### DOCUMENTING INDIGENOUS KNOWLEDGE ABOUT AFRICA'S COMPLEMENTARY AND ALTERNATIVE MEDICINE: A CAUSE FOR CONCERN?

### **Charles Akwe Masango**

Department of Research and Innovation University of Cape Town, Cape Town, South Africa Charles.masango@uct.ac.za

#### Victor W.A. Mbarika

Houston Alumnae Endowed Professor Southern University, Baton Rouge, Louisiana, United States Victor@mbarika.com

#### **ABSTRACT**

This article explores the global debates concerning documenting indigenous knowledge (IK) about Africa's complementary and alternative medicine (e-ACAM). The article further explores whether it is possible to document both the common and uncommon knowledge about e-ACAM given that the uncommon knowledge of e-ACAM is practised secretly as it is a source of livelihood for traditional medicine practices. The framework presented in the article stems from the notion that the ethnopharmacological information of medicinal plants is fast disappearing and in view of the rapid loss of such knowledge, its



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Print ISSN 0027-2639 © Unisa Press documentation as well as a better understanding of its botanico-historical roots has become an essential task. With further theoretical research it is revealed that the uncommon aspect of e-ACAM may be difficult or impossible to document as it encompasses secret knowledge. The article proposes measures within intellectual property rights (IPR) in the form of patents that could be implemented in order to document those types of e-ACAM that embrace secrecy and are a source of livelihood for traditional medicine practices.

**Keywords:** indigenous knowledge, complementary and alternative medicine, intellectual property rights, patents

### 1. INTRODUCTION

It can be argued that indigenous knowledge (IK) entails knowledge, rule, standards, skills, and mental sets that are possessed by local people in certain areas (Amenu 2007). IK is 'held and used by a people who identify themselves as indigenous of a place based on a combination of cultural distinctiveness and prior territorial occupancy relative to a more recently-arrived population with its own distinct and subsequently dominant culture' (Mugabe 1998). For example, IK includes African heritage, such as 'natural resources and cultural practices' and among the cultural practices is folklore that includes myths, beliefs, superstition, oral history, totem, and 'taboos and rituals related to species' (Makwaeba 2004, 116). Aburahma et al. (2010, 117) say that complementary and alternative medicines (CAMs) encompass a group of miscellaneous medical and health care systems, practices and products that are not currently considered components of conventional medicine. CAMs comprise skills, practices and knowledge based on the experiences, theories and beliefs indigenous to different cultures that are used to sustain health, as well as to diagnose, prevent, improve or treat mental and non-mental illnesses (WHO 2011). This article explores whether it is possible to document both the common and uncommon IK about Africa's complementary and alternative medicine (e-ACAM). The uncommon knowledge of e-ACAM is practised secretly as it is a source of livelihood for traditional medicine practices (Galabuzi et al. 2010, 11). It can be argued that although studies have been carried out on CAMs in countries such as China and the United States (US), such studies have failed to differentiate the common and uncommon aspects of the medicine and how the latter is practised secretly and serves as a source of livelihood for traditional medicine practices. For example, a report on traditional Chinese medicine by the National Center for Complementary and Alternative Medicine (2010) indicated that traditional Chinese medicine practitioners use herbs and other methods to treat a wide range of conditions. Furthermore, reporting on problems pertaining to complementary and alternative medicine in the US, Nahin and Straus (2001) report that many people in India, Japan and China seek care from practitioners of traditional medicine. It is reported that in these countries traditional medicine practitioners share several characteristics, such as the use of complex interventions, individualised diagnosis and treatment of patients. Following the failure by reports to address, for example, the common and uncommon knowledge of CAM, this article aims to address these issues, and to demonstrate that the uncommon aspect of e-ACAM may be difficult or impossible to document as it encompasses secret knowledge. The rationale for exploring the documentation of CAM stems from the notion that 'the ethnopharmacological information of medicinal plants is fast disappearing ... [and] in view of the rapid loss of such knowledge, its documentation as well as a better understanding of its botanico-historical roots has become an essential task' (Weldegerima 2009, 400). Okello et al. (2010, 1–2) say that the documentation of African traditional plants is an urgent matter following the rapid loss of natural habitats, traditional community life, cultural diversity and knowledge of medicinal plants.

In order to explore whether it is possible to document both the common and uncommon IK about e-ACAM, the article firstly examines the possible reasons for documenting the IK about e-ACAM. Secondly, the article examines the various – common and uncommon – types of IK about e-ACAM and reveals examples of such IK that can and cannot be documented. Thirdly, the article exposes reasons why the uncommon IK about e-ACAM is kept a secret by traditional healers. The challenges of upholding secrecy within uncommon IK about e-ACAM are revealed. Finally, the article proposes measures within intellectual property rights (IPR) in the form of patent that could be implemented for the secret within the uncommon types of IK about e-ACAM to be divulged and hence be documented.

### 2. RAISON D'ÊTRE FOR DOCUMENTING INDIGENOUS KNOWLEDGE ABOUT AFRICA'S COMPLEMENTARY AND ALTERNATIVE MEDICINE

It is germane to document IK about E-ACAM because it is widespread and universally used within diverse populations of dissimilar cultural and ethnic backgrounds (Aburahma et al. 2010, 117). Whitehead (2003) reports that one in five Britons use complementary therapies and the United Kingdom (UK) spends £350 million each year on natural remedies. In 1990, in the US, an estimated 427 million visits were made to alternative medical practitioners, exceeding the estimated 388 million visits to primary care physicians during the same year (Miller et al. 2000, 877). Furthermore, in the US, the use of herbal products is increasing (Liebert 2003) as hospitals are increasingly involved in offering CAM services (Clement et al. 2006, 109). For example, in 2008, the National Health Interview Survey (NHIS) concluded that 38 per cent of American adults use some form of CAM and jointly spent just about \$34 billion on CAM in 2007 (MacDuff, Grodin and Gardiner 2011, 585). Also, in Canada, Low (2004) reports that Canadians invested approximately \$1.8 billion in

alternative health care strategies and in 1996/97, a total of \$3.8 billion was spent on complementary and alternative therapies. In Australia, it is reported that 48.5 per cent of Australians used CAM, and in 2000, Australians spent A\$2.3 billion on alternative therapies (Cincotta et al. 2006). Aburahma et al. (2010, 118) say that in the North of Jordan, 57 per cent of the population use CAM and 33 per cent use it before seeking conventional medical advice. In the rural areas of India, most especially the people in far-flung areas, still rely to a large extent upon plants and household remedies for curing ailments (Phondani, Maikhuri and Kala 2010, 195). Holistically, the populations of underdeveloped countries continue to depend profoundly on the use of traditional medicines as their primary source of healthcare (Okigbo, Eme and Ogbogu 2008, 128). For example, in Africa (especially in Ghana), approximately 70 per cent of the population depend on alternative health practices for their primary health care needs (Adusi-Poku et al. 2010, 85). Furthermore, in Africa, there is an increasing reliance on the use of medicinal plants in the industrialised societies for the extraction and development of numerous drugs and chemotherapeutics (Okigbo et al. 2008, 128).

Also, it can be argued that CAM should be documented because it is cost effective. In the course of using CAM, many rural dwellers cut the cost of the extensive distances they would have to trek to the nearest health facility (Tjaronda 2008, 12). A number of people live too far from the closest conventional clinic (Lewis 2009). According to Ventegodt et al. (2009, 243), CAM was found to be 100 (10-500) times as cost-effective as pharmaceutical drugs for most clinical conditions. A large number of clinical conditions can be cured with CAM and not with conventional drugs that at times only reduce the symptoms. Hence, consumers of CAM products disburse for most CAM services out of their pockets. It is reported that in the US, consumers spent between \$36 and \$47 billion annually for CAM therapies in 1997, more than the out-of-pocket spending for hospitalisations that year (Clement et al. 2006, 109). Machione and Stobbe (2009) are of the view that alternative medicine makes up more than 11 per cent of out-of-pocket spending on health care in the US. Sorkness (2009, 609) reports that in 2007, 38 per cent of adults and 12 per cent of children in the US used some type of CAM. This represented visits to CAM practitioners and out-of-pocket expenditures that in 1990 were estimated to exceed those for conventional therapies. Following Clement et al. (2006, 109), CAM use is a way for consumers to avoid paying the rising costs of conventional medical care. This is because, for example, CAM therapies usually entail low technology and promote broad-spectrum well-being and disease prevention (Clement et al. 2006, 110). According to Machione and Stobbe (2009), almost half of those who use alternative medicine say they cannot pay for conventional care. Hence, Ventegodt et al. (2009, 243) are of the view that the swing from drugs to CAMs is likely to improve health radically in the society and reduce the cost of healthcare. In South Africa, for example, 'there's a widespread mythology that natural is better, [and] that herbal remedies are completely safe, and ... are cheap' (Jobson 2001, 24).

E-ACAM is generally perceived to be less invasive and safer than conventional medicine (Aburahma et al. 2010, 117), which is another reason why it should be documented. Corroborating this view, Whitehead (2003) says complementary medicines are alleged to be more natural than conventional medicines and do not have any side-effects. Hence, the possible reason why numerous herbal medicines do have unique pharmacologic actions that can advantage patients (Miller et al. 2000, 878) and why people invest time and money in CAM (Sorkness 2009, 609). According to Phondani, Maikhuri and Kala (2010, 195), cost, inaccessibility and other nuisances. like the side-effects of the modern health care system, have encouraged local people to depend on traditional rural knowledge. Ventegodt et al. (2009, 243) say that CAM is more efficient than conventional drugs and has no side effects. On the other hand, treatment with conventional drugs almost always has many severe adverse effects. The majority of people seeking herbal alternatives assert that conventional medicine has chemical substances that may generate more side-effects than herbal medicine (Okulo 2009). Furthermore, western drugs/medicines are prepared with an unusually high dosage of chemicals which can cause serious side effects (Osei 2008, 15). For example, in the US, in 1990 it was discovered that of 198 approved conventional drugs released for sale to the public from 1976-1985, 102 had serious side-effects and had to be either taken off the market or labelled as dangerous (Lewis 2009). Pendota et al. (2010, 40) are of the view that the use of non-conventional medicines for healing purposes is becoming progressively more popular as it is believed that botanicals are beneficial and free of side-effects. Supporting this view, Clement et al. (2006, 109) are of the opinion that among the reasons consumers turn to CAM are to avoid the side effects of some conventional medical drugs. Also, in Southern Africa, it is reported that the Hoodia plant used by the San Bushmen of the Kalahari Desert for weight loss has limited side-effects as compared to conventional diet pills. The Bushmen in the semi-deserts of South Africa, Botswana, Namibia and Angola have 'relied on hoodia for thousands of years to ward off hunger and thirst during long hunting trips. They ... cut off the stem and eat the bitter tasting plant' (Wong 2013).

Another rationale for documenting e-ACAM is that aged individuals in remote areas, who have more knowledge of and experience about CAM, only transmit such knowledge from one generation to another by word of mouth (Phondani, Maikhuri and Kala 2010, 195; Weldegerima 2009, 401). The knowledge and experience of old people in remote areas on CAM is fortified because these people are knowledgeable of the culture, the local languages and local traditions (Lewis 2009, 1). The oral transmission of CAM by old people may be detrimental to its existence as the passing down of customs from one generation to generation is in imminent danger of disappearance following that this knowledge is without written records and the

old age healers are dying (Okello et al. 2010: 1–9; Weldegerima 2009, 400). Hence, the passing away of these old people with their knowledge may be dangerous if the knowledge is not documented. These people are the keepers of CAM of generations as the plants they utilise in their practice are the storeroom of potential medicines (Weldegerima 2009, 400). In Africa, from past generations the tradition is predominantly oral where information is handed down by word of mouth as writing was unknown.

Another reason why CAMs should be documented is that most CAMs are unique and are often known only to a few persons and communities, and some CAM products are on the brink of extinction due to over exploitation (Phondani, Maikhuri and Kala 2010, 195). CAM is unique because it has a philosophical difference from conventional medicine (Clement et al. 2006, 109). Complementary and alternative medicinal plants are recognised in the international markets, for example *Ancistrocladus abbreivatus*, a Cameroon plant with anti-HIV potential (Okigbo et al. 2008, 127). Weldegerima (2009, 400) is of the view that the loss of CAM is due to rapid land degradation that has accelerated the destruction of forests. Following Okello et al. (2010, 1), overgrazing and exploitation of plant resources have already led to a decline of medicinal plants available. Okigbo et al. (2008, 128) report that due to deforestation, several medicinal plants and other generic materials were destroyed before they could be documented.

It can be argued that CAM should be documented because in rural settings it is the major source of health care for about 80 per cent of the populace, because of its cultural acceptability, affordability and accessibility (Kasilo and Trapsida 2010, 25). Corroborating this view, Odhiambo et al. (2010, 53) say that approximately 80 per cent of rural masses in Africa use traditional medicine, mostly plant preparations, for their primary healthcare. Okigbo et al. (2008, 127) say that the function and contributions of medicinal plants to healthcare, local economies, cultural integrity and the well-being of people in the rural area, have been increasingly recognised over decades. It appears that rural people choose CAMs because conventional medicines are incompatible with their personal beliefs and values (Miller et al. 2000, 877); hence, they rely on traditional healers as they are the health labour resource (Lewis 2009, 1). Furthermore, the majority of people in African rural settings rely on herbal medicines for treating a variety of diseases due to the high cost of conventional medicines and the inaccessibility of modern health care facilities in most areas (Galabuzu et al. 2010, 12).

The desire to promote CAM because it cures chronic health problems is another reason for the documentation of the medicine. Clement et al. (2006, 109) are of the view that conventional medicine has been unable to solve patients' chronic health problems. In Canada, for example, some people sought out CAM in order to solve problems for which they found little or no redress in other quarters (Low 2004). Jacobs, Levatin and Breuner (2003, 241) say that a significant number of people

rely mainly on CAM therapies to meet most of their health care needs because most conventional drugs do not work on most people who take them. Following Osei (2008), of the vast majority of conventional drugs (more than 90%) taken by people for therapy, only 30-50 per cent are healed. The National Confidential Enquiry into Patient Outcome and Death (NCEPOD) discovered that more than four in ten patients who received chemotherapy near the end of their life suffered fatal effects from the drugs (Rose 2009, 32). It can be argued that following the effectiveness of CAM as a source to cure chronic health problems, in the US chain drug stores and grocery stores have advertised CAM products aggressively to clients in a manner similar to conventional drug products (Miller et al. 2000, 878). Furthermore, governments of the US, Japan and Switzerland have together released \$400,000 to support research work on the conservation and utilisation of medicinal plants in three major ecological zones in Ghana (Rina 2009). Following the interest placed on CAM by different governments, it can be said that biomedicine may no longer be a threat to repress CAM (Ventegodt et al. 2009, 244). Hence, CAM can be promoted through documentation as it will make more people aware of it and enable them to exercise more control over their care with it as a cohort other than what conventional medicine allows (Clement et al. 2006, 109).

The demand for and recognition of CAM by the majority of the populace of Africa and beyond (Gilbert 2004, 547; Okigbo et al. 2008, 128), is another reason why CAM should be documented. In Africa there is an impressive list of recognised medicinal plants that are based on the local knowledge of the people (Lewis 2009, 22). Following Low (2004), health associations have centralised access to CAM and there are hundreds of web sites committed to discussion of CAM on the Internet. The popularity of CAM has been increased by the public's request for its services and accessibility. One third of all Americans, for example, rely on CAM. In the UK, it is estimated that one fifth to one third of the populace have been using CAM which is a similar proportion to that of the US and Europe (Gilbert 2004, 547). According to Clement et al. (2006, 110), several physicians have either consigned their patients to CAM providers, provided CAM services themselves, or shown an interest in providing such services. Clement et al. (2006, 110) report that in a 1997 survey in the US over half of the medical schools reported offering CAM courses or CAM as a topic in required courses. Furthermore, insurers have begun to offer some coverage of CAM services in response to consumer demand and state mandates for insurance coverage. In 1998, eight states insisted that insurers should cover at least some CAM services and by 2003, the number had increased to 11 states (Clement et al. 2006, 110). Also, data from the American Hospital Association (AHA) shows that 8.5 per cent and 19.2 per cent of non-federal acute care hospitals in 1998 and 2003 reported offering at least one CAM service (Clement et al. 2006, 110). According to Low (2004), one Canadian community college not only offered several workshops

or courses in CAM but also provided a certificate programme in aromatherapy, and was in the process of developing a diploma programme in CAM.

Another rationale for documenting CAM is to generate income for local communities. Weldegerima (2009, 401) says,

in order to conserve traditional medicine knowledge, it is necessary that inventories of plants with therapeutic value are carried out, and the knowledge related to their use documented in systemic studies. These studies can have other values too for society besides conserving traditional knowledge, for they can help to identify plants with market potential that can generate incomes for local communities. Generation of incomes for local communities is seen as important motivation for the conservation of local species.

Thus, in cases where the market potential of plants is not identified, local communities stand to be robbed of their knowledge of traditional medicine and income that can be derived therefrom because of ignorance about what value their medicines carry (Tjaronda 2008, 12). Following Okello et al. (2010, 9), CAM plants used in local health traditions are generally becoming extinct due to over utilisation, population explosion and other anthropogenic reasons. In order to reverse this trend, domestication of wild medicinal plants is of utmost importance. This would augment the income of rural people and in turn help the conservation of species.

# 3. INDIGENOUS KNOWLEDGE BRANDS ABOUT AFRICA'S COMPLEMENTARY AND ALTERNATIVE MEDICINE – WHICH TYPE FOR POSSIBLE DOCUMENTATION?

The various types of IK about e-ACAM cover common and uncommon knowledge of plants, leaves and roots that can be used to cure certain illnesses. The common knowledge of plants, leaves and roots is that which is well known to the culture and tradition of a people (Okello et al. 2010, 9). It can be said that it is possible to document the common plants, leaves and roots because they are commonly known by nearly everyone in the community and it is not essential for any individual to make a health claim for the product (Lewis 2009). For example, traditional herbs, such as *momordica charantia*, can be classified as common knowledge herbs as they are known and used by many people to treat various ailments. According to Uche-Nwachi and McEwen (2010, 25), the momordica charantia herbs that are located in several parts of the Amazon, East Africa, Asia and the Caribbean have been used as a folklore medicine to treat diverse ailments including diabetes. Furthermore, it is common knowledge with the Sabaots in Kopsiro Division Mt Elgon District Kenya that malaria, ulcers, and urinary tract illnesses are treated by drinking boiled and pounded roots or leaves of the rodipchepkukwa or aloe elgonica bullock plant species (Okello et al. 2010, 4). Furthermore, according to Odhiambo et al. (2010,

53), it is common knowledge among the local communities in the Kenyan Lake Victoria Basin that the *gladiolus dalenii* plant is used to treat various infections such as meningitis, malaria, diarrhoea, ulcers and HIV related fungal infections. According to Odhiambo et al. (2010, 53), it is common knowledge that ulcers are treated by drinking hot water extracts of freshly chopped or dried bulb. Meningitis is treated by sniffing dried powdered bulb and a pinch of dried powdered bulb in water is drunk to treat malaria and diarrhoea. Within the Chinese community it is common knowledge that the herb liquorice, (gancao in Chinese) is used as an expectorant to arrest coughing, reduce fever, and comfort the stomach (Shang et al. 2010, 17). In West Africa, it is common knowledge that the Cola nitida, a species of kola nut, is eaten by many students, pregnant women, drivers and other menial workers as a stimulant, masticator, astringent and antioxidant (Ojo et al. 2010, 47). Ojo et al. (2010, 48) further report that *Cola nitida* can be used: to neutralise hunger and thirst; to control vomiting in pregnant women; and as a principal stimulant to keep awake and withstand fatigue by students, drivers, and other menial workers. Furthermore, it is common knowledge in West Africa, that *Cola nitida* is not to be eaten by people who suffer from stomach ulcers due to its caffeine and its tannin content (Ojo et al. 2010, 48).

On the other hand, there is the uncommon knowledge of plants, leaves and roots that are not well known to culture and tradition because they are used to treat certain illnesses with some measure of secrecy (Uche-Nwachi and McEwen 2010, 24), as they are the source of livelihood for traditional medicine practices (Galabuzi et al. 2010. 11). These uncommon plants, leaves and roots may be difficult to document because they are not commonly known by everyone in the community. The few individuals - traditional healers - who know these plants, leaves and roots use them as a source of generating income to themselves and thus construe a health claim for the product. Hence, it may be impossible for instance, to document the uncommon knowledge of plants, leaves and roots that are used to cure spiritual illnesses. Homsy, King and Tenywa (2003, 25) say that African traditional medical knowledge is associated with the spiritual, herbal and technical knowledge that have been developed and used to heal and alleviate all kinds of physical, emotional and spiritual ailments in Africa. Those with this knowledge may not be willing to divulge the ingredients of their medicines for possible documentation as they derive their livelihood from the practice thereof (Galabuzi et al. 2010, 11). Supporting this view, Mbogo (2009) says that herbalists have incessantly resisted attempts by conventional doctors and even some government agencies to disclose the active ingredients of their medicines, for fear that their knowledge will be stolen and they will be prevented from generating income from the use of the plants, leaves and roots. An example is the plants, leaves and roots that are used by traditional healers to treat spiritual illnesses. Galabuzi et al. (2010, 1) are of the view that there are special plants, leaves and roots that are used by traditional healers for spiritual psychotherapy. In several developing countries, a

mental illness is not considered a hospital case, but rather one for traditional healers as mental illnesses that make up 45 per cent are caused by spirits that can only be handled by traditionalists (Kavuma 2009). It is reported that mainstream medicine cannot improve brain disorders in sub-Saharan Africa, and it has been demonstrated that traditional healers are very helpful in treating people with epilepsy (Kavuma 2009). Following Lewis (2009, 22), traditional healers with their herbal remedies that are made from plants contribute to the health of millions of people. It can, therefore, be argued that the plants, leaves and roots used by traditional healers for the treatment of mental illnesses, brain disorders and epilepsy, for example, constitute uncommon knowledge because traditional healers use the plants, leaves and roots with some degree of secrecy. In Cameroon, for example, it is reported that if a sick person tells a traditional healer that he was beaten all night in his bed, the healer will understand him and help him chase away the spirit (Hillenbrand 2006). The plants, leaves and roots used to chase away the spirit are uncommon to outsiders but only known to the healer or similar healers as they have not been documented nor written down. The information is held in the healer's head, passed down from one generation to the next by word of mouth (Mundy and Compton 1991/1993).

## 4. RATIONALE FOR UPHOLDING SECRECY WITHIN UNCOMMON INDIGENOUS KNOWLEDGE ABOUT AFRICA'S COMPLEMENTARY AND ALTERNATIVE MEDICINE

The major rationale for upholding secrecy within uncommon IK about e-ACAM and that may inhibit the full documentation of the medicine is that it is the norm to do so following that it serves those who have and use the knowledge – traditional healers – as a source of income. In a situation that the traditional healers release the information, they may find themselves deprived of the derived income. Hence, in order to undo the uncommon knowledge from herbalist, knowledge ownership must be compensated financially to the herbalist or community where that traditional knowledge emanated (Mbogo 2009). The herbalists are significant as they are recognised by members of the community as competent to practise traditional medicine (Diallo et al. 2003, 35). Also the community is imperative because there is traditional medicine knowledge that is owned by a community or communities (Wambebe 2003, 19). The herbalists or community should be sensitised to only reveal their uncommon traditional medicinal knowledge by licensing them under legal agreements (Homsy, King and Tenywa 2003, 26). The agreements should specify that the proceeds acquired from their products would be shared within the herbalist community or communities that revealed the uncommon knowledge product (Gamaniel 2003, 28).

### 5. CHALLENGES OF UPHOLDING SECRECY WITHIN UNCOMMON INDIGENOUS KNOWLEDGE ABOUT AFRICA'S COMPLEMENTARY AND ALTERNATIVE MEDICINE

Among the possible challenges of upholding secrecy about e-ACAM stem from the fact that knowledge that could be termed as non-secret and given freely in one culture may not be the case with another culture (Brush 1993, 653). For example, a medicinal plant that encompasses secret knowledge may be free goods in a peasantry society but regarded in another culture as material that should never be collected or made openly available to any person (Anderson 2005, 84; Flor 2013, 77) because of the secrecy that the material possesses.

Furthermore, another challenge of upholding the secret aspect of CAM is how it may be appreciated. Richards (2002:62) is of the view that 'it is hard for observers to appreciate what is often obvious to performers. This [may] lead ... bystanders into ... making of intellectual mysteries out of situations and activities whose practical import is obvious to all but the observer'. While the secret aspect of CAM may be obvious to traditional healers as it is what they practice, it may be hard for observers to appreciate CAM as they may not be aware of the secrecy embedded in the medicine. Corroborating this view, Barnes et al. (2004, 55) say, 'CAM consists of many heterogeneous systems of medicine as well as numerous stand-alone therapies'. Among the heterogeneous systems are skills, practices and knowledge based on the experiences, theories, and beliefs indigenous to different cultures (WHO 2011).

The problematic issue of obtaining a complete secret underpinning a particular CAM product can be said to be another possible challenge of upholding secrecy about CAM. This may arise where no one clan knows all (Wassmann 2001, 57) the secrets of a particular CAM product. For example, where part of a secret CAM product resides in an individual clan and another segment of the secret resides with another clan, it can be said that the complete secret of that particular CAM product does not reside with one clan as both clans' knowledge of that particular CAM product is partial (Wassmann 2001, 57). For instance, in order to get the complete secret of that particular plant, the two clans must both release their part of the secret. In instances where one clan releases a part of the secret and the other does not, the full secret of the plant is not revealed.

### POSSIBLE IPR MEASURE FOR DOCUMENTING UNCOMMON e-ACAM

Notwithstanding that there are challenges underpinning secrecy within uncommon IK about e-ACAM, the secret uncommon IK about e-ACAM could possibly be

documented by governments enacting proper IPR in the form of patent laws in consultation with the people or community that hold the product. However, for the patent to be accorded to either the herbalists or the community or communities. the traditional medicines have to be scientifically evaluated. The evaluation can be conceived where a conventional health practitioner follows up patients receiving particular treatments from a traditional health practitioner using certain traditional herbs over a certain period of time. During the period of evaluation, the formulas used by the traditional health practitioners would be photochemically analysed. The results of the analyses would remain the property of the traditional health practitioners who would then use them to compose a dossier in order to obtain a patent (Diallo et al. 2003, 35). The funds for patenting the product could be provided by the government or acquired through the United Nations Development Programme (UNDP) (Gamaniel 2003, 27). Furthermore, the herbalists or community should be educated about the prospective importance of their traditional medicine and how they would benefit from any marketing of their medicine through patent laws (Tjaronda 2008, 12). Supporting this view, Kasilo and Trapsida (2010, 27) say that the skills and awareness of traditional health practitioners need to be upgraded through appropriate training and continuing education. The rationale for patent protection is to enable the patent holder – patentee – to prevent all others from making, selling or using the subject matter of a valid patent (Besen and Raskind 1991).

It can be said that through patents the traditional herbalists or their communities would be able to make profits just as pharmaceutical industries make huge profits on the patenting of new drugs (Laws of the Pharmaceutical Industry 2009, 6). Where those that hold the uncommon knowledge are protected through patent laws and educated about the benefits thereof, it is most likely that the herbalist or community would divulge the active ingredients of their medicines and possibly indicate how the ingredients are mixed to make their medicine (Mbogo 2009). There is a scarcity of trustworthy information on herbal preparations which are being used successfully for the management of prevailing diseases in Africa (Wambebe 2003, 19). The lack of adequate mechanisms in the form of patent laws for the protection of traditional medicinal knowledge has the potential to negate uncommon herbal plants, leaves and roots used by herbalists and hence negate their documentation (Kasilo 2003, 16).

### 7. CONCLUSION

Notwithstanding that CAM products can be documented, it is worth acknowledging that only common CAMs can be documented. It is difficult if not impossible to document uncommon CAM products as they are used as a means of livelihood. However, in order to possibly document the uncommon CAM products, the products have to be compensated financially through patents. Hence, it can be said that until the financial aspect ceases to be the cardinal point for the protection of uncommon CAM

products, it would be impossible to document all the elements of the uncommon IK about e-ACAM.

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#### **ABOUT THE AUTHORS**

CHARLES A. MASANGO is a Research Development Co-ordinator at the Emerging Researchers' Programme, Department of Research and Innovation, University of Cape Town (UCT), South Africa. He has a PhD specialising in contemporary copyright fair dealing management issues. Previously, he was a lecturer in the Department of Information and Library Studies, Centre for Information Literacy, UCT. He also taught in the Department of Library and Information Science, University of Fort Hare, prior to his appointment at UCT.

VICTOR W. MBARIKA (PhD) is Full Professor and Houston Alumnae Endowed Professor at Southern University and A&M College, in the United States and is President, Board of Trustees of the ICT University, which focuses on information and communications technology (ICT) training of over 5 500 stellar scholars based in developing nations worldwide. He is founding Executive Director of the International Center for Information Technology and Development (ICITD). He is also Visiting Professor of ICT and health information technology (HIT) at the University of Buea, Cameroon, Covenant University, Nigeria, Makerere University Business School in Uganda and UCT.