

Challenges Facing Traditional Medicine: Towards New Approaches for Protecting and Promoting Intellectual Property Rights (IPR) of Practitioners in South Africa

Philip F. Iya¹

Abstract

Western health care systems are foreign to the African indigenous health care systems. This applies to intellectual property issues related to traditional knowledge. Therefore, the need has arisen to undertake a study on the challenges and prospects of the co-existence, or otherwise, of the two regimes and their respective health care systems of the contemporary era in South Africa and Africa so as to plot the way forward for the future. This research, within the broad conference theme of “research and development in indigenous knowledge-based health care systems”, therefore, aims specifically at investigating and addressing the challenges and prospects facing the current holders and practitioners of traditional medicine in South Africa. In the process, issues of intellectual property rights will be identified; its most suitable regime for practitioners of contemporary traditional medicine will be established; the new Bill on the protection, promotion and management of indigenous knowledge systems, in so far as it impacts on traditional health care systems will be analysed; the involvement of the issues of informal intellectual property regime (consisting of customary/traditional rules, rights and obligations) which are not written down but have achieved legitimacy and enforceability through the consensus of communities, monitored and enforced by traditional leaders of the respective communities, will be recommended for more research. This is a research and development project in indigenous knowledge-based health care systems which is still in progress. To achieve the above, review of available documents, which has already started in preparation for empirical research, will constitute the initial method of investigation. This will be followed by an Afrocentric approach to the methodologies required to interrogate, in greater details, the indigenous knowledge-based health care systems among communities in South Africa so as to establish the concerned aspects of intellectual property issues within that system.

Keywords: Indigenous Knowledge, Culture, Healthcare Systems, African communities, Indigenous Knowledge Holders and Practitioners

Introduction

Western health care systems are foreign to the African indigenous health care systems. This applies to intellectual property issues related to traditional knowledge. In recognizing the complexity of Indigenous Knowledge (IK), the National Research Foundation (NRF) has recently affirmed that indigenous knowledge is, indeed, a complex set of knowledge, skills, values, practices and technologies existing and developed around specific conditions of

¹ University of KwaZulu-Natal

populations and communities indigenous to a particular geographical area (NRF, 2006). As such, it should be noted that, firstly, IK is sophisticated due to the fact that it encompasses arrays of information, understandings and interpretations that guide the natural world in its innumerable interactions with the natural milieu (Mascaarenhas, 2004). Secondly, it is complex because its content and context embody different systems - hence the words “indigenous knowledge systems”(IKS) of knowledge, skills, beliefs and practices used in such areas like agriculture, architecture engineering, mathematics, natural resource management, conflict resolution, governance, medicinal and other social activities – thus explaining its multi-disciplinary nature (Onwu & Mosimege, 2004).

There is this common understanding that instead of being practiced systematically i.e. using scientific Western Eurocentric approaches, traditional medicine (TM) is practiced in accordance with the responses of individual or collective knowledge holders and practitioners to the cultural environment with which they interact. The implication of this is that in the practice of traditional medicine, existing formal intellectual property (IP) regimes of Western Eurocentric origin and nature, and intended to protect the knowledge holders, cannot fully respond to the needs of the essentially cultural nature i.e. the informal IP of the knowledge. The above kind of thinking has indeed tasked the minds of not only the traditional knowledge holders/practitioners themselves but, even more so, the minds of Western, modern and scientific practitioners of the Western medicine. One of the reasons for this kind of problematic thinking is because the Western Eurocentric (or formal) IP regime has been designed to protect individualized trade-related activities, it does not take into account the activities of traditional knowledge which are essentially of cultural nature and involves individual and community challenges caused by their social environment. Given the above broad preliminary background discussion over IK, IKS and the health care systems, especially the practice of TM, this paper describes some aspects of IK including challenges facing current holders and practitioners of TM in relation to their intellectual property rights (IPR). In doing so, the following sub-themes will guide the discussion:

1. Understanding of the link between indigenous knowledge (IK) and traditional medicine (TM);
2. Acknowledging the importance of the practice of traditional medicine: Key related issues;

3. Successes and challenges of the practice of traditional medicine in South Africa;
4. Towards new approaches for addressing the challenges of TM practitioners.

In Africa generally, and in South Africa in particular, the practice of traditional medicine face several challenges including its co-existence alongside the practice of Western Eurocentric practice; the protection of its intellectual property rights and some others (Iya, 2013). In the following section, the linkages between IK, IKS and TM are explored.

Understanding the Link between Indigenous Knowledge (IK), Indigenous Knowledge Systems (IKS) and Traditional Medicine (TM)

There are common disagreements over the appropriateness of the terms “indigenous knowledge” and “indigenous knowledge systems” as used in this, and many others, discussions. As one looks for a better and deeper understanding, one finds that there are those who prefer the concept and use of such terms like “traditional knowledge” or “local knowledge” and their respective “systems”. However, the debate about suitable terminologies in this kind of discussions is a discourse fit for another paper, save to say that as used in recent important documents like the Indigenous Knowledge Systems Policy of South African 2004; in the recent Bill for the Protection, Promotion, Development and Management of Indigenous Knowledge Systems, 2014: in the Draft Regulatory Policy Framework for the Accreditation and Certification of Indigenous Knowledge Holders and Practitioners of 2014 and many other official documents and discussions, the terms “Indigenous Knowledge” (IK) and “Indigenous Knowledge Systems” (IKS) are the most common, official and generally used terms. That fact apart, one also notes that even in the Constitution of South Africa, there is no clarity in the use of the term “indigenous” In one instance there is reference to the term “indigenous languages” (South African Constitution: 1996) and in another instance, there is reference to “indigenous law” “customary law” and “traditional (and not indigenous) leaders” -can the words “indigenous” and “traditional” be used interchangeably? Does the inconsistency suggest a distinct difference between “indigenous” and “traditional”? According to the South African IKS policy, however, one gets the impression that these terms are generally used synonymously “to differentiate the knowledge developed by and within distinctive indigenous communities from the international knowledge system generated through universities, government research centre and private

industry, sometimes incorrectly called Western knowledge system” (South African Policy on Indigenous Knowledge Systems, 2004).

Given the above uncertainties about terminologies, one may conclude that there may, as well, be no universally accepted terms or definitions because there are as many terms and definitions as there are different writers on the topic explaining the subjectivity, rather than the objectivity involved. What, therefore, is more important, in this discussion, is the need to establish the main characteristics of relevant terms for deeper understanding of those concepts and the nature of their interface. The next paragraphs will accordingly attempt to first establish the main characteristics of IK, IKS and TM before establishing the interface between all of them. With particular reference to and for purposes of the above, it should be noted that IK has the following important characteristics, namely: it is that knowledge which relates to those long standing traditions and practices belonging to specific local indigenous communities who produce, develop and maintain the knowledge locally and traditionally from one generation to another; to the skills, innovations, experiences and insights of peoples in their respective communities; to the strategies for the livelihood when making decisions over livelihood activities whether for agriculture, health, natural resource management, conflict resolution and other community livelihood activities for their sustainable development. Some of these characteristics have been acknowledge and emphasized by various authors who have specialized in the subject (Odora-Hoppers, 2002; Mascarenhas, 2004; Sennayake, 2006). One writer has highlighted the following as the special features of IK which distinguishes it broadly from other knowledge; IK is Local in that it is rooted in a particular community and situated within broader cultural traditions; it is local also because it is a set of experiences generated by people living in these communities; Tacit knowledge and, therefore, not easily codifiable; transmitted orally or through imitation and demonstration; Experiential rather than theoretical knowledge; Learnt through repetition; and Constantly changing (World Bank, 1998).

Indigenous knowledge systems (IKS), on the other hand, is characterized by bodies of knowledge, skills, beliefs and technologies/experiences used to give expression to the processing of knowledge which are also produced developed and maintained locally and traditionally by indigenous communities; this set/bodies of knowledge is also transmitted orally from one generation to another. According to the South African IKS policy, such system of knowledge

“manifests itself in areas ranging from cultural and religious ceremonies to agricultural practices and health interventions” (South African Policy of Indigenous Knowledge Systems). Western knowledge system or modern scientific knowledge, in contrast, is associated with institutions of knowledge production such as universities, research centres and foundations; “It is a type of knowledge system produced by means of systematic observation and is characterized as analytical and objective” (Materechera and Koitsiwe, 2013: 223).

Traditional healing based on the use of traditional medicine, on another hand, is one of the special professional knowledge systems within the indigenous knowledge regime which has influenced the lives of people the world over. It can be traced back to early stages of human development because for as long as human activity and interaction can be traced that far back, so can the existence of traditional healing. Historically, therefore, there was the pre-modern traditional healing with a particular characteristic of “healing by trial and error”. Today this kind of healing is referred to as “the unconventional (unscientific) healing”. This was followed by the next stage in the practice of the traditional pre-modern healing, namely: the healing based on “divination, bone throwing and religious/spiritual traditional practices. The acknowledgment of “unconventional/unscientific healing” was still attributed to this type of practice. Then emerged the traditional modern healing practice based on genetic resources, i.e. they are not the product of human invention or creativity like the two previous types of healing practice by traditional healers, but are based on genetic information from use of genetic resources or biodiversity consisting of genetic variations contained within the earth’s biological resources. Biological diversity (often shortened as “biodiversity) is recognized as a global asset because it refers to the number and variety of living organisms on earth consisting of plants, animals, fish, bacteria, insects’ micro-organisms and together with the genes they contain and the life-support systems and natural resources upon which the organisms depend (Ramsden, 2003: 395). This is where traditional knowledge of these genetic resources and biodiversity share important roles relating to the use of biodiversity for healing purposes.as regulated by the Convention on Biological Diversity adopted, signed on 5th June 1992 and came into force on 29th Dec. 1993(Ramsden, 2003:395) which has three main objectives: (a) to conserve biodiversity; to ensure sustainable use of the components of biological diversity; and (c) to ensure a fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

The final stage in the development of healing is the biomedical practice of the modern medical profession characterised by the conventional, modern, scientific and Western or Eurocentric (by origin).practice which usually looks down upon any form of traditional healing not only as background but sinister and primitive.

The above discussion explains some of the main characteristics of the important terms like IK, IKS, and TM for purposes of a clearer and deeper understanding of the complexity of concepts, practices and objectives of those terms for the benefit of the reader. With reference to the interface between these terms, what is important is to understand the fact that TM and human health promotion generally are all linked to indigenous knowledge as they form a constituent part of that indigenous knowledge systems. According to the common understanding in Africa, the practice of indigenous medicine is based on three principal factors, namely: the spiritual factors; the physical factors and psychological factors, That understanding links well with the concept of health as understood today, when, "health" is considered to be a state of total wellbeing of an individual or a community, that encompasses not only and merely the absence of disease but a complete physical, mental and psychological as well as social well-being. In the case of indigenous health, the concept of "well-being" is a collective and individual continuum with emphasis on the well-being of the individual and the community in their respective environments.

In the case of South Africa, it is common knowledge that there is a vast body of indigenous health experience and practice which could be drawn upon to advance the well-being and health of humanity; that he Department of Health, the Medical Research Council and the Council for Scientific and Industrial Research have been working together to promote research in traditional healing to meet that objective; that South Africa, through the Department's health policy documents, accepts the fact that spiritual dynamics play a role in the break down and promotion of health and well-being; that it is for example the task of life orientation to promote this holistic views of health and well-being; and that ritual and rites are equally significant to many communities in South Africa(Convention on Biological Diversity Signed on 5th June 1992 and on 29th Dec. 1993). The following section elaborates on the importance of TM in Africa.

Acknowledging the Importance of the Practice of TM within the Health Care Systems: Key Facts Relating To Its Practice in Africa

According to the facts provided by the World Bank (African Region) the importance of IK in Africa hinges on two critical processes, namely: those processes for sustainable development and those for poverty eradication as explained below (World Bank, 1998). The processes for sustainable development refer to the fact that IK provides for social and economic development i.e. it builds on local knowledge as the first step for mobilizing capital (knowledge economy) to help developing countries to adapt knowledge to local conditions – hence the importance of knowledge of local institutions and practices in sustainable development. The processes for poverty eradication refer to the fact that IK is an important part of the lives of the poor and as such, it is the key element of the "social capital" of the poor i.e. it is their main asset to invest in the struggle for survival, to produce food, to provide for shelter or to achieve control of their own lives.

The knowledge economy as another important aspect of IK for development can be emphasised by arguing that a country's ability to build on and mobilize the knowledge systems of available among its people for development is as essential as the availability of physical and financial resources. Furthermore, learning from what local communities already know creates an understanding of local conditions and provides an important context for activities designed to assist those communities for their sustainable development. The following are additional recognised facts and figures documented that have been discussed in a conference in Swaziland some years ago (Mumba, 2012). Firstly, the biodiversity in Africa, taken in its totality, is a major resource that has not been exploited fully for economic and social benefits of Africans considering the fact that the unexploited aspects of the resource constitute approximately 50 000 plant species which constitute about 20% of all plants known to mankind, Secondly, Africans have been in contact with this major resource and have used this knowledge system for a long time not only for food, medicine, shelter, fuel, etc. but they have transferred the knowledge from generation to generation for millennia. Thirdly, it is estimated that at least 80% of the population in Africa consult traditional healers, many of whom have used the rich heritage of indigenous knowledge on medicinal plants to provide leads to treatment of a number of diseases. Fourthly, today not only approximately 25% of all prescription medicines are directly or indirectly derived

from plants from the biodiversity, but a further 25% are derive from micro-organisms and bacteria abundant in Africa, although, and unfortunately, Africans, usually have tended to under value traditional medicine i.e. what they have and over value what they do not have. Last, but not least, and more positively, one has also to note that of late perceptions are changing for the better in Africa in the manner that there has followed increase awareness of the value of IK associated with biological resources; there is more awareness on the need to protect not only the biological resources but also this IK; and there is more recognition of need to develop mechanisms for fair and equitable sharing of beliefs from IK, IKS and TM, The result of all these positive developments is evident from the successes achieved in many parts of Africa, including South Africa whose aspects of the successes the case in point for analysis in the subsequent paragraphs.

Successes and Challenges of the Practice of TM in South Africa

The Successes

The yardstick for measuring the successes of any activity depends on a number of factors. For the purpose of measuring the success of the practice of TM in South Africa, one has to also accept the fact that it depends on or is measured by a number of factors interacting singly or collectively.

Achievements of the objectives of using TM for good health and human wellbeing: As earlier observed, the view widely supported in Africa is that the broad objectives of the practice of traditional medicine for healing purposes can be divided into three aspects: the spiritual healing, the physical healing and the psychological or mental as well as social healing and that indigenous health or wellbeing is always considered in the context of the individual within the collective or the community. To the extent that visits to traditional healers by day and by night (for those embarrassed to show their face by day) shows increasing number of traditional healers using TM healing means it is achieving the above objectives. Besides, one can also argue that there is consensus among those involved in health services that traditional medicine is closely linked with modern medicine because the source of many of today's medicine availability even in biomedical pharmacies originate from Africa's biodiversity. This means that traditional medicine, whether used by traditional healers applying IK or modern professional Eurocentric practitioners using drugs developed from a plant source are all used for the wellbeing of

humanity illustrate the successful achievement of healing of the holistic wellbeing of humanity for generations by traditional healers.

The positive impact of the policy directives by the South African Government and its related institutions: In acknowledging the developments made towards introducing IKS policy framework in the Southern African Development Community (SADC) region of Africa, writers have argued that such policies are guided by the desire to mobilize resources to help promote the implementation of national, interstate and regional policies and that there is, therefore, need to place value on IKS to achieve social and economic development goals such as sustainable agriculture, affordable and appropriate public health care systems (Saurombe, 2013). With particular reference to South Africa, in 2004 the Department of Science and Technology (DST) finalized a national IKS policy which, in November of the same year, the policy was adopted by Cabinet thus, in the words of the then Minister of Science and Technology in the Forward to the Policy, laid in place “the first important milestone in our efforts to recognize, affirm, develop, promote and protect indigenous knowledge system in South Africa” He goes on to state that whilst unearthing the complexities and challenges associated with IKS, a process that looked longer than expected, it provided those involved with extraordinary experiences, from which they emerged united in their admiration for the breath and scale of South Africa’s valuable indigenous knowledge resources”. From then on, South Africa's commitment in recognizing the indisputable wealth of IK that survived the last centuries of repression is validated by numerous programmes being implemented by various departments (e.g. of Arts and Culture, of Trade and Industry etc.) in response to the adoption of this policy. The policy directives from the Cabinet and other Departments have, to a large extent, been implemented. The fact that the DST under the above policy established the National Indigenous Knowledge Systems Office (NIKSO) to coordinate government's efforts on IKS is, one example of a commendable evidence of success on the part of the Government. Besides, the Department of Health, the Medical Research Council and the Council for Scientific and Industrial Research all work together to implement government policy on health is further evidence of that success.

Extensive legislative enactments to give effect to the implementation of the 2004 policy: In addition to the above, the Government of South Africa has made several efforts not only to protect the resources used by practitioners of TM but, more importantly, to even regulate the

activities of traditional health practitioners. In the case of the former, the Government, in solidarity with world bodies, took bold steps to associate itself with international instruments protecting TM practitioners against the insufficient protection from intellectual property laws. One example where that was done was to associate itself with the African Union (AU), formerly the Organization of African Unity (OAU) in producing regulations “that forbid the export of medicinal plants in commercial quantities without explicit permission of the host government. Research Corporation is likewise supposed to be regulated” (Addae-Mensah, 2009). Protection of traditional healers practicing TM regulated by the Convention of Biological Diversity of 1993 has also been domesticated by the enactment of, among others, the statutes on intellectual property laws of South Africa including the Patents Act of 1978 as amended in 2002 just like the Copyrights Act also amended in the same year, to mention but a few examples. There is also the National Environmental Management Biodiversity Act of 1998 and the National Environmental Management Laws Amendment Act of 2014 and others all of which provide for protection, fair and equitable sharing of indigenous resources. The above positive efforts on the part of the South African Government should be appreciated against previous negative attitudes of African governments based on the grounds that (the governments) they should withhold full recognition until it becomes possible to formulate practice rules for fear of charlatanry (Tshehla, 2013). It is not surprising, therefore, that one can say that South Africa has taken reasonable steps to protect indigenous knowledge and resources, including the knowledge, resources, and practice of traditional healers. A good example of this successful move is the enactment of the Traditional Health Practitioners Act No 42 of 2007 establishing the Interim Traditional Health Practitioners Council of SA and vesting it with, amongst others, powers, to register, train, certificate and represent different bodies of traditional health practitioners.

Consistent resilience and determination of the confidence in TM to meet the needs to health for local communities: It is indeed commendable how practitioners of TM and their enduring patients throughout Africa have successfully resisted the threats and destructions of colonialism and of the system apartheid regime that considered the practice of TM as primitive, backward and unscientific. Nevertheless, and particularly with the advent of the new democracy, South Africa has embraced, more strongly than ever before, the values of indigenous knowledge including a vast body of indigenous health knowledge and its practice which are being used to

successfully advance the well-being and health of the African population for their livelihood and sustainable development especially among local communities.

Consistent adherence to the self-regulating methods of IKS established within the communities: It has been acknowledged as one other important aspect of the successes in the protection of traditional knowledge for use in TM is the methods of its regulation established within the communities in Africa. Indeed, one writer argues that “the systems that govern the use and transmission of traditional knowledge within a community, which may bear a remarkable similarity to formal intellectual property systems, may be referred to as customary (or informal) regimes” (Tshehla, 2013). The strength of this argument is the fact that this informal regime offers a system rules, rights and obligations which are unwritten but they achieve effectiveness through community consensus. They also achieve effectiveness because they are monitored and enforced by community elders under the guidance of traditional leaders and, specialized experts who hold and practice the knowledge. In the case of TM, those specialized professional experts are the traditional healers who provide the true vitality and value of the profession very much acknowledge in their respective communities, thus emphasising the importance and value of the practice of TM.

The Challenges

Notwithstanding some of the visible (not perceived) successes outlined above, TM practitioners are exposed to various forms of challenges which are made more complex by the multi-/inter-disciplinary nature of its practice. Below are some selected challenges indicating their complexity and gravity that threaten the very existence of IK & TM. Given that most of these challenges are matters of common cause, a few will be highlighted to justify the desirability to explore the future direction towards new approaches for addressing the challenges seriously threatening the continued existence and successful practice of TM.

Conceptual Challenges: The variety of terms use and the subjective application of definitions expressed, as earlier discussed, provide a confusing concept of knowledge involved and the nature of the practice of TM existing in communities around Africa in terms of their nature, characteristics, objectives and application. This confusion is evident especially when dealing

with TM in the context of its healing effects. Its seriousness is extended when one attempts to understand and compare it with modern medical profession.

Social Challenges: The variety of the social challenges range from: (a) prejudice against IK, IKS and TM for not conforming with the usually accepted Western and Eurocentric methods of learning, scientific researching, application and other methods forced on the African communities by the colonialists; (b) lack of respect and appreciation caused by lack of deeper understanding of the values, beliefs, practices and successes of IK, IKS, TM. This lack has resulted in serious attitudinal approaches depicting IK, IKS, TM as uncivilized, primitive and backward; (c) Reluctance of the younger generation to learn the "old ways" has resulted in the serious problem of the decreasing and final loss of the application of IKS and TM. Even more serious is the fact that the youth of today are the leaders of tomorrow leading to the demise of IK due to ignorance, disrespect and reluctance on the part of the youth (Visser, 2013: 117-119).

Policy Implementation Challenges: Despite the goodwill and successes achieved by the Government of South Africa in introducing a more advanced and exemplary IK policies in Africa, there are serious issues threatening its policy implementation. One such serious threat relates to "muti killing" about which the media writes negative stories on traditional healers and their healing practices. "Muti killing" is the practice where a person is killed so that his/her body parts can be used for healing" The fact that traditional healers are part of crime syndicates to provide muti to criminals gives a very negative understanding of TM (Visser, *ibid*).

Absence of clarity on the interface between competing knowledge systems: Without joining the arguments for and against regulating IK, it suffices to mention that there is no clearly regulated interface among traditional healing, biomedical profession and the state. To make matters worse, even the Traditional Health Practitioners Act No 42 of 2007 is characterized by a host of problems one of which relates to the problem of identification in terms of who is a traditional healer – no clear acceptable definition. Others include: what qualification does one need to be recognized as one; what and how much knowledge in traditional medicine should an aspirant practitioner have to qualify for recognition and/ or admission to the profession? The gravity of the above and many more other challenges to the Act regulating the TM profession needs no over emphasis.

Constitutionality Challenges: Some writers have pointed out the lack of specific reference to traditional healing in the South African Constitution arguing that although one can resort to the provisions relating to the protection of culture and religion in Articles 30 and 31, the absence of a specific provision supports the despising and rejection of anything and everything traditional in the post – 1994 South African. The above position raises the fundamental question as to whether enough protection, whether by the Constitution, enabling legislation and/or regulations, is accorded to the practice of TM.

Challenges to the broader issue of IK protection: Any discussion on IK is always incomplete without focusing on the importance of its general protection based on the critical issues of intellectual property. This is more so when IK is applied to TM with its complex nature, objectives and importance to health in the context of its holistic healing effect. In South Africa, just like elsewhere in Africa, the issues of IK protection as related to TM has taken centre stage thus requiring its own specific discussion. The reader's attention is, therefore, directed to that discussion in the subsequent paragraphs.

Challenges Facing the Protection of the Intellectual Property Rights (IPR) of TM Practitioners: Generally speaking, the World Intellectual Property Organization (WIPO), an agency of the United Nations (UN) states that intellectual property refers to the creation of the mind and intellectual property rights are like any other property right in that “they allow creators, or owners of patents, trademarks or copyrighted works to benefit from their own work or investment in a creation (Tshehla, 2013; Ramsden, 2003). At international level, these rights are enshrined in Article 27 of the Universal Declaration of Human Rights of 1948 which provides for the right to benefit from the protection of moral or material interests resulting from the creation of the mind. In South Africa those rights are provided for in Section 25 of the 1996 Constitution which provides for various rights relating to property. According to WIPO, the reasons for protecting intellectual property rights include (a) the progress and well-being of humanity rest on its capacity to create and invent new works in the area of technology and culture; (b) the legal protection of new creations encourages commitment for new and further innovation; and the promotion and protection encourages economic growth, creates new jobs and industries and enhances the quality and enjoyment of life. These laws serve as catalysts for economic development, social and cultural well-being and help to strike a balance between the

interests of the innovator and public interest. Such promotion and protection are monitored and effected by WIPO at international level through The Intergovernmental Committee on Intellectual Property and Genetic Resources. At regional level in Africa there is The African Regional IP Organization (ARIPO for English speaking) and African Intellectual Organization (OAPI for French speaking). At country levels there are specific pieces of legislation. Therefore, discussions about the use of TM are linked to the protection and promotion of intellectual property through IP laws, regulating IK, IKS and IPR, whether at international, regional or national levels.

Non-existence and/or ignorance of the appropriate IP law: In the case of South Africa, however, apart from those challenges discussed above, and in addition to other general challenges of plaguing the whole continent like biopiracy, benefit sharing and lack of appropriate recognition of IK holders and practitioners, very serious particular challenges to the IPR of the knowledge holders and practitioners of TM need exploring with a view to making fresh recommendations for new approaches for addressing the challenges of IP of TM practitioners. Below are a few of those pressing challenges which require new approaches in the field of law. They include: insufficient or inappropriate IP laws; ignorance of the formal and informal IP laws (including the Indigenous law); and difficulty of integration – Western Scientific Versus African Indigenous (Richter, 2003).

Towards New Approaches for Addressing the Challenges of Tm Practitioners

In the previous paragraphs, much of the discussion was directed to the successes and challenges facing the practitioners of TM challenges relating to issues of IP generally, and IPR specifically, of the practitioners. From the discussion it is evident that the challenges outweigh the successes. For many legal scholars and activists of IP and IKS, of which the practice of TM forms an important part, three approaches need urgent and careful consideration, namely: a new research methodology for use to improve the practice of TM; a new approach to the regulatory framework by introducing a new piece of legislation based on the outcome of the research; and a new approach to advocacy on IP and IPR.

Introducing new research methodologies into the practice of TM: Most researchers of IKS have condemned outright the orthodox western scientific research methodologies for use in IKS-

related research and have demanded decolonizing research approaches into issues of IKS. While accepting the above demand, what has been still uncertain is: what is IKS of which TM forms a part and how can research be conducted into these areas? Since the establishment of the IKS Centre on the Mafikeng Campus of NWU, researchers at the Centre, of which the presenter is one, have been struggling to establish that that kind of appropriate methodology.

A new appropriate to regulatory framework – a sui generis legislation: One emerging scholar of IKS, who researches on a number of legal aspects of IKS, has seriously addressed the question whether regulation is a necessary route to take in matters of IKS and he argued that for the state, regulation not only protects the public and the traditional healers but it also creates order, certainty and protection of the profession (Tshehla, 2013). An examination of the Traditional Health Practitioners Act of 2007 shows that it has several shortcomings; there is a need for a new set of legislation based on thorough and appropriate research. Fortunately, the Minister in charge of the Department of Science and Technology (DST), after receiving the approval of the Cabinet, ensured that a Bill is drafted known as The Protection, Promotion, Development and Management of Indigenous Knowledge Systems Bill 2014. This Bill was already gazetted and it is hoped that it will help have a new home-grown (sui generis) legislation to regulate IKS and the practice and profession of TM.

A New Approach to IP and IPR Advocacy: It is common knowledge that the DST not only has a Directorate for Advocacy of IKS but actively participates in a number of advocacy programmes. Yet it is amazing how little, if at all, is known about IP and IPR by stakeholders of IK including the public, traditional healers and their patients. The alarming state and extent of the ignorance raises the dire need to design new programmes of capacity building on issues of IP the implementation of which must be holistic enough to reach all stakeholders of IKS and especially the users of TM.

Conclusion

What emerges from the above discussion is that notwithstanding the complexity associated with IK and IKS, of which health care systems and TM form important components, some basic facts have been identified and explained to provide a deeper understanding of the practice of TM and its link with IK and IKS. This discussion has also provided evidence of some extensive successes

of the practice of TM, given its importance as a health care factor in the holistic well-being and development of indigenous communities in Africa generally and in South Africa in particular. The focal point of the discussion relates to the challenges facing the health care system generally and the practice of TM in particular in so far as issues of the application of IP and IPR are concerned. Not only have the details of those challenges been analysed but recommendations for new approaches to eradicate or at least minimize the extent of those challenges have been suggested. It is further hoped that by highlighting the main issues, sufficient arguments have indeed been generated to provoke more thoughts and research to which the presenter is deeply committed. Whether singly or collectively, like it or not, the issues of TM in the context of IK and IKS will continue to engage all of us, activists or non-activists of IK, for many more years to come.

References

Addae-Mensah, n.d., “Plant Diversity, Herbal Medicine, Intellectual Property Rights and the Industrial Developing Countries, socio-economics, Ethical and legal Implications”, available at [www.crvp.org/book/series 02/11-5/chapter vii.htm](http://www.crvp.org/book/series%2011-5/chapter%20vii.htm). Accessed on 10th August 2015.

Addae-Mensah, I. 2009. African Science Academy Development Initiative, http://www.nationalacademies.org/asadi/2009_conference/ASADIS-GhanaBios.html

Constitution of the Republic of South Africa, Act 108 of 1996.

International Bureau of WIPO, 2003, what is Intellectual Property? WIPO Publication No 450(E), pages 2 and 3.

Iya PF, 2013, Addressing the challenges of integrating African Indigenous and modern Eurocentric approaches to life skill education in South Africa. Proceedings of the 40th Annual Conference of the Southern African Society for Education, Vol 1, Mafikeng, South Africa.

Mascarenhas A, 2004, “knowledge, Indigenous Knowledge, Peace and Development”, Indilinga, Vol 3

Materechera, SA, & Koitsiwe, M, 2013, Implementing the Bachelor of Indigenous Knowledge (B.IKS) Curriculum at the Mafikeng Campus of the North West University: Experiences and

Lessons, Proceedings of the 40th Annual Conference of the Southern African Society for Education, Vol 1, Mafikeng, South Africa.

Mumba, L, 2012, "The Background to the Guidelines on Use of Traditional Knowledge and Plant Genetic Resources", National seminar on IKS on 7th November 2012 at the University of Swaziland, Kwaluseni Campus in Swaziland.

NRF (National Research Foundation), 2006, Report on current and completed Projects at <http://stardata.nrf.za/scripts/startfinder.exe>. Accessed on 12 of July 2015.

Odora-Hoppers, C, 2002, *Towards a Philosophy of Articulation: IKS and the Integration of Knowledge Systems*, New Education Publisher, Cape Town.

Onwu OL, & Mosimege MM, 2004, "Indigenous Knowledge Systems and Science and Technology Education: A dialogue" in *African Journal of Research in Mathematics, Science and Technology Education*.

Ramsden, P, 2003, *A guide to Intellectual Property Law*, Juta & Co, Cape Town.

Richter, M. (2003). Traditional medicines and traditional healers in South Africa. Treatment action campaign and AIDS law project, 17, 4-29.

Saurombe, A, 2013, "Towards a Harmonized Protection of Indigenous Knowledge Systems (IKS) in the Southern African Development Community (SADC): One step at a Time, *Journal of the Eastern and Southern African Regional Branch of the International Council on Archives*, Vol 32. Read also Bhagwati, J, 2008, *Termites in the trading system: how preferential agreements undermine free trade*, Oxford University Press.

Sennayake, SGJN, 2006, "Indigenous Knowledge as a key to Sustainable development", *The Journal of Agricultural Science*.

Tshehla, BJ, 2013, "Traditional Healing: A practice restricted to the legal periphery", unpublished paper.

Visser, C, 2000, *Legal Aspects of Traditional Knowledge and Diversity*, UNISA Publication, pages 117-119.