

# Should traditional medicine services in Ghana be covered by Ghana's National Health Insurance Scheme?

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## Abstract

More than half of Ghanaians use traditional medicine in addition to conventional medicine in treatment of diseases. However, traditional medicine is not covered by the National Health Insurance Scheme. This poses a serious threat to financial risk protection to users of traditional medicine as they may be exposed to catastrophic healthcare expenditure. This paper assessed whether traditional medicine services should be covered by National Health Insurance Scheme in Ghana or not. A case study design was employed to assess a traditional medicine facility in Accra, Ghana. The study adopted Ghana's National Health Insurance Scheme accreditation tools coupled with in-depth interviews with key informants. Data was analyzed using descriptive statistics and content analysis from interviews. It was found that the overall performance of the facility was 83 percent, representing grade 'A'. This implies that the facility may be considered for accreditation. However, the facility performed poorly in in-patient care, with a grade 'E', representing 'Fail'. Some respondents were of the view that the facility should only be accredited on condition that it is upgraded to meet the required standards. Other respondents argued that selected service lines which meet the accreditation standards should be accredited. It was concluded that traditional medicine could be covered by NHIS, especially for outpatient care, while steps could be taken to address teething problems such as standardization of traditional medicine.

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**Key words-** Traditional medicine, National Health Insurance Scheme, Accreditation, Ghana.

## Introduction

Utilization of complementary and alternative medicine is increasingly gaining momentum in both developing and developed countries (Gyasi, Mensah, Osei-Wusu Adjei, & Agyemang, 2011; Gyasi, Mensah, & Siaw, 2015; Tindle, Davis, Phillips, & Eisenberg, 2005; Vialle-Valentin, Ross-Degnan, Ntaganira, & Wagner, 2008).

Complementary and alternative medicine, known popularly in Ghana as ‘traditional medicine’ refers to “the sum total of the knowledge, skill and practices based on the theories, beliefs and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness” (World Health Organization, 2019) This paper uses the term ‘traditional medicine’(TM) which is popularly used in Ghana. The term ‘conventional medicine’ (CM) is also used in place of western allopathic medicine. The WHO Global Centre for Traditional Medicine (GCTM) as at 2022 estimates that 80% of the world’s population use TM. According to WHO, 88% of Member States have acknowledged their use of traditional and complementary medicine which corresponds to 170 Member States (World Health Organization, 2019). It is reported that about 80 percent of the population in Africa use TM for primary health care(Krah, de Kruijf, & Ragno, 2018; Kwapong, Normeshie, Eghan, Adjei-Mensah, & Obiri-Yeboah, 2022; WHO, 2002, 2013). These statistics show that TM plays an important role alongside CM in meeting the health needs of most populations in the world. In Ghana, it is estimated that over 70% of indigents in rural and urban areas resort to TM for both primary care and some specialized care(Gyasi et al., 2015; Krah et al., 2018).

The use of TM has a long history in Ghana. Prior to the Colonial period, TM services were patronized by Ghanaians until the British introduced CM services (Kofi Bobi Barimah, 2013). In a typical Ghanaian household, especially in the rural areas, TM is culturally acceptable, affordable and utilized by most of the people (Adams,

Sibbritt, Broom, et al., 2011; Adams, Sibbritt, & Lui, 2011). TM thrives on locally available resources, and knowledge of the health-care value of plants and their derivatives. The utilization of TM has been increasing steadily alongside the CM services (Adams, Sibbritt, & Young, 2008; Asante & Avornyo, 2013; Kofi Bobi Barimah, 2013; Krah et al., 2018).

Over the past 30 years Ghana has made significant progress in enhancing the status of TM as a viable complement to CM. There is a policy framework guiding TM practice in Ghana (Boadu & Asase, 2017). A Traditional Medicine Practice Council has also been established as an agency of the Ghana Ministry of Health, to regulate TM practice (Ministry of Health Ghana, 2019). The Ghana Health Service which is the statutory agency of the MOH responsible for direct provision of health services to the public, has established a traditional and alternative medicines directorate to ensure the implementation of strategies aimed at integrating TM into CM services in rural and urban areas of the country (Ministry of Health Ghana, 2019) . TM practice is regulated by the Traditional Medicine Practice Act-2000 (Act 575) (Gyasi et al., 2011; Gyasi et al., 2015; Herman, Craig, & Caspi, 2005). Efforts are made by the Traditional Medicine Practice Council to bring all TM practitioners under one national organization, preparing guidelines for standards of practice and ethics, and a training manual for the profession (Boadu & Asase, 2017). The Government of Ghana, through the Ministry of Health, has also established TM units in selected health facilities such as Police Hospital and LEKMA Hospitals in Accra, to provide TM treatment alongside CM treatment (Ministry of Health Ghana, 2019). The Kwame Nkrumah University of

Science and Technology (KNUST) runs a degree programme in TM. Products from the programme work in various TM health facilities in Ghana (Ministry of Health Ghana, 2005; World Health Organization, 2019). The Suntreso and Ho Government Hospitals in the Ashanti and Volta Regions respectively, also provide professional training in TM (Gyasi et al., 2015; Herman et al., 2005).

Although majority of Ghanaians have embraced TM, and despite its recognition by many stakeholders, payments for TM services is wholly out-of-pocket. Unlike CM, services provided by TM is not covered by Ghana's National Health Insurance Scheme (NHIS) (Kofi Bobi Barimah, 2013). The NHIS was rolled out nation-wide in 2005 under the National Health Insurance Act-2003 (Act 650) (Blanchet, Fink, & Osei-Akoto, 2012). The aim of the scheme is to eliminate out-of-pocket payment, address inequities in access to healthcare and protect the indigents from financial risk of accessing healthcare services (Busato, Eichenberger, & Künzi, 2006; Nahin, Barnes, & Stussman, 2016). The scheme covers primary, secondary and tertiary levels of care in public, private and faith-based health facilities in Ghana (Blanchet et al., 2012). The NHIS is funded through 2.5% Value Added Tax, 2.5% of formal sector workers' social security contributions, premium contribution from informal workers, monies allocated to the National Health Insurance Fund (NHIF) by parliament, and return on investments (Arhin, 2012; Blanchet et al., 2012; Gobah & Liang, 2011; Nahin et al., 2016). However, pregnant women, minors (under 18 years), indigents and adults aged 70 years and above are exempted from payment of premiums to enroll into the scheme (Akazili et al., 2014). The scheme

covers over 95% of all diseases that are reported in Ghanaian CM health care facilities (Akazili et al., 2014). Outpatient and inpatient services such as eye care services, maternity care, oral health services, surgical, and emergency care are covered under the scheme (Blanchet et al., 2012). The NHIS coverage showed an increasing enrollment since operations began in 2005 (Blanchet et al., 2012). The total number of active members rose from 2.4 million in 2006 to 11.1 million in 2009, suggesting that close to about 50% of the population is covered by the insurance scheme (Blanchet et al., 2012). The outpatient utilization of CM services under the NHIS rose from about 2 million in 2005 to approximately 27.35 million in 2013 (Pagán, Puig, & Soldo, 2007).

Given the fact that about 70% of Ghanaians patronize TM services which are not covered by NHIS (Kofi Bobi Barimah, 2013), coupled with inadequate CM services throughout Ghana, this could pose a serious threat to financial access to primary health care by the population, and undermine the attainment of Sustainable Development Goal (SDG) 3, which advocates for universal health coverage, among others. Reports indicate that as at 2018, Ghana scores only 45% in the SDG index, which is described as insufficient progress (Service, 2018). Several calls have therefore been made on the government of Ghana and the NHIS to cover TM facilities under the NHIS just like CM facilities (Kofi Bobi Barimah, 2013). According to Barimah, a renowned researcher in TM, if TM services are included in the NHIS, it is likely to increase the utilization of health services (Kofi B Barimah & Van Teijlingen, 2008; Blanchet et al., 2012).

A renowned TM practitioner also argued that TM providers in good standing should

be accredited by the NHIS because many Ghanaians prefer to seek care from TM providers, but are sometimes forced to use orthodox practitioners because the NHIS does not cover TM (Gyasi et al., 2015). According to the practitioner the National Health Insurance Authority remained reluctant to include TM on the programme even though TM is recognized by the Food and Drugs Authority and all the health services regulatory bodies in Ghana (Ministry of Health Ghana, 2005). He asserted that some chronic diseases like stroke, hypertension which cannot be easily treated with CM are easily cured with TM (Andoh, February 2015).

However, there is dearth of literature on relationship of health insurance coverage and use of TM. Findings of the few studies in high income countries are mixed. Some of the studies found little or no relationship between health insurance and TM use. For example, a study conducted in United States of America (USA) reported that rural residence, age, income, education, and health insurance were unrelated to TM use (Kaboli, Doebbeling, Saag, & Rosenthal, 2001). Lewing and Sangsiry (2018) examined costs, utilization, and driving factors of TM services in USA and found that about 8.8% of the adult population visited a TM provider, and about 42% of those that visited a TM office paid more than 80% out of pocket. In addition, those without health insurance were 50% more likely to seek TM provider care, suggesting a reverse relationship between health insurance coverage and utilization of TM services.

On the other hand, some studies found a large positive influence of health insurance on TM use. For example, an internet survey on the provision of complementary and alternative medicine in Japanese private

clinics found that 96.8% of the clinics provided mainly health services on the universal national health insurance tariff (Motoo, Yukawa, Hisamura, Tsutani, & Arai, 2019). Kambo (traditional Japanese herbal medicine) medicines represent the most commonly used TM in private clinics in Japan, and universal national health insurance coverage is considered to be the reason for the high rate of their use (Motoo et al., 2019). Due to the demand of the presence of TM in CM, European countries like Switzerland have included some of the most common treatments such as acupuncture, homeopathy, and naturopathy, as part of the national health insurance (Carruzzo, Graz, Rodondi, & Michaud, 2013; Klein, Torchetti, Frei-Erb, & Wolf, 2015). In addition, since 2004, one-third of Swiss hospitals offered TM to its patients (Saldana, 2018). This demonstrates how Western medicine in Europe, and Switzerland specifically, has been legitimizing TM as a helpful treatment, whether truly effective or not (Saldana, 2018).

There is however, paucity of studies in developing countries on whether TM should be covered by health insurance. Another important question in the context of Ghana is whether TM healthcare facilities in Ghana would meet NHIS accreditation standards, as required of CM facilities. To the best of the authors' knowledge, no research has addressed these questions yet. To fill this gap, this study aimed at assessing one of the renowned TM health facilities, using NHIS standard accreditation tools, to establish whether it meets the NHIS accreditation requirements. Interviews were also conducted with key staff to seek their views on these research questions.

## Methodology

## Study design

This was a single case study of a renowned 20-bed capacity herbal hospital located in Ghana's capital city, Accra. For the purpose of anonymity, the herbal hospital is described here as AHH. AHH initially started operations as a manufacturing unit and a clinic. It was later commissioned as a herbal hospital. AHH has six departments/units: Out Patient, Physiotherapy, Laboratory, Pharmacy, Ultrasound and Health and Fitness (Gym) departments. It has a state-of-the-art diagnostic equipment to diagnose patients' health conditions before the administration of herbal medicines and treatments.

## Population and sampling

AHH has a staff capacity of 72, comprising of clinical and administrative staff. Purposive sampling was employed to select respondents for interview. A total of eleven respondents were interviewed, consisting of one administrator, six nurses, one pharmacist, one physiotherapist and one laboratory technician. We also interviewed one staff of Traditional Medicine Practice Council in the Ministry of Health. The Traditional Medicine Practice Council is an agency of the Ministry of Health which is responsible for regulating TM practice. These respondents were carefully selected based on their experience and expertise in the TM practice.

## Data collection and analysis

A standard accreditation tool used by the NHIS to assess CM facilities was adopted to assess the selected TM facility. The original tool comprises of twelve dimensions (standards) ranging from range of services to pharmaceutical care. However, seven of these dimensions were considered relevant for this study. Table 1

shows the twelve standards used in assessing CM facilities by the NHIA. However, in view of the nature of services by the AHH, it was considered expedient to use seven standards including Staffing, Environment and Infrastructure, Basic Equipment, Organization and Management, Safety and Quality Management, Out-patient Care and In-patient Care. This is acceptable by the NHIA since CM facilities often indicate the level and nature of their services, based on which the NHIA assesses them.

**Table 1. Standards used in assessing healthcare facilities by the NHIA for accreditation**

1	Range of Services
2	Staffing
3	Environment and Infrastructure
4	Basic Equipment
5	Organization and Management
6	Safety and Quality Management
7	Out-patient Care
8	In-patient Care
9	Maternity Care
10	Specialised Care
11	Diagnostic Services
12	Pharmaceutical Services

Even though the study facility is perceived as a hospital, the accreditation tools for health centre, which is lower than a hospital, was used to assess the facility. This is because our initial checks revealed that the facility did not meet the accreditation standards of a hospital. An evaluator used the observational and interview methods to assess the health facility. A checklist which has the selected dimensions with a number of sub-dimensions and measurable indicators under them was used. The indicators are often separated by commas. Each indicator is one mark if the health facility performs it, else it is zero. For

example, under the dimension 'Out-patient Care', one of the sub-dimensions is 'Provision of health education'. The indicators under this sub-dimension include: health talks given, audiovisual health programmes, programme / plan of health talks. If a facility does all these three indicators, three marks are awarded under 'Provision of health education'. But the facility can score one, two or none, out of the three.

In-depth interview with management and staff of the facility was also conducted. A staff of the TMPC was also interviewed. The interview guide comprised of twelve major themes, based on the NHIS accreditation guidelines and other relevant themes. The interviewer made prior appointment with the respondents.

Interviews were recorded and notes also taken as a back-up. On average each interview lasted for about 30 minutes. The data collected were transcribed and coded according to the emerging themes and analysed, vis-à-vis the quantitative findings.

The grading system and the accreditation guidelines with corresponding interpretations can be found in Table 2. Grades A to D, are pass grades, while E is a fail grade. However, a facility must pass 50% or above in a core area in addition to passing in the total scores to be accredited. For instance, a health facility with total score between 50 to 59% is interpreted as grade D. However, the facility must have passed 50% or more in a core area to be qualified for accreditation.

**Table 2: Grading system and interpretation.**

Grading system	Interpretation
Grade A + $\geq 90\%$ total score + $\geq 50\%$ in each core area	Accreditation
Grade A: $\geq 80\%$ total score + $\geq 50\%$ in each core area	Accreditation
Grade B: 70-79% total + $\geq 50\%$ in each core area	Accreditation
Grade C: 60-69% + $\geq 50\%$ in core areas	Accreditation
Grade D: 50-59% + $\geq 50\%$ in core areas	Accreditation
Grade E (Fail) : Below 50%	Provisional accreditation or denial of accreditation.

## Results

### Results of assessment with accreditation tools

Using the NHIS accreditation standards for CM facilities, AHH was assessed to find out whether it meets the requirements for NHIS's accreditation. The facility was assessed based on seven dimensions including out-patient and in-patient care. AHH passed in six out of the seven dimensions. The dimension that AHH

failed was in-patient care. The highest score was recorded by environment and infrastructure dimension, where the actual score was the same as the expected score, indicating 100% score. Scores on staffing, safety and quality management, organization and management, general out-patient care and basic equipment were 93%, 90%, 81%, 78%, 72% and 66% respectively. However, the hospital failed to meet the expectation regarding the

provision of inpatient services. This is because the facility scored 41%, that is grade E, which is interpreted as fail. The total expected accreditation score for all the

dimensions was 492. However, AHH's actual score was 408, representing 83% and equivalent to grade 'A'. (See Table 2).

**Table 2: Summary of results on technical assessment of AHH\***

Dimensions	Expected Score	Actual Score	Percentage Score	Grade
General Out Patient Care	57	41	72	B
Staffing	28	26	93	A+
Environment and Infrastructure	129	129	100	A+
Basic Equipment	71	47	66	C
Organization and Management	32	26	81	A
Safety and Quality Management	89	80	90	A+
In Patient Care	22	9	41	E (Fail)
Totals	492	408		
Total % Score	100	83		A

*\*The scoring systems is a very detailed checklist which is not shown in this paper.*

### Results of in-depth interviews

This section presents findings of interviews with staff of AHH and the TMPC. The findings are presented according to the major themes of the interview guide.

#### **Should TM services be covered by NHIS?**

Regarding whether AHH should be accredited by NHIS, majority of the respondents were of the view that TM services should be 'covered' by NHIS. They argued that users of TM services are Ghanaians, they pay taxes and contribute to national development, therefore they are also entitled to benefit from social interventions like NHIS:

*"Yes, TM should be covered by the NHIS, this will make the services of TM facilities accessible to all Ghanaians. This was the reason for establishing the NHIS" (Staff 1). "Yes, because majority of our clients are Ghanaians who also pay taxes to the state and it is a matter of choice so they should also get free service here. Some also have financial difficulties paying for*

*the services here. I think NHIS would help reduce the burden on these clients"*

- (Staff 2)

However, a few respondents were not in support of including TM services in the NHIS. They argued that TM facilities do not have standardized and certified medicines that are accepted by all TM providers. For instance, AHH manufactures and dispenses its own medicines which may not be accepted by other TM providers, hence making it difficult for the NHIS to bill the medicines:

*"TM should not be covered by the NHIS because most of their medicines are limited to the facilities operated by these proprietors. How would the cost of the medicines be determined? The orthodox medical practitioners have an essential medicines list with prices which are agreed by both service providers and the health insurance scheme, whilst the TM facilities do not have. TM should be covered after their medicines have been nationalized. That is if they have common medicines, they can all prescribe*

*just like prescribers in the orthodox facilities do”*  
-(Staff 3)

### Range of services

The range of health services provided by a facility is one of the standards for NHIS accreditation. It is expected that the facility should provide services ranging from out-patient care to public health care. Respondents indicated that AHH provides range of services like that of orthodox facilities. Although not all services are provided by the hospital, the respondents suggested that the NHIS should cover the current services the hospital provides:

*“We have adequate facilities and the required staff to run the facility like orthodox facilities. Even though we do not have all departments for patient care, some orthodox health institutions do not also have specialist care but are accredited by the NHIS*

-(Staff 4)

However, one respondent had a contrary view. According to the respondent,

*“the fact that the facility does not provide maternity services including antenatal care, deliveries and postnatal care, disqualifies the facility from being accredited by the NHIS”*

-(Staff 5)

### Staffing

Availability of qualified staff in the right numbers and professional mix is very important in healthcare delivery and a requirement for NHIS accreditation. The respondents were of the view that AHH had the required number of qualified staffs for accreditation:

*“We have the qualified staff, such as nurses, medical herbalists, lab technicians, pharmacy and ultrasound technicians who are*

*knowledgeable in herbal medicine” (Staff 1). “The qualification required for TM practitioners to operate under the NHIS could either be a diploma or a degree in an accredited institution like KNUST, Suntreso Government Hospital and Ho Hospital. Most of the staff of AHH have training from these institutions”*

-(Staff 4)

### Environment and Infrastructural Systems

Respondents were unanimous that AHH has proper infrastructure and operates in a very conducive and hygienic environment, unlike other TM practitioners. According to the staff the hospital compares favourably with many orthodox facilities, hence the hospital should be accredited by the NHIS:

*“Some TM facilities have poor infrastructure and operate in unhygienic environments. However, a few of them like ours are in proper infrastructure. The few with proper infrastructure and hygienic environments could be accredited and services covered”*

-(Staff 6)

### Basic Equipment

Basic equipment is needed by every health facility for effective operation. In this regard, respondents were of the view that the kind of modern medical equipment AHH uses in their daily operations are equivalent to those in the orthodox health facilities. Special reference was made to the kind of medical equipment used by the physiotherapy and the laboratory units:

*“We have some equipment comparable to those in the orthodox facilities, especially our laboratory and physiotherapy departments operate like an orthodox facility. Some TM*



*facilities do not have these basic equipment. For AHH we have such equipment. Our lab, scan and physiotherapy machines work like those in orthodox facilities (Staff 7). A respondent however, suggested that: "some vital services like surgery should be performed in the herbal hospital to be able to meet the standards set by NHIS"*

-(Staff 8)

### **Organization and Management Systems**

Respondents indicated that AHH is well organized and has similar organizational structure as the orthodox facilities. It will therefore be fair that it is also given accreditation by NHIS:

*"Some TM facilities are well organized and have similar organizational structure as the orthodox facilities. For example, AHH has a director, an administrator and departmental heads, accounts, laboratory, physiotherapy, Out Patient Department and a pharmacy. The structure is just like that of the orthodox facilities"*

-(Staff 8)

### **Safety and Quality Management Systems**

Respondents indicated that AHH pays attention to organizational health and safety issues. Respondents revealed that the hospital has put in place safety mechanisms such as fire extinguishers and guidelines:

*"The safety of our clients as well as staffs is paramount that is why there are directional signs to guide clients and visitors. The floor is not slippery, fire extinguishers are provided and there is a complaints unit for clients who think they are not satisfied with the services provided"*

-(Staff 9)

### **Out-Patient Care**

The respondents believed that even though AHH does not provide comprehensive OPD services, the services provided are very important:

*"We have limited OPD services, as you can see, no antenatal and post-natal care services are rendered. However, the services we render are very important to the community"*

-(Staff 10)

### **In-Patient Care**

Respondents indicated that the hospital only admit general cases and not specialized cases:

*"Our in-patient services are limited to general cases that are seen here, no specialized cases are on admission and we have only eighteen beds. Children's ward, 4 beds, male ward, 9 beds, and female ward, 7 beds"*

-(Staff 11)

### **Maternity Services**

Most of the respondents shared similar views about maternal services at AHH. They believed AHH can provide maternal health services. However, the lack of midwives in the facility poses a major challenge for the provision of maternity services. Notwithstanding, some respondents contended that some CMs equally lack midwives, but have been accredited by the NHIA:

*"Most TM facilities do not provide maternity services just like some orthodox facilities. However, this should not be a hindrance because some health centers do not have midwives, but their services are accredited by the scheme"*

-(Staff 3)

### **The Level of Care of TM Facilities**

Majority of the respondents were of the view that the ability of the facility to create different departments or units in the provision of various health care to the public demonstrate that the facility could be accredited to operate as a hospital:

*"I will classify AHH as a hospital since we have different departments just like that of an Orthodox health facility. There is a laboratory, a scan, a physiotherapy, accounts, administration and some wards"*

-(Staff 3)

### **Views of TMPC member**

A staff of the Traditional Medicine Practice Council, which regulates TM practice in Ghana was also of the view that TM services should be covered by the NHIS and that the Council was putting in measures to that effect:

*"TM services is on the verge of being integrated into the health system and be covered by NHIS nationwide. In view of that, some hospitals have already started practicing both TM services and CM in providing health care to the public"*

-(A staff of Traditional Medicine Practice Council).

The staff also disclosed that some TM facilities have been given accreditation to commence business and manufacture herbal medicines. This is because such facilities adhere to organizational health and safety issues as it pertains in orthodox facilities. The respondent indicated that the MOH has provided a list of some TM facilities that could be covered by the NHIS. However, the TM Practice Council outlined some challenges it encounters as a regulatory body, such as accreditation difficulties with the Food and Drugs Authority of Ghana and the authorization

by the Ministry of Health for TM practitioners to use generic names for the herbal medicines.

### **Discussion**

The purpose of the study was to find out whether TM services should be covered by Ghana's NHIS. An objective assessment of the suitability of one of the renowned TM health facilities (AHH) was done using tools developed by the NHIS. The overall score of AHH was 83% which represents grade 'A'. This implies that objectively, the facility may be considered for accreditation.

However, the facility performed poorly in the area of in-patient care with a score of 'E' representing fail. This cannot however disqualify the facility. There are two possibilities, either the facility may be accredited to provide only out-patient care, or they may be required to upgrade the facility to provide in-patient care before accrediting it. The other dimensions for accreditation recorded high scores ranging from 'B' to 'A+' for general out-patient care, staffing, environment and infrastructure, organization and management and safety and quality management. However, basic equipment recorded a score of 66, representing C. Even though this is a pass, it suggests that attention needs to be paid to providing basic equipment for the facility. This finding, however, needs to be interpreted with caution, in view of the nature and scope of work of the TM facility. It should be noted that even though the laboratory and physiotherapy units have complex, state of the art equipment comparable to some orthodox health facilities, less complex and basic equipment such as ophthalmoscope, auroscope, tendon hammers, X-ray viewing equipment, height measure (stadiometer), tape measure,

suturing set, oxygen delivery equipment, functioning emergency care devices and supplies, among others, which are all part of the assessment of basic equipment, were inadequate. This inadequacy of basic equipment was more likely to be associated with their irrelevance to the nature and scope of their activities than affordability, since AHH could afford more expensive equipment. In the absence of an assessment tool developed by the NHIS for the assessment of TM facilities we had to adopt the tools developed for the CM facilities which could not fit neatly into the nature and scope of activities of the TM facilities. We recommend that in future, the NHIS should consider developing an assessment tool unique to the nature and scope of TM facilities.

With respect to the interview with the staff of AHH and TMPC, it was found that even though majority of the staff were in favour of covering TM by NHIS, a few expressed reservations. The major reasons advanced by those in favour of covering the traditional medicine with NHIS is that it will increase access to basic health services in Ghana, since majority of Ghanaians patronize TM. They also argue that AHH has enough staff and adequate infrastructure. They are also able to treat some common disease conditions, among others. This view is consistent with the literature. Several studies reported a positive influence of health insurance on TM use (Carruzzo et al., 2013; Klein et al., 2015; Motoo et al., 2019; Saldana, 2018).

On the other hand, few respondents had reservations on including TM services in the NHIS. Their main reason was lack of standardization in TM. With CM facilities, the NHIS has a medicine list with pre-determined prices which all accredited health facilities throughout the country

must comply. However, some TM facilities manufacture their own medicines, thus making it difficult to have standardized medicine list. However, the fact that people patronize TM in state-of-the-art TM facilities, and the fact that TM has been integrated into some CM facilities, even though the former is not covered by health insurance is consistent with some studies in high income countries which found little or no relationship between health insurance and TM use (Kaboli et al., 2001; Lewing & Sansgiry, 2018).

In the case of Ghana, the respondent from the TMPC disclosed that TM services are being integrated into the health system for ultimate inclusion into the NHIS. The respondent however, acknowledged the major challenges of the TMPC to include the need for all TM facilities to use generic drugs that are common to all; and the difficulty in getting approval for TM by the Food and Drugs Authority. The extent to which these pose a major challenge to the inclusion of TM in the NHIS and how they may be addressed requires further studies. Another reason given for their reservation was the lack of maternity services. However, it is possible to provide accreditation excluding maternity services.

This study however, has a few limitations. First, the tools used in assessing the TM facility was developed for CM facilities, since there were no specific tools developed for TM facilities. The findings should therefore be interpreted with caution. Notwithstanding this limitation, it was realized that except for medicines, treatment procedures in the TM facilities were very much like CM facilities. The NHIS may therefore consider developing tools tailored for TM facilities if they will be covered by the NHIS. Related to this limitation was the fact that the facility was

assessed using tools developed for health centres, even though AHH is known as a hospital. However, preliminary review of the accreditation tools showed that AHH did not meet the standards of CM facilities. Another important limitation of the study is that it was not about whether TM is relevant or a useful complement to CM or not. Rather, it was about the suitability of TM facilities, based on such factors as having the requisite staff and basic equipment. Future studies may therefore investigate the relevance of TM as a complementary medicine in Ghana.

### **Conclusion and implications**

Technically, AHH is qualified to be covered by NHIS, especially for outpatient care. This conclusion is based on the scores on the standards set. By implication, in view of the wide use of TM in Ghana and the concerns raised by some stakeholders, TM could be included in the NHIS were all other TM similar to AHH. Teething problems such as standardization of TMs are surmountable and can be addressed. Maternity services may be excluded in view of the lack of infrastructure and professional staff. This study provides evidence of the feasibility of including TM in NHIS. The findings will therefore provide useful insight to stakeholders and policy makers in health care in the continuing debate as to whether TM should be covered by health insurance or not. Further studies are required to examine the problem of standardization of TM and how it may be addressed.

### **Abbreviations**

CM: Conventional medicine

FDA: Food and Drugs Authority

LEKMA: Ledzokuku Krowor Municipal Assembly

MOH: Ministry of Health

NHIS: National Health Insurance Scheme

TM: Traditional medicine

TMPC: Traditional Medicine Practice Council

### **Declarations**

The authors declare that there is no competing interests.

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### **Availability of data and materials**

Data can be made available. Please contact the corresponding author.

### **Authors' contributions**

AAA, conceived the study. WCNV, MDB, WAA and MAA collected the data. AAA and EAA carried out data analysis. All authors drafted and finalised the paper. All authors read and approved the final manuscript.

### **Ethics approval and consent to participate**

We obtained permission from the Management of AHH and the Traditional Medicine Practice Council to undertake the study.

### **Consent for publication**

Not applicable.

### **Competing interests**

The authors declare that they have no competing interests.

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