-Darko, and Mensah, 2013, p.124).

In the 1970s, further efforts were made to integrate traditional medicine into the formal healthcare system. The government, with support from international bodies such as the World Health Organization (WHO), initiated programmes to train traditional

healers and birth attendants. These programmes aimed to improve the skills of traditional practitioners, ensuring that they could provide safer and more effective care. For instance, the Danfa Comprehensive Rural Health Care and Family Planning Project was launched to incorporate traditional birth attendants into efforts to reduce maternal and infant mortality (Ampofo et al., 1976, p.267).

In spite of all this transformations, adherents of traditional medicine do not necessarily embrace all aspects of the scientific therapeutics or other forms of healing even when it is readily available to them. Although, biomedicine has a great deal to offer its patients among the Dagomba, some of them refuse their services since they believe that it cannot offer them all they require in healthcare. Indeed, the pluralistic nature of the treatment choice among the Dagomba, which is also found to be one of the key features of ethno medical systems across the world, emphasizes that adherents of the traditional medical system are left with no option than to seek Western or so-called mainstream medical care from formal health practitioners when the need arises or based on the individual's conceptualization of a disease over a longer period of time.

Significantly, due to the pluralistic nature of the medical terrain in Ghana and the Dagomba in particular, there exists certain kind of relationship between the biomedical practitioners and the traditional medical practitioners. A significant aspect of this relationship is the referral system, which serves as a bridge between modern and traditional medical practices and what is now referred to as the mainstream Western biomedicine. In this referral system, traditional healers played a crucial role as gatekeepers to biomedical services. Patients approached traditional healers first, owing to their accessibility, affordability, and the cultural resonance of their practices (WHO, 2024). Upon diagnosing conditions such as severe infections, complicated fractures and surgical needs, which are sometimes defined as health challenges beyond the scope of traditional healers, they sometimes refer these patients to biomedical practitioners.

Conversely, biomedical practitioners recognized the value of traditional medicine, especially in areas such as spiritual healing, chronic ailments, and psychosomatic disorders, where biomedicine potentially have limited success (Habtom, 2015, p. 71-87). In these cases, biomedical practitioners would refer patients to traditional healers. This mutual referral system exemplified a form of pragmatic pluralism, where the primary goal was the well-being of the patient rather than the supremacy of one medical system over the other.

Studies on medical anthropology emphasized how social change had affected local medical care. They granted other medical practices internal logic and coherence and by highlighting how related practitioners and patients' concepts were, they emphasized their cultural embeddedness (Hsu, 2008, p.319). Some highlighted what they called syncretic ideas and practices, others focused on fluidity between medical fields with overlapping jurisdiction. Matthews (1992) has reported that, a thirty-six-year-old black male and a twenty-six-year-old black woman enlisted the services of both traditional and orthodox/ biomedical therapies. Both patients were able to combine the different strands of expert advice into a meaningful whole (Matthews, 1992, p.70). Several authors have also emphasized the complementary rather than competitive nature of different medical systems, and highlighted how each of these were perceived to be useful for different kinds of disorders (Hsu, 2008, p.320).

Significantly, the traditional healers interviewed in the Dagbon community reported that they are willing to learn and refer their patients to formal healthcare settings for further treatment, and same is reciprocated by the formal health services. Aside from this, patients often cross over between traditional medical and biomedical practitioners for the same health problems. This referral method has therefore created a nexus between the traditional healers and formal healthcare practitioners.

Religious and socio-cultural perspectives of indigenous medicine

In the African indigenous setting, health is not just the absence of diseases, but a peaceful society is paramount for good health. This is because health has both intrinsic and extrinsic value since perhaps it is the pivot around which the development of societies originates (Senah, 2001, p.282). Similar to the above, Gundona (2015) has asserted that health to the pre-colonial African was regarded not just as a state of complete physical, social, material, and psychological well-being, rather, health and wellbeing was integrated into their social order. In his view, if there was a tranquil in the society people would be healthy to undertake their normal duties without transgression (Gundona, 2015 p.17). To maintain this social solidarity and consciousness, certain rules and to a larger extent laws such as taboos, norms, ethics was set as guiding principles for members of the society. It is against this backdrop that Adu-Gyamfi (2010) asserted that since the earliest times, man has devised various ways and means of dealing with anything that poses a threat to his survival and happiness in life.

Twumasi's study affirms the rules and regulations in maintaining a healthy community (Twumasi, 1972). The study revealed that to enjoy good health and prosperity, members of the kin group and for that matter, the community were made aware of the need to keep close and friendly ties with other relatives of the society. These rules are intertwined with the indigenous cosmological patterns. In light of this, Addae-Mensah (1992) has reported among other things that indigenous medicine reflects the

socio-religious structure of indigenous societies from which it developed together with the values, behaviors and practices within the communities (Addae-Mensah, 1992, p.53). Additionally, Feierman et al (1992) posit that indigenous healing is deeply rooted in the social and cultural order of Africans and that health and healing are shaped by broad social forces. They further elucidate that, the history of healing in Africa has come to resemble the history of religion in a place that experiences broad religious diversity. Thus, during the earliest and contemporary times, the religious beliefs of a people within a society influenced their health seeking behaviours (Feierman et al, 1992 p. 25).

Similarly, Twumasi (1972) revealed that healing was accomplished by the application of religio-magico practices. He added that, the potentiality of indigenous medical practice is derived from the supernatural assumptions underlying the practice. In this sense, indigenous medical practitioners often sought treatment in terms of the powers of the spiritual world. Additionally, he indicated that indigenous medicine has broad ties with the way of life of a people (Twumasi, 1972, p.12). It can be inferred that these magico-religious beliefs caused the society to depend on super-sensible powers with the goal and desire to increase their hold on life and to provide some kind of insurance against threats to life or disruption of the social unit. Thus, the quest for longevity and well-being created a desire in the individual to search and come to terms with both the physical and spiritual forces in his environment.

Bierlich (1995) has indicated that, what the Dagomba meant by the term medicine is different from the meaning westerners attached to the word. The Dagomba defined medicine as that which is much more inclusive and has wider connotations. Citing Alland (1970), Bierlich noted that the Dagomba medicine has both empirical substances that are curative or good (botanical preparations, Islamic and Western medicines), as well as metaphysical power that may be protective or bad (Bierlich, 1995, p.105-6). Indigenous medicines, both curative and noncurative preparations, occupy a dominant place in the

lives of the people of Dagbon. Kwame (2016) has intimated that, Dagbon traditional medical sector consists of practitioners whose medical practices are based largely on their culture, traditions and theories about illnesses, their causation and the functioning of the human body. They rely extensively on traditional medicine for their healthcare needs (Kwame, 2016, p.44-48).

The concept of illness and diseases among the Dagomba

The concept of illness is determined by culture in almost all settings. Illness is believed to be culture bound in which perception and management of ill-health are determined by the culture of the people concerned. Gundona (2015) intimates that Africans of the pre-colonial period had their unique understanding of illness and health that guided them generally in the process of cure. Moreover, the explanation of illnesses often vary from culture to culture, society to society and person to person (Gundona, 2015, p.17-18). Similarly, the methods considered acceptable for curing illness varies significantly. Generally, it is widely believed that in this journey of life; from birth to death, man has encountered numerous challenges that are deleterious to good health. As indicated earlier, different societies have evolved different means and methods of healing including the differences in perceptions about diseases.

Kwame (2016) stated that health and illness are represented differently in different cultures or societies. Among different people even within the same culture, different theories are used to explain them (Kwame, 2016, p.40). In order to appreciate and have an insight about the Dagomba's medical culture, it is necessary to glean their theories about illness. In this vein, Patterson (1974) made a similar call that any consideration of disease and medicine in Africa must of course consider local theories and cures (Patterson, 1974, p.141-148). Kwame (2016) visualized the appeal made by

Patterson (1974) when he argued that cultural sensitivity and the respect for a people's lay theories of health and illness need to be taken seriously. To him, that could help promote effective healthcare delivery and reduce conflicts between patients and healthcare professionals (Kwame, 2016, p.44).

According to the beliefs of the Dagomba, illnesses had a spiritual component that need to be treated with supernatural forces. Also, Onwuanibe (1979) has argued that in the African cosmology, since human interacts with spirits and deities, all sicknesses and epidemics are often regarded as an imputation of guilt by the individual, family, village or the people as a whole. According to the Dagomba cosmology, these spiritual entities manifest physically and are manipulated by local medicine men and women to protect or to harm (Onwuanibe, 1979, p.25-28). The spirits are both good and bad, and they traverse the two worlds to cause fortune and misfortune (Kwame, 2016 p.46).

According to Bonsi (1980), this orientation towards reality provides the basis for explaining and treating many disorders. In addition, the violation of societal behaviour means a violation of the harmonious relationship between the community and the spirit world which can bring ill-health to the members of the community (Bonsi, 1980, p.10-57). Citing Bierlich (1995), Kwame (2016) added that, the Dagomba see many illnesses as inescapable facts of living and growing up. They demand no explanation; they are part of people's everyday experiences; they come and go. They demand no explanation because it has been caused through invisible means. In addition to this, he argued that there are certain diseases such as epilepsy and leprosy that the Dagomba find it difficult to explain. They often regard them as strange or bought diseases. This happens when the victim in question had wronged a fellow human or defy the gods (Kwame, 2016 p.44). Bierlich (2007) has argued that illnesses such as haenia, chua (piles) and dirigu (migrain) are said to be partly caused by humans. Thus, such diseases are innate in us. He argued

further that, these diseases only become illness when they are triggered by either internal or external forces or both (Bierlich, 2007, p.39-54).

In a similar view, Twumasi (1972) argued that health and illness are not isolated phenomena, but part of the whole magico-religious fabric (Twumasi, 1972 p.59). Pertaining to the relationships among human beings, as well as interrelationships between humans and spiritual entities, the Dagombas theorize that illness may result when there is a broken relationship between these vital forces. In correlation to the above, Adu-Gyamfi (2016) stated that disease and ailments are consequences of the breach of the social order or an offence against a spiritual being or a fellow human being (Adu-Gyamfi, 2016, p.39-50). These vital forces according to Kwame (2016) are of different spirits and of different forms and shapes, they perform different functions. They are believed to live in many places of the earth including man-made objects, such as tractors, grinding mills, cars, bicycle, caves, trees, mountains (Kwame, 2016 p.62). In connection with the above, Bierlich (2007) noted that, disease causation can be categorized into two among the Dagomba, thus; natural and supernatural causes (Bierlich, 2007, p.30).

Furthermore, Barimah (2006) revealed that the causation of disease is of two types, the germ theory and the supernatural. In an attempt to explain the above, he posited that the germ theory is based on biomedicine. This means that the germ theory approaches illness in a scientific manner, seeking to establish a diagnosis and on the basis of its findings, it applies the most appropriate therapy and finally sees to the rehabilitation of the sick (Barimah, 2015, p.99-106). Aja (1999) sharply refuted the notion of the germ theory. He argued from the African perspective that the germ theory has failed to account for the causes of many illnesses. Aja argued further that factors such sorcery, witchcraft, breaking of taboos, spirits intrusion, ghost of the dead and acts of the gods inflicted illnesses on people and such illnesses cannot be verified by the germ theory (Aja, 1999, p.168-177).

Also, Akyeampong (2006) hinted on the germ etiology of diseases in West Africa. He stated that disease arises from human encounters with parasitic organisms. These includes bacteria and virus that are unable to replicate without a host cell. He added that some parasites require a non - human intermediate host and they step off other animals for their propagation (Akyeampong, 2006, p.187-190). Similarly, Adu-Gyamfi (2010) has argued that due to ethnic and religious beliefs concerning the causes and cure of illness, the indigenous African vehemently believes in the social causative theory of disease (Adu-Gyamfi, 2010, p.14). Again, Kwame (2016) maintains that, the basic idea about indigenous medicine is the belief that the human being is both a somatic and spiritual entity. As such, illness can be caused by the supernatural as well as bacterial invasion of the human body (Kwame, 2016, p.60-62).

Twumasi (1972) shares a similar view when he stated that malefic action of another human being or intervention by a supernatural power may cause illness. However, this is not to state that the practitioners of indigenous medicine do not know about the physical and biological components of disease causation. Additionally, within this framework the etiology of health and illness were far more behavioral than biological (Twumasi 1972, p.10). Alternatively, working on the behavioural and attitudinal characteristics of native healers in Ghana, Bonsi (1980) has indicated that, traditional healers may not define disorders such as broken bones, rashes, wounds, and fevers as mechanical and natural, importantly when these disorders do not respond readily to treatment. He added that finding treatment to these disorders might take the healers to go beyond the physical nature of disorders to discover what sets them in motion. To him, the theories of the etiology of diseases can be classified into three. They include, human agency, supernatural agency and natural causes (Bonsi, 1980, p.15).

Moreover, Nkosi (2012) working on anthropological perspective of disease and illness hinted on the causes of illness that may be considered social or spiritual. He further

highlighted the major causes of illness such as witchcraft and sorcery, punishment as a result of disobedient to supernatural forces, the socioeconomic forces and power differentials that influence access to care, cultural norms and practices and natural causes of illness (Nkosi, 2012, p84-93). In addition to the above, Pritchard (1976) made a distinction between witchcraft and sorcery. Drawing on his study on witchcraft among the Azande, Evans-Pritchard defines witches as those who can injure others through psychic means. While sorcerers are those who can harm by performing magic or administering bad medicine through ritual (Pritchard, 1976, p.176)

Igwe (2019) enumerated three categories of witches among the Dagomba. They include remediable, irremediable and anticipatory (Igwe, 2019, p.186-203). Bierlich (2004) stipulated that sorcery is another means of illness causation among the Dagomba. A sorcerer is an individual who consciously engages in bad magic for the purpose of harming someone. Hence any one can engage in sorcery as opposed to witchcraft. He maintained further that sorcerers usually use materials such as nails, hairs, herbs and paring as part of a secret formula for imparting a magical maleficent power. It is therefore not surprising that in the indigenous health care system, we find practices relating to the use of herbs and other natural products in addition to the use of spiritual and psychic powers for the treatment of diseases. The local theories about diseases are key component to understanding the factors that influence the individual's health care choices in Ghana. Accordingly, the health-illness perception of the Dagomba should be a major area for the formal health sector to understand going forward (Bierlich, 2004, p.79-110).

Traditional Bone Setting (TBS) in Dagbon and the formal health sector

Traditional bone setting is an ancient practice and a branch of traditional medicine which is practiced across the world and Africa in particular. In Ghana, the practice of traditional

bone setting heralded the pre-colonial period and continues to play an indispensable role in primary health care delivery. The practice is very popular and predominant among the rural folks. Thus, it was the sole preserve of indigenous healers, especially those in the rural areas prior to the introduction of modern methods from the first half of the twentieth century. TBS services are well preserved as a family practice, and training is by apprenticeship. Thus, the power to practice bone setting is inherited within the lineage/family.

In his study to assess the contributions of TBS in the Tamale Metropolis, Hamidu (2018) stated that despite the advances in technology and medical research coupled with the availability of modern health care, traditional bone setters still play important role in the health care delivery system due to the difficulty in accessing modern health care systems in the Northern part of Ghana (Hamidu, 2018, p.10). In addition to this, historically, Ghana's mainstream health care practitioners and the World Health Organization (WHO) have acknowledged the contributions of TBS to healthcare delivery in the country (WHO 1978, p.10).

During a personal interview, Abdulai Fuseni, a traditional bonsetter, hinted that in the olden days, bone fractures and dislocations were minimal in the indigenous Ghanaian society and Dagbon in particular. This is because there were not many automobile devices that could trigger and cause accidents day in and day out compared to contemporary times. The known causes of bone dislocation and fracture in ancient times were the incidence of someone falling from a tree and this was predominant among children. Further inquiry revealed that some of the bone-injuries were as a result of offences committed against the deities and other spirits. This confirms the postulations of Ariës et al (2007) when they observed that rapid urbanization and increasing dependence on motor vehicles had accounted for a steady increase in traumatic injuries and accidents in third world countries, including Ghana. Consequently, there has been a

considerable increase in fractures with varying degrees of complexities (Ariës et al., 2007, p. 564-674).

The principles of traditional bone setting although differs slightly among cultures, they are generally similar. In this sense, traditional bonesetters in Ghana diagnosed and treated fractures in more or less general way and used the same methods for all patients. Among the Dagomba, the bone setter commences with a thorough diagnosis of the affected part. This is followed by the reduction of the fracture by manipulation and massages, fomentation of the affected part, application of shea butter mixed with black powder to immobilize the fracture by the use of splints and bandaging. Our interviewee, Abdulai Fuseini, added that the age of the patient matters mostly in the healing process. For instance, children have a speedy rate of recovery compared to adult patients (Personal Interview with Abdulai Fuseini, 2020).

In line with the above, Ogunlusi *et al* (2007) have reported that at the immobilization stage, traditional bonesetters use the application of tight splint at the fracture site. These traditional fracture splints are made from bamboo, rattan cane (*Oncocalamus yrightiana*) and palm leaf axis (*Elaeis guineensis*). These materials are knitted together to form a mat-like splint which is usually wrapped around the fracture site tightly. Other basic techniques traditional bonesetters used in the treatment process includes bandaging, management of inflammation, sprains, strains, methods of early healing of fractures and strengthening of bones using medicinal products such as oils (Ogunlusi et al., 2007, p.3-6).

In a personal interview with Mahama Dawuda, a traditional bonesetter, he hinted that this is done to improve the blood flow of the patient and to avoid clots which may subsequently lead to the amputation of the affected part. Mahama further expressed his worries about how formal orthopedic surgeons treat dislocations and fractures of their clients. He argued that, most of the formal healthcare practitioners, despite their

knowledge in anatomy, physiology and radiography, their treatment often result in complications. According to Mahama Dawuda, his claims are from a majority of clients he admitted at his healing center after they had been hospitalized without improvement of their condition. These complications include deformities that could lead to amputations or even death. Studies have shown that TBS are not subjected to any scientific study. This assertion is attested by Mahama Dawuda when he hinted literally in the Dagbani Language that "*Ti nim bE Karim. ZuY' sabilim Ka ti mali tumida*". It translates "we traditional healers did not attain any formal education; we only treat people in darkness" (Personal Interview with Mahama Dawuda, 2020). Additionally, Galaa (2006) maintained that bonesetters employ magico-religious healing. He argued further that divination marks the beginning of the treatment process and is employed to establish the cause of the problem before ritual and herbal healing is undertaken (Galaa, 2006, p.49).

Among the Dagomba, knowledge of traditional bone setting is transmitted through oral means and direct observation of the healing processes by the novice. Additionally, the novice also acquires his knowledge of healing through the family, where practicing parents or grandparents teach the novice the names of plants and ferns, as well as the practices involved and customs/norms to be observed, in the treatment process. The novice received his formal medical education within the traditional medical institution, mostly at home. At the end of the training, it was expected of the novice to think, act, and feel like a bonesetter in the traditional medical setting (Mahama Dawuda). Additionally, during the training process, the aspiring practitioner was expected to observe family norms and was denied certain privileges. These regulations are in accordance with the family norms. In a personal interview with Mahama Dawuda, he hinted that the training of aspiring novice can take two years or more. However, the consistency and observational quotient of the novice can make him learn faster than the expected period. He further revealed that, bone setting is their family medicine (Tim)

bequeathed to them by their grandfather. As a result, almost all the children in their house who want to practice bone setting learn through observation. Importantly, the first year of the training is dedicated to orient the aspiring novice on observation when the master is treating a patient. In this same period, the novice is taught the names of the objects and materials used during the healing process. During the final year of his training, the novice is allowed to operate on patients. This notwithstanding, at this point of the training, the novice assists the practitioner throughout the healing process.

From time past, majority of the TBS performed a series of ceremonies and incantations through calling on the spiritual essence of the patient and connects with his spirit guides for assistance (Interview with Mahama Dawuda, 2020). For instance, during the treatment process, the healers applied the medicine on the affected limb of the patient and at the same time applied it on the broken limb of a fowl. It is said that on the eighth day if the affected limb of the fowl was healed that of the person would have been healed. However, such practices have been outlawed since it is seen by many as a form of punishment to animals. Bone setting practice involves a remarkable degree of expertise and skill as it does not involve radiological aids. As this practice is passed on to the current generation, TBS are extremely cautious about reputation and deliver the best treatment to their patients. The faith of people in bone setting cannot be ignored and the fame enjoyed by bonesetters is so much that patients took voluntary discharge from orthodox hospitals to receive treatment from TBS.

The relationship between the traditional bonesetters and the orthodox practitioners is a symbiotic one. This is seen in their (TBS) attempt to take an active role in primary health care delivery. Additionally, the rise in accidents and its associated complications, rising costs of medicines, inequitable distribution of health resources and lack of universal access to quality healthcare services have worsened the healthcare delivery system in Ghana. This has made the TBS consequential in terms of contributing

to health care delivery. Corresponding to this, one of our interviewee Abdulai Fuseini revealed that when a patient is admitted to their bone setting centre, probably in the course of healing, if the person falls sick aside from the bone setting procedure he is undergoing, they have specifically arranged with a medical doctor to take care of that. Additionally, as a result of the relationship they have with the medical doctor, he provides them with first aid materials to aid their practice. Our interviewee again hinted that the medical doctor frequently refers patients to them, after taking X-rays. According to our interviewee, he can interpret X-rays and treat the affected part. Likewise, the bonesetter sends patients with open wounds to the doctor, where they can be given emergency care. Most often than not, the healer visits the doctor to check on patients he has referred, and to discuss the treatment of complicated cases with the doctor. It is therefore prudent for biomedical practitioners especially those under emergency care units and that of the orthopaedic departments of the various hospitals in Ghana to collaborate with TBS to gain more knowledge concerning their practice in order to improve the quality of their service delivery.

Traditional Birth Attendants (TBAs) and their integration with the formal health sector

Traditional Birth Attendants are another category of healers in Dagbon. Traditional birth attendants existed long before the introduction of modern medicine. They are mostly old women and, in some cases, few men and are found in most rural areas in Ghana. In northern Ghana, for instance, almost every household in the rural communities has a birth attendant. The World Health Organization (WHO) has defined a traditional birth attendant as “a person who assists the mother during childbirth and initially acquired her skills by delivering babies herself or through apprenticeship to other traditional birth attendants” Nonetheless, studies on traditional birth attendants show no efficient

similarities of practice. The studies reveal that there are various categories of TBAs besides those who use pure physical means compared to orthodox practice.

For instance, the Operation Research Project in 1990s identified three categories of TBAs with the composition of straightforward midwifery, spiritual practices and herbalists. The study conducted by Aziato (2018) also revealed that some categories of TBAs use magico-religious (oracles) and herbal means of midwifery care that is acquired through inheritance and supernatural means (Aziato, 2018, p. 7). Such TBAs do not acquire their practice through apprenticeship as in the case of the ordinary TBA. This section is therefore devoted to elucidating on the conception of pregnancy among the Dagomba at the family level and up to delivery in which the TBAs come in to play a role.

Ordinarily, among the Dagomba, pregnancy is seen as an anxious moment in the life of the woman because it marks a transformation or mode of existence from one stage to the other. In a personal interview with Hajia Fati, a traditional birth attendant, she echoed that pregnancy as a form of happiness is not just to the expectant mother but to the larger society who anticipate the arrival of a new member. The expectant mother therefore becomes special and receives such treatment from her relatives before and after child birth. In addition, in the Dagbon society, marriage is not fully consummated until the wife has given birth. This means that pregnancy becomes the final seal of marriage that fully integrates the woman into her husband's family and kinship circle (Interview with Hajia Fati, a traditional midwife, 2020).

Pregnancy was therefore given special attention and was accompanied by elaborate religious rite. This rite is performed on the occasion of the woman's first pregnancy. This rite is called *pirigibu* which literally means undressing. This ceremony is the official declaration of the pregnancy. This ceremony is done as accounted by Abdulhamid (2010). Among the Dagomba, when a woman is pregnant for about four months, the man's family will inform the lady's family about their daughter's conception and a

date is fixed for the ceremonial rite. A sister of the husband is normally invited to officiate the ceremony. Where there is no sister, any female relative of the husband is eligible to perform the ceremony. She comes to the house with a calabash in her hand and opens the ceremony in the pregnant woman's room by giving her a knock on the head or shoulder saying, "you were a child, but now you are an adult" (Abdul-hamid, 2010, p.6).

Explaining further, Abdul-hamid (2010) noted that, this knock is supposed to transform the pregnant woman from a girl into a brave woman ready to bear all the impending pains of puerperium (the period between childbirth and the return of the womb to its normal state). The cloth that is tied to her waist is then untied and she stands naked with the sign of pregnancy visible as a result of the protrusion of the belly. A special meal is then prepared with chicken presented by the officiating woman or under her supervision. The ancestral spirits are then invoked to protect the woman throughout her labouring period and also to ensure a smooth delivery. Finally, a soothsayer is contacted to determine the ancestor after whom the child should be named when it is born and usually a fowl is slaughtered in memory of such an ancestor. From then on, the woman can be referred to as *pagapulana*—pregnant woman (Abdul-hamid, 2010, p.8).

Among the Dagomba, TBAs traditionally support the delivery of babies. However, their services cover antenatal and postnatal care. This is to argue that, the services of TBAs among the Dagomba cut across pregnancy, labour, postpartum and care of the newborn (Personal interview with Abibata Salifu, 2020). As part of the postpartum services by the TBAs, they are responsible for bathing the child for at least three weeks and thereafter the nursing mother takes over. In addition to this, TBAs in Dagbon also treat a wide range of health-related problems by the application of their indigenous knowledge and practices. Among such health-related problems include abdominal pains and miscarriage, abnormalities in the development and challenges

with the foetus, vomiting during pregnancy, childbirth and weakness after delivery (Derbile, 2007, p.73-77). Shamsu-Deen (2008) also noted that other specialties of the TBAs include sex education, family planning and counselling. It should however be noted that, these older women were the sole providers of midwifery care prior to the introduction of European forms of medicine and at rural areas where health professionals were/are inadequate and health facilities are nonexistent (Shamsu-Deen, 2008, p.14).

In the words of Hajia Fati; in the olden days, delivery was done at home with the assistance of co-wives, mothers-in-law, aunts or mothers or TBAs. In line with this, it can be inferred that patients who seek the services of traditional birth attendants were/ are usually members of the same community. Thus, traditional birth attendants tend to have an intimate knowledge of their clients (Personal interview with Hajia Fati, 2020). Women who become traditional birth attendants learn their skills in an informal atmosphere. It was mostly through observation and apprenticeship. As a result, there was a great disregard for surgical operation to aid childbirth in most rural communities in Ghana and Dagbon in particular. Besides, these TBAs did not have the know-how to perform surgical operations (Adu-Gyamfi, 2010, p.74-84). However, it was not until the 1960s and 70s that training programmes were instituted to upgrade the services of traditional birth attendants (Shamsu-Deen, 2008, p.15).

At labour and child delivery, the TBAs would make sure that the pregnant woman has eaten in order to gain strength to push during delivery. Mostly TBAs in the rural areas used their homes as delivery centres. They have pieces of cloth, mattresses and mats in their homes which they use to support women during delivery. In a personal interview with Hajia Fati, she revealed that:

When expectant women come for delivery, I would first examine them if they are close to delivery then I assist through the delivery process. However, some will have

to wait for some time if they are not close to labour. At delivery, the pregnant woman will be laid on either the piece of cloth or a bed to ensure a safe or worthwhile delivery (Personal Interview with Hajia Fati, 2020).

Additionally, Hajia Fati further stated that as soon as the child is delivered and both the woman and the child are in healthy condition, she will discharge them and also advise them on what to do next. She hinted that:

Due to my experience in child delivery, I know what is good for the lactating mother. I give my clients prenatal and postpartum health education on nutrition in order to maintain the health of the unborn child and the mother and also after delivery (Personal Interview with Hajia Fati, 2020).

From about the 1970s, the role played by TBAs in maternal and child health had long been recognized by both the Government and Non-Governmental Organizations. These community workers have been recognized for their availability, steadfastness and cultural appropriateness in caring for mothers and newly born in rural areas in the country (Neumann and Lauro, 1982, p.1818). As a result, support schemes and training programmes were organized for TBAs. The first of these was the Danfa Comprehensive Rural Health Care and Family Planning Project which was a joint endeavor between the University of Ghana and the University of California at Los Angeles. This project was instituted in the 1970s to incorporate TBAs in the reduction of maternal and infant mortality in rural areas. In addition to this, the Brong- Ahafo Rural Integrated Development project was also launched by the government of Ghana in the 1970s with assistance from the World Health Organization (WHO) to make health care delivery the responsibility of the community and practical ways of establishing community health centers (Ampofo *et. al.*, 1976, p.268).

Nonetheless, in the northern part of the country, a chunk of the support came from Non-Governmental Organizations (NGOs). The Ministry of Health and United Nations International Children Emergency Fund (UNICEF) as well as other NGOs such as United Nations Population Fund (UNFPA), World Health Organization (WHO), Christian Children Fund of Canada (CCFC), Plan Ghana, and Action Aid Ghana operating in the area. They engaged TBAs through training programmes. Yendi and Damongo were some of the pilot districts for primary health care programmes sponsored by UNICEF (Shamsu– Deen, 2008, p.22).

Divination as a form of preventive medicine among the Dagomba

Finding an explanation for the causes of ill-health and other misfortunes has been an entwined part of the life of the Dagomba and other communities in Ghana. In Africa's long history, it is a popular practice to go to a diviner to find explanations to diseases. In an attempt to do so, sometimes the healer himself or the family members of the sick can go to the diviner or diagnostician to seek for solution to disease that afflicted their kindred. Awalu (2009) maintained that physical sickness may be a personal experience among the Dagomba although its causes and treatment may not be understood without making reference to socio-cultural factors such as divination to find those that are perceived to be responsible for it. Here, diviners are not healers on their own but have been the point of reference for consultation in every situation, whether good or bad. This role by the diviners therefore makes them critical actors in the health-seeking behaviour of the Dagomba (Awalu, 2009, p.215).

Again, the above position does not justify that a diviner cannot be a healer. For instance, in a personal interview with Imoro Yakubu, a renowned diviner, he hinted that he comfortably settles between the role of a healer and a diviner. He further reported that

his granduncle is a healer. Although Imoro could treat people, he does not want to be seen by the community that he is challenging the uncle and that has made him concentrate on divination alone. Concerning the evolution of divination among the Dagomba community, Imoro hinted that it is difficult to periodize the origins of divination. However, in the olden days when someone dreamt about a misfortune or a fortune, like pregnancy among others, such a person would consult an elderly person for help in order to interpret the dream for him. This was done in order to obtain knowledge about the hidden or future issues. On the other hand, he stated that the victim might not be directly involved in the dream, probably a relative might see that in his/her dream, and later narrate everything to the supposed victim. Ordinarily, it can be inferred from the perspective of Imoro that divination started when people attempted to interpret their dreams. Imoro also maintained that various categories of diviners existed among the Dagomba since time immemorial. They include numerologists, palmists, mallams and indigenous diviners (Personal Interview with Yakubu Imoro, 2020).

In a personal interview with Alhassan Andani, a community member, he noted that divination is seen as one of the preventive measures in healthcare among the Dagomba. This according to him necessitated the search for the unseen in traditional health practices. These measures essentially entailed the use of charms, amulets and talismans obtained from diviners. In Dagbon, amulets sewn in leather and shoulder blades of a foal are hanged over doors, and entrances. Miniature jaws were equally used to serve as protection against sickness and evil spirits (Personal Interview with Alhassan Andani, 2020). In addition to the above, Bierlich (2004) has indicated that the Dagomba consult diviners when sicknesses befall them. Most illnesses have a spiritual dimension in the view of the Dagomba, and the cause and treatment must be sought through divination. In performing his tasks, the diviner in many ways complements the activities

of healers within the traditional and the biomedical spheres as presented by our interviewees.

Conclusion

The foci of the paper include traditional bonesetters, traditional birth attendants including other healers and how their practices have influenced formal health sector cooperation to come up with a cure and treatment plan among the Dagomba. Cooperation between these healers and the formal health sector is germane since at the epicenter of the relationship is the patient benefiting from the sweet-interplay or complementary roles of biomedical and traditional healers. The clinical manifestation of these medical systems calls for urgent attention. Among the Dagomba, the traditional bone setter enjoys an enviable position. This unquestionable pride bone setters enjoy is rooted in the inadequacy of medical personnel and orthopedic surgeons to adequately attend to the teeming population who suffer from injuries regularly. This notwithstanding, due to the perceived challenges or inability to treat bacteriological diseases and other emergency situations, healers refer their patients to formal sector doctors for treatment. Through this relationship both practitioners would be able to access their client information and history concerning their health. Significantly, health information that has been passed from formal practitioners to traditional healers and to the community, can promote the traditional healers as a vehicle for relaying health information. Subsequently, information that is coming from the traditional healers are trusted and is easily accepted by the community thereby reinforcing and adding to their knowledge and experiences.

Theoretical frameworks such as critical medical anthropology (CMA) and Leininger's theory of culture care diversity and universality provide essential lenses for

analyzing the intersection of traditional and biomedical practices. CMA highlights the impact of socio-political and economic structures on health outcomes, emphasizing the need to address structural violence and inequities that marginalize traditional healing systems. Leininger's theory underscores the importance of cultural competence in healthcare, advocating for treatments that align with patients' cultural values and beliefs. By integrating these frameworks, this study underscores the necessity of culturally congruent care that respects and incorporates traditional healing practices. Based on these theories, it can be said that both healers and health professionals could be able to enhance quality healthcare among the Dagomba through their cooperation. As indicated in the section which discusses traditional bone setters and their integration with formal health sector, the research reveals a clear cooperation between a bonesetter and formal health sector doctor in attempt to heal a patient. This point underscores the fact that such mutual cooperation can be adopted between practitioners in other spheres to provide cure for the inhabitants of Dagbon.

The study concludes that indigenous medicine has been a major contributor to meet the health care needs of the Dagomba. It was the sole provider of healthcare for the people until western medicine was introduced into Dagbon. As time unfolded, the medical systems of the Dagomba has gone through changes in providing treatment and therapy for the sick due to the pluralistic nature of their medical culture. The practice of indigenous medicine among the Dagomba of Ghana has been a dynamic and established medical system for a very long time. Their theories and perceptions about health and ill health have helped shape a unique indigenous medical system for themselves. In this research, we argued that for peaceful coexistence to prevail in both healthcare systems, there should be the enhancement of the existing national policy that regulates the activities of indigenous healers. In addition to this, the intensification of health systems and operational research is another key area that various stakeholders especially health

policymakers should focus their attention on. Among other things, the research should include ethnic groups in Ghana, so as to get different cultural perspectives to traditional medical practices and illness based on traditional or indigenous knowledge systems. This will help in the formal inclusion process into mainstream healthcare as envisaged in the changing policies on medical care by respective governments of Ghana in contemporary times. This notwithstanding, indigenous communities or countries can draw lessons from the Dagbon case by adopting national policies to initiate comprehensive programmes for legislation, evaluation and quality control of indigenous remedies to properly improve service delivery in non-western cultures.

Again, collaborations should be encouraged between universities or training institutions, the ministry of health and the relevant and well-intentioned international bodies to appraise and roll out disciplines on indigenous knowledge and medicine, and to provide perspectives of health and illnesses including the right cultural orientations about health. Most importantly, strategic planning is essential to develop and maintain such cooperation from both practitioners and policy makers to understand transcultural nature of healing among indigenous populations.

Personal Interviews

Abdulai Fuseini. (2020)., Personal Interview, Dagomba Traditional Area.

Abibata Salifu. (2020)., Personal Interview, Dagomba Traditional Area.

Alhassan Andani. (2020)., Personal Interview, Dagomba Traditional Area.

Hajia Fati. (2020). Personal Interview, Dagomba Traditional Area.

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