South African Triple Heritage and Public Healthcare

Mayashree Chinsamy¹

Abstract:

The paper is based on the assertion that South Africa is a country of triple cultural heritage. It is home to representatives of three global regions i.e. Africa, Asia and Europe. This composition has created a diversity of culture and knowledge systems impacting on public healthcare. This rich and diverse heritage advocates for health care equity and leadership. The paper interrogates the following aspects: the impact of western healthcare system on other indigenous healthcare systems; cases from the triple cultural heritage groups showcasing the prospects and challenges of indigenous medical and health systems on public healthcare in South Africa.

Keywords: Culture, Traditional Medicine, Health Care Systems, Colonialism

Introduction

South Africa is a country of triple cultural heritage. It is home to representatives of three global regions i.e. Africa, Asia and Europe. This composition has created a diversity of culture and knowledge systems impacting on public healthcare. Although, the South African historical landscape is a legacy of colonialism and apartheid, which was characterised by racial and ethnic segregation, the country has emerged as a young democracy of more than 20 years and is built on the aspirations of laid in its Constitution (1996) and a Policy of Reconciliation (Department of Justice and Constitutional Development, 2017). The socio-cultural landscape of South Africa has been a picture of diverse cultures emanating from three global regions of Africa, Asia and Europe. In the country's Traditional Leadership and Governance Framework Amendment Act (2010), culturally diverse communities are referred to as indigenous. Historically, this diversity was viewed as a challenge and contributed to social tension, conflict and hatred. It is the consequence of unbalanced power in an ethnically diverse country. Despite efforts to promote human understanding and social cohesion in the country, vulgarities of racial and ethnic differences in recent xenophobic attacks reveal inconsistencies in current policy interventions.

The recognition of community-based or indigenous knowledge (IK) in the National Indigenous Knowledge Systems (IKS) Policy (2004) promotes IKS as the social capital of the poor. These knowledge systems are therefore expected to contribute to the sustainable improvement of livelihood and development in South Africa. However, the diverse knowledge systems in the country are yet to be mutually promoted as part of South Africa's knowledge economy and have not been comprehensively integrated in social development programmes such as health promotion. There have also been very limited concerted efforts to interface and share experiences of the unique cultural histories and knowledge systems in the country to mitigate social problems such as health equity and leadership of the country.

¹University of KwaZulu-Natal

Health is a social issue and is associated with behaviour, culture and other socio-economic and environmental problems (World Health Organisation (WHO), 2010). Moreover, according to the report the perception of health as a social issue has implications on the role of power in the determination of health equity (WHO, 2010). Through the lens of indigenous knowledge systems promotion for health equity, previously marginalized and oppressed communities of practice can express as a collective power their contribution to health. This will begin the processes of addressing the historical assimilation of indigenous communities and their public health knowledge.

The public health landscape has seen the Minister advocate for innovative interventions to fulfil the aspirations of health for all in the latest Strategic Plan (2013 - 2017). This plan was in response to increased reports of non-communicable diseases (NCDs) and anticipated pressures on public health care sector to cater for the resulting acute and chronic cases. The message was clear in promoting interventions that centre on development to reduce the burden of disease as echoed in the prevention and management of NCDs in the National Development Plan. Incidences of NCDs such as cardiovascular disease, cancer, chronic respiratory disease, diabetes account for 40% of deaths in the country, affecting mainly females (Department of Health Strategic Plan 2014 – 2019).

The General Assembly on the Prevention and Control of Non-Communicable Diseases (2011) emphasized the strengthening of national policies and health systems, particularly: "encourage the involvement of indigenous peoples and communicate in the development, implementation and evaluation of NCD prevention and control policies, plans and programmes, where appropriate, while promoting the development and strengthening capacities at various levels and recognizing the cultural heritage and traditional knowledge of indigenous peoples and respecting, preserving and promoting, as appropriate, their traditional medicine, including conservation of their vital medicinal plants, animals and minerals". Among the recommendations was the call to "recognize further the potential and contribution of traditional local knowledge and in this regard, respect and preserve in accordance with national capacities, priorities, relevant legislation and circumstances, the knowledge and safe and effective use of traditional medicine, treatment and practices, appropriately based on the circumstances in each country".

Infectious disease epidemics (HIV and AIDS) in South Africa resulted in elevated mortality rates in all age groups during 1990 – 2005 (Birnbaum et al., 2011). These epidemics have been compounded by increasing tuberculosis (TB) infections (Kwan et al., 2011). The overall picture provided in the Health in South Africa Series (2009) was that the country's per head health burden was disproportionately high. In order to support and strengthen our national response to the quadruple burden on public healthcare systems there is to investigate the contribution of traditional, local health knowledge and practices which are widely available, accepted and subscribed to by different communities.

The widespread use of traditional medicine (TM) globally is well documented (WHO 2002; WHO factsheet on TM). In South Africa, Soebiecki (2014) reveals that 72% of the Black

population in the country, which equates to approximately 26.6 million consumers, rely on African Traditional Medicine (ATM). The demographics of this population include a range of age categories, education levels and occupation. African Traditional Medicine was the dominant medical system practiced prior to the introduction of other healthcare systems. However, it is not the extensive utilization that made ATM prominent in the country. The indigenous biodiversity and high level of endemism in South Africa has strategically positioned the country in the phytopharmacological industry in terms of research and development of traditional medicines.

Cultural relevant/specific healing systems have been formulated worldwide. These diverse healthcare systems have evolved and are broadly defined as "the sum total of knowledge, skills and practices based on 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 illnesses" (WHO, 2002)".

In 2007, Heather et al. highlighted priorities to ensure integration of TM as an essential component of the public healthcare system. South Africa, at that time, was classified as progressing towards an inclusive system. The classification was most likely due to significant developments in healthcare legislation and exploratory research. This is in contrast to an integrative system which is evidenced by the official recognition and incorporation of TM into healthcare. It would be notable in national policy, regulatory frameworks, provision and availability of remedies in public and private hospitals, underwriting for health insurance, robust and translation research, teaching and learning at higher education level for doctors, pharmacists and nurses, research institutes (WHO, 2002). The WHO recognized China, the Democratic People's Republic of Korea (North Korea), the Republic of Korea (South Korea) and Vietnam as representative of an integrated healthcare system.

Gqaleni, et al., (2007) show that Ayurveda is registered and regulated in South Africa under the Allied Health Professions Council (AHPC). It is a therapy encompassing a range of individualized treatment options. Health and self-healing is promoted through cultivating inner peace and spiritual harmony (Dhar et al., 2012). Ayurvedic philosophy perceives man as a vital component of the natural environment. Cooppan (2014) introduces Ayurveda as the science of life where physicians use diagnostic and therapeutic strategies for improved health and way of life. He also alludes to its increasing popularity among patients and conventional health practitioners. This may be aligned to its recognition as the most ancient, complete, scientific and holistic system of healthcare by the WHO (WHO, 2002).

When considering the intersections of TM practices in South Africa, Ayurveda is widely accepted and practiced. Comparatively, more than 1.5 million practitioners use the traditional medicinal system for health care in India (Pandey et al., 2013). The Indian/Asian population accounts for 2.5% (approx. 1.3 million people) of the South African population. The interface of knowledge systems, especially in the domain of TM, is not a new concept. For instance, with the migration of the Indian population from the Indian subcontinent to South Africa, *Withania somnifera* has become naturalized. The potent medicinal plant is still referred to as

Ashwagandha in Indian vernacular but the local vernacular term is *Ubuvimbho*. There is therefore associated cultural understanding, meaning and medicinal value to this plant from different communities.

While Blaxter (2010) suggests that biomedicine is apparently the dominant and primary health system in South Africa, Abdullahi (2011) provided evidence of growing demand and policy development of TM. Global recognition of the usefulness of integrating TM systems available and operating in the national context forms the case in this paper of an exploration of the affordances of African and Indian TM to biomedicine in the South African context. This was based on the fact that all TM practices and beliefs exist within specific cultural and social philosophies.

Methods

The paper uses secondary sources to discuss the integration of indigenous medical practices in the formal healthcare system with special reference to ATM and Ayurveda. The use of secondary sources involved accessing information that was already available. This included information from past research, websites, articles, books. The advantages included affordability and easy access to available information than conducting primary research in the medical facilities and institutions in South Africa. The search strategy included searches for published and unpublished studies in MEDLINE, EMBASE, CENTRAL, GOOGLE Scholar, CINAHL, AJOL (African Journals Online), South African e-journals and others.

Results and discussion

The Impact of Western Healthcare System on Other Indigenous Healthcare Systems

According to Rinaldi and Shetty (2015) the major differences between TM and biomedicine include: knowledge protection, formulation, regulation, evaluation, dosage, consultation, and training. These stem from fundamental differences in the ways of knowing, world views, value systems that influence the practice, evaluation and management of each system. Flint (2015) describes the national healthcare system of South Africa as a case of biomedical hegemony where TM practices have been tolerated as opposed to being embraced.

(i) Perception

Flint (2008) indicates that the perception of health, wellness and the body may be subject to beliefs, experiences, culture and environmental factors. This offers a range of understandings and thus approaches to healthcare and improved wellbeing. The perception of health as a state of complete physical, mental and social wellbeing and not merely the absence of disease is not a new concept (WHO 2002). The promotion of TM has, however, been marginalized by a skewed perception when discussed in conjunction with western medicine.

Whyte and Van der Geest (1988) discuss medical pluralism as the understanding and treatment of illness in the context of cultural differences. They emphasize the need to 'denaturalise' current perceptions and pre-determinations to avail ourselves to alternative philosophies. This suggests broadening the limits of ethnopharmacology where natural-based medicinal substances are not merely of biochemical and therapeutic value but 'cultural phenomena'. Through that lens, the South African situation may be considered as a rich endowment of cultural manifestations of biological diversity through its triple cultural heritage.

There is an impetus towards transforming conventional health philosophies to be inclusive, employ holistic models of healing and patient-centred approaches. This would potentially alleviate the current misconceptions surrounding TM in South Africa. The report by Abdullahi (2011) endeavoured to promote traditional medicine in Africa with the aim of addressing widespread mistrust in the industry. The roles and responsibilities of THPs in public health promotion were shown to have been largely ignored mainly due to negative perceptions. The portrayal of ATM, particularly in South Africa is sensationalist and generally creates a negative perception. This is contrary to the growing evidence that show TM is utilized by increasing numbers of society due to inadequacies of allopathic medicine. These include increasing side effects, adverse drug reactions, rising costs, inaccessibility of modern medicine and healthcare (Ekor, 2013). It is also supposed that the poor mainly subscribe to TM, but this is not always true. A wide demographic subscribe to TM as they believe the side effects to be lower. In both developed and developing countries, users of complementary methods also commonly seek conventional care (Pandey et al., 2013).

(ii) Regulatory – existing legislation, inadequacies, proposed

As indicated earlier knowledge protection differs between TM and biomedicine. Existing intellectual property laws and strict patenting systems are inadequate in the protection of indigenous knowledge. The evolution effective medicine depends on the continuous search for natural sources of therapeutic agents. The practice of bioprospecting however, has often blurred the lines to biopiracy. Individuals and/or corporations in foreign countries misappropriated indigenous knowledge for commercial exploitation by securing exclusive rights to biological materials through patents. This would prevent access to TM and associated cultural practices.

This further prohibits the development of such material through research and innovation for improved healthcare in the country. The basic dependence and access to local resources is essentially denied under current frameworks. The World Intellectual Property Organisation (WIPO) instituted an intergovernmental committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore to develop a legal instrument to ensure appropriate protection of traditional knowledge, expressions and genetic resources. Traditional medicine is regulated by Traditional Healers Council while complementary and alternative medicine (CAM) is regulated by the Allied Health Professions Council of South Africa (AHPCSA).

(iii) Research and Development – standards, methodology, evaluation

Key considerations in research and development of TM are efficacy and safety. This is based on western cultural perspectives which view medicine as a value free endeavour and empirical. This is contrary to the belief and practices of TM therapies which are informed by socio-cultural and environmental factors. The balanced and holistic nature of TM puts emphasis on health or quality of life rather than on disease alone. While western knowledge systems have contributed greatly to diagnostic technologies and disease management systems for health promotion it has dictated understanding and conceptualization of healthcare at the expense of non-Western ways of knowing and knowledge systems. Sharma (1992) summarized the advantaged position of allopathic medicine. The domination of current western knowledge systems is evidenced in the indoctrinated training of health practitioners, health systems and interpretations of the state as translated in health infrastructure, regulatory frameworks, and resource allocation.

Li and Verderas (2009) discuss the value of plant secondary metabolites which have contributed to pharmacological research and drug development as models for active compounds and synthesis of drugs. The benefits of drug preparations derived from medicinal plants and other natural source has been evident in therapeutic agents for major communicable and non-communicable diseases. Sahoo et al. (2010) reported that 11% of the 252 essential drugs listed by the WHO are based on plant phytochemistry. They further indicated that 25% of prescribed drugs internationally are plant derivatives with a further 13 such drug formulations being approved in the United States of America in 2005-2007. Mahomoodally (2013) describes the characteristic feature of TM which is the individual, additive and or synergistic therapeutic activity of plant phytochemicals. This is in contrast with conventional pharmacological drug preparation which is based on isolated single active ingredients. There is only recent momentum towards the use of natural combinations present in TM formulations which through synergistic effects may enhance activity, stabilize the main ingredient, and reduce side effects. This demonstrates the holistic nature of TM which makes use of naturally occurring phytochemicals to improve health.

Pharmacodynamics research has mainly focused on the interactions of biomedicines. The reaction between allopathic medicine and TM formulations is still in its infancy. It has gained some attention albeit negative due to contraindications in patients that did not disclose use of other medicines when consulting diverse practitioners. This implies that information, education and communication is critical to promote knowledge and awareness; not only for biomedical and TM practitioners and professionals, but also the general public. As part of WHO information exchange programmes South Africa, as a member state, produced an authoritative monograph of selected medicinal plants. While such monographs serve as a notable reference on the safety and efficacy of medicinal plants, elements that promote the knowledge and practice of indigenous medicine are lacking (WHO, 2005).

Flint (2006) explored the effect of polyculturalism on TM practices in the KwaZulu-Natal Province in South Africa. Benzie and Wachtel-Galor (2011) explain that TM such as African TM

and Ayurveda puts emphasis on the overall condition of the patient and not just the ailment or disease for which formulations and treatment are appropriately determined. Despite this acknowledgement, the current system of determining efficacy and safety is based on western methodology/protocols for standardization and evaluation. There is requirement for TM to conform to these protocols such as clinical trials, classification of bioactive constituents, automated high throughput bioassays, concept of false positive, quality assurance, and authentication. Throughout the commercialization value chain of TM therapeutic formulations there are multiple levels of standardization to ensure quality and safety.

Currently data on efficacy and safety of TM is not comprehensive for full integration into the national healthcare system. This would require a revision of current protocols and/or development of adequate and accepted research methodology to evaluate TM (WHO, 2002). The integration of TM in the South African national healthcare system would require co-operation among TM practitioners to work with stakeholders and derive acceptable parameters. It was suggested that a selection of therapeutic remedies can be researched and promoted for production and manufacture (WHO, 1977). It was also recommended that positive communication and educational reform evident in curriculum for health care practitioners are required to ensure expedited public health education and promotion.

In the USA, Ayurvedic products are classified as dietary supplements and therefore not subject to the same safety and efficacy standards. But there is concession that the approaches to evaluation of Ayurvedic medicine are limited. This includes research design, inappropriate control groups, and inconclusive results. Comparison of Ayurvedic medical formulations to single active compounds was considered a gross misconception (nccih.nih.gov/health/ayurveda/). Internationally, the credentials of Ayurvedic practitioners are not uniform with few approved schools. In South Africa, there has been is a significant increase in the last 3 years in the number of registered Ayurvedic doctors, from 8 to 17 in total (AHPCSA, 2016).

The WHO reported that in 2012 there were a total of 73 national research institutes in TM and CAM (Rinaldi and Shetty, 2015). The South African Department of Higher Education and Training recently (2014) implemented a national vocational certificate in the South African Health Care System (National Qualifications Framework NQF 3). The main objective is to directly promote, restore and maintain health. Chitindingu et al., (2014) provide an overview of TM in South African higher education medical school curriculum. There was evidence of incorporation of TM at the undergraduate level but only one school offered TM at postgraduate level. These however were not independent modules. One school did not offer TM as they perceived it not to be accredited and chose to promote solely biomedicine affiliated with Health Professionals Council of South Africa (HPCSA).

The most encouraging finding was the use of problem-based learning approaches by involving traditional healers and CAM practitioners at two schools to promote knowledge and awareness of concepts and practice of TM. Alternatively, other schools simply taught concepts of TM and CAM without interaction with practitioners. The KwaZulu-Natal medical school was the only

institution to offer teaching on ATM, Ayurveda, Chinese Medicine and Homeopathy. The study highlighted the disconcerting situation of the continued challenge of integrating TM into medical education curricula. This was mainly due to differing perceptions and philosophies and perceived inconsistencies with conventional evidence-based approaches and lack of reference material. Nxumalo et al., (2011) identified the basis for the lack of commitment to integrate TM into medical education as biased epistemology despite the polyepistemic society of South Africa. Their findings indicate that South African medical education curricula are generally lacking in this regard. Integration is necessary to increase the knowledge base of health care practitioners due to the impetus of health equity and leadership demonstrated in legislature and policy in the country.

(iv) Access and Use

In a series of articles published by the British Medical Journal in 1995, Kale alluded to the key aspects of ATM which distinguishes it from western conventional medicine – that ATM is holistic and cultural acceptable. Culture was referred to as the combination of societal patterns, beliefs, life style, attitudes and accepted organisation by which communities solved life problems. Therefore cultural change and development would be commonplace in a changing environment and associated knowledge to sufficiently adapt and survive. The WHO at its Meeting on the Promotion and Development of Traditional Medicine (1977), referred to this cultural evolution as a means of preserving the role of TM in providing healthcare within communities. It further impressed that modern research avoids limiting TM to the use of medicinal plants but rather to the actual practice and system of health.

One of the major developments in health care was the large-scale manufacture and distribution of biomedicines (Van Der Geest and Whyte, 1988). While this may have increased availability of biomedicines it impeded development of TM in developing regions. In this regard, the dominating and multinational nature of the pharmaceutical industry had several implications. First world countries continue to dominate and accrue the commercial value of products. While, research and development plants in developing countries have contributed towards skills and training they have been strategic in securing cheap labour and draining already scarce resources to further develop biomedicines (Akkari, 2016). Health equity would require respect for and access to TM. Currently, however, bioprospecting undermines TM demonstrated by inadequate intellectual property protection and implementation of relevant interventions. This could render it inaccessible to the large population who depend on TM should cost of medical treatment increase.

Conclusions and Recommendations

The WHO (1977) report argued for the recognition, promotion and development of TM. In response to the current call for novel approaches to achieve improved national healthcare system, consideration for the holistic and balanced outlook of TM practices prevalent in South Africa

should be made. This will place emphasis on lifestyle, attitudes and societal development for overall public health. Integration of TM would also ensure health equity and demonstrate leadership in health promotion (WHO, 1977). While the primary responsibility to ensure health equity resides with national governments, the right to health provides indigenous communities with the opportunity to take control of the determinants of health (Solar and Irwin, 2010). The multi-inter-transdisciplinary nature of TM should be evidenced across disciplines in the medical education system that train medical professionals and practitioners. This will sensitize allopathic practitioners and professionals on the concepts, perspectives and practice of African TM and Ayurveda in South Africa. Successful integration would require ongoing communication and dissemination of information. This would include both positive and negative feedback between TM and biomedical practitioners. In moving towards the realization of an integrated national healthcare system in South Africa the recognition of medical pluralism should be founded in the triple cultural heritage of the country.

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