

Estimated annual incomes of South African traditional healers as generated by their practices and sales of their pre-modern traditional health products for 2015/2016

Gabriel Louw¹, André Duvenhage²

1. Research Associate, Focus Area Social Transformation, Faculty of Arts, Potchefstroom Campus, North-West University, Potchefstroom, South Africa
2. Research Director, Focus Area Social Transformation, Faculty of Arts, Potchefstroom Campus, North-West University, Potchefstroom, South Africa

RESEARCH

Please cite this paper as: Please cite this paper as: Louw G, Duvenhage A. Estimated annual incomes of South African traditional healers as generated by their practices and sales of their pre-modern traditional health products for 2015/2016. AMJ 2017;10(2):78–94.
<https://doi.org/10.21767/AMJ.2017.2735>

Corresponding Author:

Prof Dr GP Louw
Focus Area Social Transformation
Faculty of Arts
Potchefstroom Campus
North-West University
Potchefstroom, South Africa
Email profgprouw@gmail.com

ABSTRACT

Background

In South Africa, it is an accepted fact that the main role players in the manufacturing and selling of so called traditional medicine (TAM) are traditional healers. The Traditional Health Practitioners Act No 22 not only strengthened this perception in 2007 by giving statutory recognition to traditional healers as *traditional health practitioners*, but also with its various definitions as they are reflected in the Act.

There is an estimation that South African research on traditional healing that TAM, specifically under the guardianship of the traditional healers, generates in excess of R2 billion (R2,000 million) annually.

The idea also exists that the traditional healers offer a widespread indispensable medical service, specifically through their medical and health products, which contributes to a further R1 billion (R1,000 million) or more in income.

Aims

The study aims to estimate the annual income generated by South African traditional healers in their practices and with the manufacturing, prescription and selling of their traditional health products for the period 2015/2016.

Methods

This is an exploratory and descriptive study that makes use of an historical approach by means of investigation and a literature review. The emphasis is on using current documentation like articles, books and newspapers as primary sources to reflect on the South African traditional healers' estimated annual incomes as generated by their practices and the manufacturing, prescription and selling of their health and medical products for the period 2015/2016. The findings are offered in narrative form.

Results

Over the years, it seems that a misconception was established in South Africa about *what* traditional medicines really are and *who* the specific manufacturers and sellers are. There is no differentiation between the traditional medicines offered and marketed in the South African retail and commercial market, and those prepared by traditional healers. Some traditional medicines are available from well-established outlets like pharmacies, modern-day health-shops and allied-traditional healthcare professionals like the statutory recognised homeopaths, naturopaths, phytobaths and ethnobaths. These medicines have to adhere to a formal manufacturing and scientific foundation, while traditional healers rely on self-made, pre-modern and

untested indigenous mixtures. This lack in differentiation and scientific foundation has clouded the true ownership of traditional health and medical products as viewed and understood under the definition *Traditional African Medicines (TAM)*. This vagueness also obstructs the compilation of a profile of the incomes generated by the various role players in their practices and by manufacturing and selling of traditional medical and health products. The end result is a misrepresentation of sales statistics in South African literature on traditional healers and their self-made health products and untested mixtures.

Conclusion

The present-day statistics cited in literature of annual incomes of between R2 billion (R2,000 million) and R3.4 billion (R3,400 million), roughly an average of R2.7 billion (R2,700 million), from the sales of traditional health products and mixtures by South African traditional healers, are false. What is more, South African literature generally reflects an erroneous classification of *who* the true manufacturers and sellers of traditional health and medical products are, and *what* “traditional medicines” really mean. This has led to an acceptance of South African traditional healers and their untested and risky health products and mixtures based on a misconception that they are the true manufacturers, sellers and owners of TAM.

The most prominent role player in the manufacturing and selling of traditional medicines and the true income-generator seems to be the formal South African industry of complementary/-alternative medicines (CAM). This comprehensive, well-established and prominent medicines industry has been manufacturing and marketing South African traditional medicines for decades. They do this scientifically as a viable and sustainable enterprise.

In comparison, there are the traditional healers’ unscientific practices and the medical products that they manufacture and sell outside of the formal healthcare sector. There is no sound foundation and substantiated evidence in the literature to confirm their primary role as manufacturers, developers and sellers of the modern-day South African traditional medical and health products. They fail the test as scientific, viable and sustainable role players in the field of South African traditional healing and TAM.

Key Words

Comprehensive, domain, expenditure, indigenous, muti, pre-modern

What this study adds:

1. What is known about this subject?

Few trustworthy literature and data sources are available; mostly inscrutable assumptions and statements are offered to account for the matter.

2. What new information is offered in this study?

Although the estimates of this study are based on comparisons with the incomes of the allied and allopathic health professions, a new and realistic viewpoint could be stated.

3. What are the implications for research, policy, or practice?

An in-depth study is urgently needed. The present-day income figures of South African traditional healers as reflected in literature seem to be an over-estimation.

Background

Alleged income from traditional medical products in South Africa

Literature on South African traditional healing reports extraordinary high incomes for traditional healers *per se* from the production and sale of traditional medicine, better-known as pre-modern health products or traditional mixtures.¹⁻³

Traditional healers claim that there is an extraordinary demand for traditional healing in the form of treatment and pre-modern traditional medicines. They propose that approximately 80 per cent of South Africans regularly consult traditional healers for treatment with their traditional health medicines and that this has led to a contingent of 200,000 or more practicing traditional healers in South Africa.¹⁻⁶

Traditional healers purport that the massive impact of their service delivery in South Africa leads to 128 million traditional prescriptions to 26.6 million customers annually. They claim that 133,000 persons work in the South African pre-modern traditional medicine trade, generating incomes worth between R2 billion (R2,000 million) and R3 billion (R3,000 million) or more per year, representing 5.6 per cent of the national health budget. They furthermore allege that 72 per cent of Black South Africans use traditional medicines as part of their daily lives. They also claim that this need is constantly growing and that all the various social and economic classes of Black South Africans use and prefer traditional medicines and products.¹⁻³

A recent study on the economics of the traditional healers' pre-modern medicines' trade in South Africa postulates the existence of 68,000 full-time practicing traditional healers, 63,000 plant harvesters and 3,000 street vendors of traditional plant materials. The study postulates that this group generates possible annual incomes of between R2.9 billion (R2,900 million) and R3.4 billion (R3,400 million).³

Trustworthy literature on the TAM trade of South Africa is lacking. Most of the studies are old, while the more recent ones only focus on certain segments of Black South Africans and specific areas such as the Black trade in traditional medicines at markets like those in Durban and Johannesburg. An in-depth analysis shows that most of these researches used small samples of 30–400 persons, lacked applicable information-gathering methods, and generalise regarding the needs and use of traditional medicines and services by more than 45 million South Africans. There is a measure of political opportunism and subjectivity, specifically after the new political dispensation of 1994. There are benefits to being strong role players in some of these studies that promote traditional healing, masked under so-called "cultural customs and traditions". Most of these studies fail when it comes to the requirements of statistical inference about the whole South African population from the information about their samples.^{3,7,8}

Conclusions are strongly based on generalisations, assumed and estimated outcomes and the repetition of untested literature. The studies lack sound scientific research and statistical foundations to offer an in-depth view and understanding of the trade in traditional medicine for the country as a whole. It seems that some of these research approaches and justifications for the findings, presentations and estimations border on the reckless manipulation of facts to promote South African traditional healing and to suit the thinking of propagandists and politicians in new RSA. The inappropriate extrapolation of trends in healthcare politics, needs and education has undoubtedly led to ridiculous conclusions on traditional healing.^{3,7,8}

What is more, there is a lack of objective identification and recognition of the legal role players responsible for the manufacturing, marketing, selling and scientific development of modern-day traditional healing practices and medicines in South Africa. The wider history of South African alternative medicines and healing is blindly ignored in the post-1994 political dispensation, specifically the role of complementary/alternative traditional medicines and statutorily recognised allied traditional healers. These

include homeopaths, naturopaths, phytopaths and ethnopaths, who became the official guardians of the development and promotion of the modern-day South African traditional medicines by the 1980s. Propagandists and government supporters of the outdated South African sector traditional healing that an insignificant remnant of old African religious traditions and customs ignore the more scientifically-based field of alternative medicines.^{3,7,8}

The post-1994 political dispensation has distorted the role of the South African traditional healers and their activities as role players in the country's healthcare sector. The new government is steering the future healthcare of new South Africa based on political opportunism, propaganda, emotional subjectivity and anti-Western healthcare models. It has distorted the role of the South African traditional healers and their activities as role players in the country's healthcare sector in Traditional Health Practitioners Act No 22 (2007). The foundation of this Act is unsubstantiated allegations and statements offered by official sources regarding the high incomes generated by traditional healers in their practices and through sales of medical products.^{3,7,8}

It is clear that objective and scientific approaches to data collection are needed to obtain insight into the incomes that South African traditional healers generate through their practices and sales of medical and health products. The focus of interest is specifically for the period 2015/2016.

An objective and scientific approach is possible through an analysis of the incomes of the practices and the sales of complementary/alternative medicines (CAM) in South Africa. A comparison can be made to calculate estimated TAM-incomes for the country.

Three informative studies have been published in this regard, although limited to 2003/2005. The studies address the costs, usage, generation of incomes and different role players in the field South African complementary/alternative medicines (CAM) based on information from the allied and the allopathic practitioners and the medical funds.^{1,2,9,10}

The CAM pathway to calculate an estimated TAM income for 2015/2016 in South Africa

In light of the lack of directive evidence and guidelines on the incomes generated by the South African traditional healers, the above CAM studies seem to be the only pathway to estimate the possible annual incomes generated by TAM; specifically in relation to the traditional healers'

practices and their pre-modern self-made mixtures and other health and medical products.

For this study the above CAM information and directives were selected as a point of departure to determine by estimation the optimal/maximum possible income generated by TAM in 2015/2016.^{1,2,9,10}

This direct transformation of data from CAM to TAM is based on the general assumption that the two industries function as a sort of dual system, assumed in general to be equal to each other: What happens in the one system theoretically also happens in the other. The only real difference it seems is that the one is *official*, the other *unofficial*.

Such a 50:50 comparison of TAM:CAM evidence is questionable, since the traditional medicine/products fraternity only occupies 3 per cent of the marketing vehicles/selling points.³

CAM and its practitioners had already taken over the roles and positions of the South African traditional healers by the 1960'. CAM is one of the main role players in the development, management, marketing and steering of modern-day TAM in South Africa. This became official in 1982 with the promulgation of the Allied Health Practitioners Act No 63, notwithstanding superficial efforts by politicians and propagandists of the outdated South African traditional healing sector to revive traditional healing in new RSA with the Traditional Health Practitioners Act No 22 (2007).^{1–3,11}

Estimated CAM turnover for 2015/2016

It must be noted that the above South African CAM studies, dated 2003/5 do not include statistics for growth in the CAM turnover up to 2016. A growth rate of 46 per cent was reported for the four-year period 1996–1999 (average of 11.5 per cent per annum), but there are no statistics to confirm if this growth remained constant from 2003–2016.^{1,9}

[To obtain some guideline on statistics of other countries, an Australian study was consulted. This study on CAM sales of vitamins and dietary supplements for the period 2011–2015 reflects an average annual growth rate of 12.6 per cent for vitamin and dietary supplements, while for *herbal traditional products* (products more or less similar to the pre-modern traditional health products and mixtures of the South African traditional healer) an average growth rate of only 6.4 per cent is reflected.¹⁰]

In 2014, it was postulated in South African literature - again lacking any evidence to substantiate it - that the CAM industry in South Africa can generate R8 billion (R8,000 million) per annum, indicating a total growth of R6.6 billion (R6,600 million) from the R1.4 billion (R1,400 million) of 2003. This indicates an annual growth rate of 34 per cent. The annual South African GDP growth rate for 1993–2015 was much lower, namely only 2.97 per cent.¹²

It seems as if the 2.97 per cent is an underestimation and the 34 per cent an overestimation. In an effort to offer an estimated, but balanced viewpoint within this contradiction on the possible 2015/2016 sales statistics of CAM, this study uses an annual average growth rate of *11.5 per cent*, or *150 per cent* (based on the 1996 to 1999 annually CAM growth rate) in total for the period 2003–2015/2016.

Various definitions of traditional medicines

It is important to understand *what* the meaning of *traditional medicine* is for South Africans before one can understand the issue around the possible optimal maximum income of TAM for 2015/2016 generated specifically by the South African traditional fraternity. Only after such an insight can the real role players in TAM be identified and the income matter appropriately evaluated.

Three definitions of *traditional medicine* are available:

- *World Health Organization (WHO) Global definition:* "Diverse health practices, approaches, knowledge and beliefs incorporating plant, animal, and/or mineral based medicines spiritual therapies, manual techniques and exercises applied singularly or in combination to maintain well-being, as well as to treat, diagnose or to prevent illness".^{2,13,14}
- *WHO Africa definition:* "The sum total of all knowledge and practices, whether explicable or not, used in diagnosis, prevention and elimination of physical, mental, or social imbalance, and relying exclusively on practical experience and observation handed down from generation to generation, whether verbally or in writing".^{13–15}
- *The Traditional Health Practitioners Act No 22 (2007).* The WHO Africa definition is more or less the same as that of the definition of the Traditional Health Practitioners Act No 22 (2007) as reflected in its description *traditional philosophy*, read together with the definition *traditional medicine*: "indigenous African techniques, principles, theories, ideologies,

beliefs, opinions and customs and uses of traditional medicines communicated from ancestors to descendants or from generations to generations, with or without written documentation, whether supported by science or not, and which are generally used in traditional health practice". In this context *traditional medicine* "means an object or substance used in traditional health practice for the diagnosis, treatment or prevention of a physical or mental illness; or any curative or therapeutic purpose, including the maintenance or restoration of physical or mental health or well-beings, but does not include a dependence-producing or dangerous substances or drug."¹⁶

The above definitions gives the impression that TAM is exclusively the intellectual property of the *South African traditional health fraternity*, including the indication that they are the true generators of an annual income varying from of R2 billion (R2,000 million) to as much as R3.4 billion (R3,400 million). This impression is strengthened by two prominent guidelines: first by the view that modern-day traditional medicine in South Africa is *something distinct from CAM* and must therefore be treated as an *exclusive entity with exclusive health and medical products and income*.² The second guideline is the WHO interpretation that *traditional medicine* is a way of protecting and restoring health that *existed before the arrival of modern medicine* and that these approaches to health *belong to the traditions of each country, handed down from generation to generation*, notwithstanding that it is pre-modern, unscientific and outdated.⁹

The WHO furthermore states, without offering evidence to support their inclination and classification, that CAM is not part of a country's own traditions. In terms of above interpretation, CAM seems to be outside this TAM uniqueness, but as said, without sound arguments or facts to support it.⁹

The definition of complementary medicine

South African and other global literature contradicts above "uniqueness" of TAM as an *entity separated from CAM*. CAM is indeed traditional medicine (TAM) in South Africa; It had incorporated and replaced "African indigenous medicines" successfully in South Africa over time.¹⁷ The official registration of *phytotherapists (as well as homeopaths and naturopaths)* as allied health substitutes for the *traditional herbalists* of indigenous healing are excellent examples of this transformation of TAM into CAM.¹¹ The comprehensive definition of *complementary*

medicine furthermore confirms that *African traditional medicine* was successfully incorporated into the supplementary health fraternity in the 1980s. TAM is indeed a limited subdivision (represented by phytotherapy, naturopathy, homeopathy) of the allied health fraternity in South Africa and is managed as such in terms of the Allied Health Practitioners Act No 63 of 1982.^{9,11}

This *complementary medicine* definition reads:^{9,p.65}

"Complementary Medicine means any substance or mixture of substances, originating from a plant, mineral or animal, which may be, but is not limited to being classified as herbal, homeopathic, ayurvedic or nutritional, used or intended to be used for or manufactured or sold for use in complementing the healing power of a human body or animal body or for which there is a claim regarding its effect in complementing the healing power of an animal or human body in the treatment, modification, alleviation or prevention of disease, abnormal physical or mental state, or the symptoms thereof in a human being, and may encompass substances or mixtures of substances used in the disciplines generally referred to as Western Herbal medicine, African Traditional medicine, traditional Chinese medicine, traditional Dutch medicine, homeopathy, ayurveda, aromatherapy and food supplementation". The identification and classification of TAM in Africa (and thus also in South Africa) is that it is a sub-medicine, one of many, inside the greater medicine-group of CAM.

The above definition nullifies the exclusive global and African WHO definitions and the definition of the Traditional Health Practitioners Act No 22 (2007) on African traditional medicine (TAM), as well as the clause of "medicine before the arrival of modern medicine". The definition extends the Act's clause "traditions of each country, handed down from generation to generation," to CAM.^{17,pari.nyi} CAM, its practitioners and its customers are therefore full members of the South African "traditions of traditional medicine". CAM's *traditional medicine knowledge and culture* is undoubtedly, as described in the Traditional Health Practitioners Act No 22 (2007) regarding TAM, also "handed down from generation to generation."¹⁷ Indeed, this CAM definition takes TAM directly into the health/medical sciences of the 20th century under the guardianship of the CAM fraternity.^{11,16} It modernises and strips the pre-modern *African traditional medicine* (TAM) of its supernatural and unscientific contents and past (the outdated remnants that politicians and propagandists of

traditional healing at present try to revive in South Africa). On the other hand it also nullifies the assumed existence of a dual system, with TAM and CAM as equal, but independent role players in health care in South Africa (this immediately makes a theoretical estimation of TAM, based on CAM-findings, such as this study tries to do, questionable).^{2,10-12,18}

Two contradictory issues arise here. Are the alleged R2 billion (R2,000 million) to R3.4 billion (R3,400 million) in annual revenue:

- a) Trustworthy incomes generated by traditional healers in their practices, health and medical products and mixtures?; or
- b) Misleading and untrustworthy incomes, statistics hijacked by the traditional health fraternity and its propagandists and thus in reality the income statistics of the CAM?

TAM, as defined by the Traditional Health Practitioners Act No 22 (2007) and understood by the general public, is clearly not limited to traditional medicines exclusively manufactured, prescribed to patient/clients and sold by the South African traditional healers anymore. The most appropriate terms to describe and identify these untested health products and mixtures of the traditional healers in terms of the Traditional Health Practitioners Act No 22 (2007) should be *South African indigenous or pre-modern traditional medical products, or traditional healers' mixtures*.

The true owners and manufacturers of TAM in modern-day South Africa

To obtain insight into the generation of the alleged approximately R3.4 billion in TAM, or any annual income otherwise generated by South African traditional health and medical products, it seems most appropriate, in light of the lack of data on TAM, to focus on the incomes of the CAM-fraternity. The allied and allopathic professions are key role players. This data make estimated, but highly theoretical calculations and conclusions on the 2015/2016 incomes of traditional healers' fraternity possible. They can be extreme over-estimations though.^{11,16}

Present-day TAM can be understood in terms of its definition as traditional medicines that are industrially manufactured on an extensive scale under the auspice of CAM in South Africa and that adhere to certain minimum health and safety standards. The main role player in this

manufacturing is the Health Products Association (HPA). The role of the HPA in offering traditional medicine should be highlighted to show the immense difference between authentic, modern-day traditional medicines (that is classifiable as TAM), versus the low scale, mostly informal production of pre-modern and untested traditional health products or mixtures of the traditional healer that are erroneously described by the Traditional Health Practitioners Act No 22 (2007) as "traditional medicine".^{4,5,13,19-21}

The HPA consists of 114 manufacturers, importers and distributors of traditional (also referred to as complementary/comprehensive) medicines and healthcare products, including TAM and CAM, which are based on a sound scientific foundation. It is an important member of the modern traditional medical fraternity that *excludes* the South African traditional healers and their self-made mixtures and muti's. These 114 companies cover most of the market of traditional medicines and healthcare products (TAM/CAM) and include the largest individual companies in South Africa. The HPA is also a member of the European Federation of Associations of Health Products (EFAHP).^{4,5,13,19-21}

Other formal and prominent role players in traditional medicines (TAM/CAM) in South Africa are the Self-medication Manufacturers of South Africa (SMASA), the Traditional Medicines Stakeholders Committee (TMSC), the Confederation of Complementary Health Associations of South Africa (COCHASA) and the South African Complementary Medicine Association (SACMA). Besides their input into scientific TAM/CAM, these various bodies also are constantly publishing new literature and clinical studies on CAM and TAM.⁹

The above-mentioned well-established and well-recognised South African CAM-bodies, although without formal accreditation by the Medicines Control Council (MCC) of South Africa, aim to ensure through in-house scientific research and development that their CAM (including TAM) and other health products are of a high quality and free from dangerous components. There are no such comprehensive manufacturing bodies owned by the traditional healers of South Africa.^{2,3,9}

For the future development and benefit of South African TAM in general two *official bodies* exist, namely the Traditional Medicines Research Unit (TMRU) of the Medical Research Council (MRC) and the Institute for African Traditional Medicines (IATM) of the Council for Scientific

and Industrial Research (CSIR). These official bodies are totally *independent* and not owned by or associated to any of the role players in the CAM/TAM fraternities including the traditional healers.^{1,2,13,21,22}

The traditional healers try to assert the quality and standard of their traditional health products by conferring an unofficial Inyanga's Pharmaceutical Codex on it. An in-depth analysis of the code only confirms the pre-modern inclination, low quality and patient health risks of their pre-modern health and medical products and mixtures.^{3,23}

A comprehensive and sound infrastructure for the scientific manufacturing of traditional health and medical products is lacking at present. In South Africa, there are presently between five and 10 pharmaceutical manufacturers, who all lack in-depth, research standards and quality overseeing, active in some way in the manufacturing of traditional health and medical products. These groups seem to be supported by a further 50–100 *laissez faire* manufacturer of traditional products in the country, also lacking quality control. These products are manufactured, stored and sold mostly in unhygienic conditions. They do not conform to the pharmaceutical industry's "Good Manufacturing Standards", nor to the minimum standards prescribed for MCC-certification of medicines.^{2,3,9}

In an effort to understand the present-day sales of so-called *traditional medicines and products* in South Africa, two different, but opposing role players must be taken into account:

- a) **traditional health practitioners**, as defined and described by the Traditional Health Practitioners Act No 22 (2007), with their **self-made and home-made, untested pre-modern traditional health/medical products and mixtures**, *versus*
- b) Market-dominated local **CAM manufacturers and distributors of traditional medicines and products with their high standard of industrially produced, tested and evaluated medicines that adhere to the pharmaceutical industry's Good Manufacturing Standards**.

The aims of this study were: 1) to determine through estimation the South African traditional healers' optimal incomes for 2015/2016 from their self-made traditional health/medical products and mixtures; 2) if the annual incomes as offered in literature, varying from R2 billion (R2,000 million) up to as high as R3.4 billion (R3,400 million) are correct or false; and 3) to determine the true generator

of TAM. For data analysis the CAM statistics of 2003/5, adjusted with a total growth rate of 150 per cent (2005–2015) to make it applicable to 2015/2016, were used as a guideline for the theoretical calculations and estimates of the incomes of the traditional healers and their self-made pre-modern products and mixtures.

The study aims to estimate the annual income generated by South African traditional healers in their practices and with the manufacturing, prescription and selling of their health products for the period 2015/2016.

Method

The research was done by means of a literature review. This method entails formulating a view based on the evidence presented in literature. This approach is used in modern historical research that centres on topics about which there is little information. The databases used were EBSCOHost, Sabinet online and various contemporary sources like newspapers and reports for the period 2013–2017, articles from 1999–2016, books for the period 1998–2013 and government documents for the period 1997–2014. These sources were consulted to offer a view on the incomes that the South African traditional healers generate in their practices and from sales of their self-manufactured health products and mixtures for the period 2015/2016.^{24,25}

This study was based on the population statistics (incomes) of all role players active in the South African health care. It meets the requirements of statistical inference to infer information about the whole population.

A twofold approach was used to make theoretical interpretations: first, calculations and conclusions were drawn in terms of the 2003/5 CAM-statistics; and second, calculations and conclusions for 2015/2016 were made in terms of a growth-compensation of 150 per cent on the 2003/5 CAM-statistics.

The findings are offered in the narrative form.

Results

The comparing and discussion of pre-modern traditional medicine sales in terms of CAM sales

It is important to determine the possible turnover for traditional products through CAM. We can make theoretical conclusions from this for a traditional product income profile to gain an understanding of the market for pre-modern medicines. [Note: The theoretical view is that the CAM and TAM fraternities are equals, but operate independently in a dual system. What is applicable to one

can also theoretically be applicable to the other]. Such a turnover for comparison and theoretical conclusions on TAM is reflected in Table 1 on the sales of CAM and its health products (1998–2003).² Only the statistics for 2003 were analysed and used for calculations to compare and to draw conclusions.

Table 1 reflects that a total amount of R68 102,000 (R68 million) worth of homeopathic medicines, R141,573,000 (R141 million) worth of herbal medicines, R11,075,000 (R11 million) worth of aromatherapy medicines, R889,066,000 (R889 million) worth of nutritional supplements and R238,550,000 (R238 million) worth of health foods were sold in 2003 in South Africa. Table 1 clearly shows that the only so-called ‘unique’ African medicine sold was *African herbs* to the value of R2,000,000 (R2 million). This was *under 1 per cent* of the total homeopathic sales, already reflecting the insignificant sales of traditional health products in South Africa. The majority of the sales were therefore from various traditional products (overwhelmingly under the classification CAM) of local or foreign origins, but clearly outside the manufacturing domain of South African pre-modern traditional products.

Furthermore, the R2 million worth of *African herbs* sold were not sold by traditional healers themselves, but by various modern outlets, like food stores, pharmacies, supermarkets, chain stores and toiletry discounters *inside* the CAM fraternity (See Table 2).

These African herbs, as indicated, were primarily marketed and manufactured by a modern and well-established complementary/supplementary/alternative medicine (CAM) group, namely the HPA, with 114 members and other role players. There is also no indication in support of traditional healing that these products (herbs) were sold only to indigenous or Black South Africans in rural areas (the main working domain of the traditional healers) or for use in traditional rituals that involve traditional healers as such. These products were sold to the broad public, outside the traditional healers’ practice domain and could therefore have been used in the same way as Western and Chinese herbal preparations. This finding puts in doubt the view that traditional products and CAM can be seen as equal partners in the health market. Indeed, it seems that the traditional health products, as manufactured and marketed by the traditional healers, only occupy a fraction of the market and sales of that of CAM.^{2,3,6}

The mass selling of traditional products by the CAM fraternity outside the traditional healers’ practices and

markets, is in line with research²⁶ that postulates that 90 per cent (89.7 per cent) of traditional products are sold outside traditional healers practices. This means that only 10 per cent of the traditional health products prescribed in the traditional healers’ practices can be traced to and associated with the traditional healers’ activities and can therefore be seen as income generators. This not only clarifies the low input and use of the traditional healer’s services and their untested home-made health and medical products, but foregrounds that TAM (*excluding* the traditional healers’ health and medical unscientific products and mixtures) is indeed part of the South African CAM.^{2,3,8} It also nullifies allegations that the need for the pre-modern health products of the traditional healers by Black South Africans are growing and that there are approximately 30 million users of pre-modern traditional medicines and that its sales represent 5.6 per cent of the National Health Budget.³

The fact that African herbs *represent only 1 per cent or R2 million of the total sales of CAM products* in Table 1 emphasises the insignificant role that the untested traditional products and mixtures really play in the formal, organised CAM and TAM. One can safely assume that the traditional healers’ total sales of their medical products, marketed through their unorganized outlets and limited pre-modern practices, could be *at most only 10 per cent of all the formal sales of homeopathic products and in value the same or less than the R2 million sales in African herbs for 2003*. The *2015/2016 theoretical estimation can therefore be at the utmost R300 million for the traditional healers’ income*.

This outcome does not support the alleged general income of between R2 billion and R3.4 billion. This R300 million outcome (a tenth of the alleged income of R3,000 million reflected in literature) seems a very acceptable, even optimal theoretical estimation for the total sales of traditional healers’ health products and mixtures for 2015/2016.

Another insight can be obtained from the sales of homeopathic products. Table 1 reflects that the total sales of homeopathic products were R68,102,000 (R68 million) in 2003/5. In terms of the growth compensation, this R68 million can be as much as R10 billion (R10,000 million) for CAM in 2015/2016. In theory, the pre-modern traditional products could also generate R68 million in terms of the 2003/5 CAM statistics, or R10 billion in 2015/2016 if the 50:50 relationship between traditional healing and CAM is true and can be accepted.¹ As seen with the above finding

of only a 10 per cent market share by the traditional healers' health products when compared with CAM, one should be cautious of the possible 50:50 relationship. Various other factors also seem to nullify this 50:50 interpretation.

Here it must be noted that homeopathic products (TAM/CAM) include a mass of products outside the scope of the traditional healers' health and medical self-made products. Also, these sales figures as reflected in Table 2 were achieved by means of an intensive marketing system.¹ This R10 billion as a possible theoretical sales figure in 2015/2016 for traditional products requires further refined calculation, analysis and discussion.

The retail structure of CAM and its health products¹ are reflected in Table 2 to provide an overview of the marketing approach of TAM versus that of CAM.¹ Table 2 clearly shows that a total of 3,350 public outlets and selling points exist in the CAM market. This offers CAM the opportunity to sell on an aggressive scale.¹

Research only confirms the existence of between 300 and 400 informal and unorganised traditional product outlets (described as "muti-shops" in the literature and managed from sidewalks) for traditional healers in South Africa. There are only between five and 10 pharmaceutical manufacturers of traditional products, with a further 50-100 laissez faire manufacturers.³ This infrastructure is only 3 per cent of that of CAM. This low number of outlets and manufacturers undoubtedly limits the production and sales of the pre-modern traditional products and mixtures of the traditional healers in the country. It surely dramatically lowers dramatically the estimated R68 million sales of homeopathic products (CAM) for 2003/5 as equal to the traditional health products, as previously indicated. This situation surely also affects the growth compensation of R10 billion (R10,000 million) for pre-modern traditional products of the traditional healers estimated for 2015/2016. In terms of only 3 per cent against the 100 per cent marketing and sales ability of the CAM, the theoretical estimation of R68 million of 2003/5 and the R10 billion (R10,000 million) of 2015/2016 for the CAM, the sales figures for the pre-modern health products and mixtures of the traditional healers can be only R2 million for 2003/2005 and at most R0.4 billion (R400 million) for 2015/2016 respectively.

This finding of R400 million is in line with the above finding that the pre-modern traditional health products of the South African traditional healers as reflected in the sales of African herbs, can be no more than R300 million for

2015/2016. These two outcomes contradict the alleged incomes of between R2 billion (R2,000 million) and R3.4 billion (R3,400 million) as true incomes generated by the traditional healers.

Medical schemes expenditure on complementary traditional medicines

Another way to determine the possible financial impact of the traditional healers' self-manufactured medical products on the total health care and to identify specifically the use and purchase of their self-made products by the public, is to analyse the medical schemes expenditure on CAM for 2005. The analysis specifically focused on pay-outs to dispensing allied and allopathic health professionals.² Table 3 reflects this data.²

Table 3 reflects that the total dispensing income (selling in the CAM practice) generated by the allied professions in 2005 was only R34,959,793 (R34 million) against the total dispensing income of R7,150,193,033 (R7 150 million) for all the registered healthcare practitioners. From this total income the pharmacists' income was R6,381,064,777 (R6,381 million) and medical practitioners' income was R769,128,256 (R769 million). This selling of CAM (R34 million) in practice by the allied practitioners is only 1 per cent of the dispensing income of the pharmacists and allopathic practitioners together.²

Table 3 reveals that the allied professions fail to make the same financial impact by dispensing their CAM as the medical practitioners do with MCC medicines. The same can theoretically be said for traditional healers' sales of their self-made traditional products, since it has already been indicated that the traditional healers' health products only represent 10 per cent of the homeopathic sales and that the traditional healers marketing only represents 3 per cent of that of homeopathy.² The traditional healers' annual dispensing income for 2005 could not be R34 million or R5.1 billion in 2015/2016 as theoretically estimated for the allied professions. The assumed financial impact of R34 million by the an alleged 200,000 traditional healers in South Africa is further neutralised by evidence of fewer than 5,000 *bona fide* traditional healers practicing in South Africa. This finding is further supported by indications that not more than 1.4 per cent of the South African population make use of traditional healers and that there is a continuing decline in demand for the services of traditional healers since the 1990s in South Africa. This negative trend in terms of diminished demand is further aggravated by their lack of professional and organised consulting and marketing facilities, as well as medical fund backing. All these negative

factors minimise the presence of traditional healers in the health care sector. This reflects an 1–3 per cent presence of traditional healers in the South African health care sector, meaning an income of not more than R1.2 million in 2005 and an income of R0.15 billion (R150 million) for 2015/2016.

When the allied professionals' dispensing income for 2003/5 is specifically compared with the medical practitioners' dispensing income, the discrepancy is still enormous: R769,128,256 (R769 million) for the medical practitioners compared with R34,959,793 (R34 million) for the allied professionals. This reflects only a 5 per cent allocation to the allied professionals.² Above negative position of the allied professionals re-affirms the low incomes generated by the traditional healers in their practices and through sales of their pre-modern traditional health products. An income of R150 million seems to be optimal as reflected in the previous paragraph.

Indeed, the above data show that even the allied health professionals, who constitute a statutorily recognised health science group that has been regulated for more than 30 years in South Africa and who promotes themselves very strongly, can still not make significant in-roads into the general health care sector's income set-up with their CAM alone. This is notwithstanding its well-developed scientific foundation and intensive self-marketing through pharmacists and organized points-of-sale. The South African traditional healers, with their total lack of an established infrastructure (for instance formal consulting rooms, statutory status, medical aid-support), the constant decline in the demand for their services and their unscientific pre-modern health products and mixtures, is surely far worse off.

The maximum incomes of between R150 and R400 million for South African traditional healers per annum as reflected so far by the calculations of this study, seem at this stage to be acceptable and correct.

Potential income of the traditional healer's practice

Another way to determine the financial incomes of traditional healers and their health products is to calculate their potential income. This can be calculated by looking at the income generated by consultations and the sales of their pre-modern and self-made health products and mixtures. These outcomes can be calculated by analysing the allopathic and allied practitioner's practice incomes (see Table 3).

Table 3 reflects the benefits paid out in 2005 by medical schemes to the all regulated health practitioners as one comprehensive group. Medical doctors generated a total income (consultation and dispensing) of R4,402,206,860 (R4,402 million) against the total income of only R97,033,651 (R97 million) generated by the allied health practitioners. The allied health practitioners' income is only 2.2 per cent of that of the medical doctors.

This reflects the unfavourable income position of the traditional healers in South Africa: it seems that they not only occupy at most between 1 and 10 per cent of the health care market, but financially also only between 1 and 10 per cent of the health care sector's income.

The above low-income dilemma of the traditional health fraternity is further pinpointed when the total income of homeopaths, naturopaths and phytotherapists (seen as similar professions as the traditional healers) of R20,645,813 (R20 million) is compared with the medical practitioners' income of R4,402,206,860 (R4,402 million) for 2005. This comparison shows that the allied sub-group's income is less than 0.5 per cent of the medical practitioners' income.²

This outcome confirms again that the traditional healers are undoubtedly insignificant role players when it comes to income. They do not generate the extraordinary incomes alluded to in South African literature.

The low income of the South African traditional healers becomes more clear when the total consultation incomes of all the allied health practitioners is calculated (consultation income R62,073,868 or R62 million), compared to the consultation income (R3,633,078,604 or R3,633 million) of the medical doctors in 2005. In this case the income ratio between the allied and medical doctors is less than 1 per cent for the allied practitioners. [As already indicated in terms of dispensing income alone, the allied group only generated R34,959,793 (R34 million) compared to the medical practitioners' dispensing income of R769,128,256 (R769 million). In this case the ratio is less than 5 per cent].

It is clear that the traditional healers, either through their services as healers or through the selling of their traditional products, do not occupy at present more than 1 per cent of the consultation market or the dispensing markets of the South African health care sector.

Another approach in calculating an estimated income for the traditional healers is the use of the allied health

professions' total incomes of 2003/5 as a guideline. The maximum total income per annum that the allied professions could generate in 2005 was not more than R97 million. Product sales produced a maximum of R34 million and consulting clearly did not generate an income of more than R62 million. Hereto the growth compensation reflects a potential total income of R14.5 billion (R14,500 million) in 2015/2016. The unorganised traditional healers could at most generate 3 per cent of that of the allied professions, which comes to an income of R3 million in 2005 and R0.4 billion (R400 million) for 2015/2016.

The above finding of R400 million is in line with the findings so far of an annual income of between R150 and R400 million for the traditional healers, not between R2,000 and R3,400 as alleged in literature.

If the consulting fees of only the homeopaths, naturopaths and phytotherapists of 2005 are calculated, the consulting income of the traditional healers would not be more than R0.6 million and the sale of their products would generate more or less R1 million, with the total practice income R1.6 million for 2005. Hereto, with the growth compensation, the total income of traditional healers for 2015/2016 can be as little as R240 million (R0.24 billion).

Although this amount of R240 million is R60 to R160 million lower than the amounts of R300 and R400 million for 2015/2016 so far calculated, is it still a good indicator that the traditional healers of South Africa do not generate alleged incomes of between R2 and R3.4 billion (R2,000 and R3,400) per annum.

A perspective on the numbers of clients using traditional health products

In an attempt to understand the anomalies of the arguments on the income generated from sales of South African traditional healers' pre-modern and untested traditional products and mixtures, to the numbers or proportion/percentage of users of the traditional healers' services and their medical products, the focus is therefore on the number of paying clients and the number of traditional healers that practise for an income.

Another allegation that goes hand-in-hand with the unsubstantiated reflection of 200,000 and more practising traditional healers in South Africa is the allegation in South African literature that 80 per cent of South Africans consult traditional healers regularly and that this includes all the social and economic levels of Black South Africans. The claim of 80 per cent utilization and a growth in this trend

must be tested to obtain a perspective on the true usage (in rand value) of the traditional healers' pre-modern traditional products. For such an evaluation various South Africa Household Surveys between 2003 and 2013 can be used effectively be.^{3,26-30}

It seems that since 1990, there has been a constant decline in the use of traditional healers in South Africa. In 2003 it was reported that 5.2 per cent of the public consulted traditional healers monthly, with a further 6 per cent of the public reporting that they seek care from a faith healer for spiritual needs. This total of 11.2 per cent means that 88.8 per cent of the total population does not make use of traditional healers at any time. This 88.8 per cent contradicts both the claim of 80 per cent usage reflected in South African literature and the claim of a growth in the usage of traditional healers.^{3,26,28-31}

One report stated that for 2008–2011, the use of traditional healers by Black households was only 1.4 per cent per month. Furthermore, the monthly visits to healers were very low (0.02 visits) compared to the utilization rates of public sector clinics (0.18) and hospitals (0.09). The least favoured provider to use when seeking health care was the traditional healer (0.1 per cent) compared to the private medical doctor's high rating of 24.3 per cent. In total, 81.3 per cent of South African Black households used public health facilities first. This finding not only nullifies the alleged 80 per cent usage often quoted in the literature, but also the allegation that Blacks from the higher financially and better educated groups are using traditional healers more and more. It also contradicts the allegations that preference of the poor Black population is traditional healers and that these healers are inexpensive.^{3,28-31}

The 2013 National Household Survey reflects a preference rate of only 0.1 per cent for the traditional healer as the first choice health care practitioner against the preference rate of 21 per cent for medical practitioners. For the period 2004 to 2013, the average preference rate for traditional healers was only 0.2 per cent compared to an average preference rate of 22 per cent for medical practitioners.^{3,31}

An overview also reflects that of the Black households who do visit traditional healers, as many as 89.4 per cent of these visits are mostly *culturally* driven. This indicates that only 10.6 per cent of the visits are for some kind of medical reasons.³⁰ It furthermore seems that 62 per cent of Black households use pre-modern traditional products without the services of traditional healers.²⁶ This clearly indicates a further diminished income for the traditional healers.

The above findings reflect that the alleged consultation rate of 80 per cent is false: Present-day use seems to vary from less than 0.5 per cent to 1.4 per cent. This is in line with earlier findings (with impact figures varying from 1 up to 10 per cent in certain cases) of this study that the incomes generated by the traditional healers in their practices and from the selling of their pre-modern traditional health products are limited. It is indeed insignificant when compared with total annual incomes of the medical doctors, even allied health practitioners.

Discussion

The above statistical incomes of this study are theoretical calculations, done with the single aim to offer insight and obviate confusion around the present-day statements in research on the incomes generated by traditional healers and their pre-modern health products. Such a descriptive and exploratory approach is the only available solution for data collection to make up for the total lack of research and official data on the incomes of traditional healers and their medical products. This approach offers a “liberal” statistical model to test the trustworthiness of the many allegations, assumptions, generalisations and statements on the incomes of the South African traditional healers and to make theoretical conclusions.

The final findings and outcomes of this study are not *absolutes*: indeed, the findings in most cases seem to be over-estimations of the income classes discussed and the numbers can be much lower for the traditional health fraternity than the income ceilings offered here. The primary aim of the study was merely to obtain an optimal profile, even if it favours the traditional healers’ incomes, in an effort to put to rest the dispute on the *maximum incomes* of traditional healers.

Negative factors were not considered during the above calculations. One such factor is a possible future ruling on CAM by the MCC that can close down 60–80 per cent of uncertified CAM products and manufacturers. This will negatively affect the incomes of traditional healers as well.¹⁹⁻²¹ Another factor is the finding that as many as 90 per cent of the people who call themselves traditional healers may be mendacious healers by the standards of the traditional healer fraternity. This may cut the number of practising healers to fewer than 20,000, perhaps even 4,000, which can result in a significantly lower income grouping for traditional healers.⁴⁻⁶ What is more, the South African Statistical Services found in 2013 that the public’s preference for traditional healers was only 0.2 per cent between 2004 and 2013, compared to a 22 per cent

preference rate for medical doctors (ratio 1:110). This reflects a growing decrease in the preference for traditional healers and their pre-modern traditional health care and products.³¹ Also the continuing decline in the use of the traditional healer since 1990 was not calculated.²⁸

Income from criminal actions like religious, muti- and ritual murders and the trade in human body parts by certain segments in the traditional healing fraternity was not taken into account. Income generated from harvesting protected plants and animals by many traditional healers and their co-workers (illegal incomes ignored as such by the propagandists of traditional healing in their present reflections on the incomes of the traditional healers) were also not included into this study.^{3,32,33} The same approach was followed regarding the negative impact that the Suppression of Witchcraft Act No 3 (1957) and stricter law-enforcement related to protected plants and animals has had. Decreased income due to extinction of plants and animals as result of the illegal actions of traditional healers can have an impact on their income in future.^{3,32-35}

There is a lack of research on CAM-TAM and the data transformation undertaken in this research to affirm the general research statements in the literature. Statements include claims such as that the customers of the traditional healers are 26.6 million in number, that 128 million traditional prescriptions per annum are issued to clients or that 133,000 full-time employees are working in the traditional fraternity.^{1,2,4-6,9} Indeed, these statements must be rejected.

A recent South African finding that postulates that there are 68,000 full-time practicing traditional healers with an average annual income of between R2.9 billion (R2,900 million) and R3.4 billion (R3,400 million) also be rejected as untrue by this research.^{1-3,9}

It seems further that any planter, harvester and seller of any plant material in South Africa have become self-styled “traditional healers” over the years. The common and daily practice of using and the selling natural products, like herbs, vegetables and fruits, have in the minds of certain South Africans become “health science” and “health plant industry”, viewed as a health care and ethnic culture that is unique to South Africa.^{3,32,33}

It is further clear that TAM and CAM are far more intertwined in South Africa than the traditional health fraternity, the South African authorities, politicians and propagandists promoting traditional healing, like to admit.

The view that TAM and CAM are independent equals in status and income in a 50:50 dual system is suspicious and must be rejected. Some of the South African statistics claimed by the traditional health fraternity and by certain role players in TAM seem indeed to be solely applicable to CAM. As such, they declared R2 billion (R2,000 million) to R3.4 billion (R3,700 million) as “true incomes” per annum for the South African traditional healers.

It must be noted that the manufacturing and marketing of TAM are not ignored by CAM in present-day South Africa. It is only the traditional healers and their pre-modern traditional products and mixtures, on the grounds of being unscientific and dangerous, that are ignored by CAM. TAM has been acknowledged and accepted in terms of its phytopathic, etnopathic, homeopathic and naturopathic status as a subdivision of CAM. Within the CAM industry, with its established infrastructures and capital for development, the growth of formal TAM has so far been successful. This growth can be unlimited: indeed, true billions in rand income may be realised in the future. But there is no place for the unscientific and untrained traditional healers and their dangerous, pre-modern health products in TAM or CAM in modern-day South Africa.¹⁻³

The total possible maximum income of South African traditional healers as theoretically calculated and estimated in this study, seem to be between R150 million and R400 million for 2015/2016. The mean income, based on the separate five calculated incomes (R300, R400, R150, R400 and R240 million respectively), is R298 million. Even these figures (individual and average incomes) in money-value must be approached with caution, especially when read with the South African statistics finding in 2013 that the consultation of the traditional healers by the public is almost non-existent when compared with their main competitor, medical doctors. Even when compared with the allied health professions’ incomes, the traditional healers’ incomes are insignificant.¹⁻⁶

It is clear that the general public, medical doctors and other statutory health care professionals must be properly informed, perhaps even educated, about the South African traditional healing fraternity and its over-stated role in the country’s financial-and medical scenario.

Strengths and limitations

The study offers “liberal” theoretical estimates on the possible incomes generated by traditional healers’ practices and sales of their pre-modern health products, refuting the

veracity of various present-day figures, like R3.4 billion (R3,400 million) per annum.

The lack of trustworthy statistics on the incomes generated by South African traditional healers from a source such as the South African Revenue Services limited a convincing and decisive conclusion. Such a final conclusion will evade South African research for many years to come.

Conclusion

The authors believe that the South African traditional healing fraternity generate at most an annual average income of R298 million (varying between R150 and R400 million).

This study rejects the allegation that the South African traditional healers generate an annual income of between R2 billion (R2,000 million) to R3.4 (R3,400 million), roughly an average of R2.7 billion (R2,700 million). This average estimation of R2.7 billion (R2,700 million), which is based on unsubstantiated assumptions, is nearly ten times the average estimation of R298 million found by this study, based on substantiated population statistics.¹⁻⁶

The future viability and sustainability of the traditional health products and mixtures of the traditional healers and the traditional healers’ status as an independent and statutory health profession, notwithstanding their possible annual contribution of R150 million to R400 million to the GDP of South Africa, are in doubt. This doubt is further strengthened when their income data are compared with the income data of the allopathic doctors, even the allied doctors for 2015/2016. The constant decline in the need for traditional healers and their health products since 1990 strengthens this doubt.²⁸⁻³¹

We believe that CAM, as the manufacturer and seller of scientifically developed traditional health products as health/food products and traditional medicines, *outside* the traditional healers’ practices and traditional mixtures, is the true generator of the TAM incomes in South Africa. This fact is erroneously reflected in various South Africa research projects and literature as the sales incomes of the traditional healers’ pre-modern traditional health products.^{28,31,36} The writer Farouk Araie’s warning must be taken to heart when he writes:^{37,p.13} “A lie can get halfway round the world before the truth gets its boots on. History teaches us that if you tell a lie big enough and often enough, it shall be believed as truth”.

The polemic around TAM indicates a lack of understanding about *what* it really is and *who* the true role players in its

delivery in the new South Africa are. This misconception should be addressed thoroughly: only through sound knowledge can we obtain a well-managed and effective South African health care sector.

References

1. Caldis KS. Complementary medicine in South Africa: A pilot study. Cape Town; Complementary Medicine Trust/University Cape Town Actuarial Science: May 2000; 1–30 (Electronic copy store on University of Cape Town Actuarial Science web-site).
2. Gqaleni N, Moodley I, Kruger H, et al. Traditional complementary medicine. In: S Harrison, R Bhana, A Ntuli eds. *S Afr Health Review*. 2007;13:175–188.
3. Mander M, Ntuli L, Diederiks N, et al. Economics of Traditional Medicine Trade in South Africa. In: Harrison S, Bhana R, Ntuli N, eds. *S Afr Health Review*. 2007;13:189–196.
4. Moodley N. Medical aids to examine bill on traditional healers. Health System Trust 2014. [Internet]. [Cited 2016 Feb 3]. Available from <http://www.hst.org.za/news/medical-aids-examine-bill-traditional-healers>
5. Peters M. Sickening blow for alternative medicine. Health Systems Trust 2014. [Internet]. [Cited 2014 Mar 2]. Available from <http://www.hst.org.za/news/sickening-blow-alternative-medicines>
6. Pretorius E. Traditional healers. Health Systems Trust 2000. In: Crisp N, Ntuli A, eds. *S Afr Health Review*. 1999:249–256.
7. Mander M. Marketing of Indigenous Medical Plants in South Africa. A case study in Kwazulu-Natal. Rome: Food and Agriculture Organization; 1998.
8. Mander M. Medical Plant Marketing and Strategies for Sustaining the Plant Supply in the Bushbuckridge Area and Mpumalanga Province. Republic of South Africa. Pretoria: Department of Water Affairs and Forestry. 1997.
9. Caldis KS, McLeod HD, Smith PR. The fall of the Bamboo Curtain: A review of Complementary Medicine in South Africa. *S Afr Actuarial J*. 2001;1:63–93.
10. Complementary Medicine Australia. 2014 Complementary Medicines Industry Survey. [Internet]. [Cited 2016 Feb 28]. Available from <http://www.cmaustralia.org.au/resources/Documents/Reports/CMA%20Industry%20Audit%202014.pdf>
11. Allied Health Practitioners Act of 1982, No 63. Republic of South Africa. Pretoria: Government Printers; 1982.
12. Kahn T. South African GDP Growth Rate. [Internet]. [Cited 2016 Feb 27]. Available from <http://www.tradingeconomics.com/south-africa/gdp-growth>
13. Hassim A, Heywood M, Berger J. Traditional and Alternative Healthcare. In: Hassim M, Heywood M, Berger J, eds. *Health and Democracy*. Westlake: Siber Ink; 2007.
14. Richter M. Traditional Medicine and Traditional Healers in South Africa. Discussion Paper prepared for the Treatment Action Campaign and AIDS Law Project. Pretoria: Government Printers; 2003. [Internet]. [Cited 2016 Feb 20]. Available from http://healthlink.org.za/uploads/files/TAC_Law_Proj.pdf
15. WHO. Traditional Medicine: Definitions. [Internet]. [Cited 2016 Feb 27]. Available from <http://www.who.int/medicines/areas/traditional/definitions/en/>
16. Traditional Health Practitioners Act of 2007, No 22. Republic of South Africa. Pretoria: Government Printers; 2007.
17. Onyiaapat JE, Okoronkwo IL, Ogbonnaya NP. Complementary and Alternative Medicine use among adults in Enugu, Nigeria. *BMC Complement Altern Med*. 2011;11:19.
18. Renaldi A, Shetty P. Traditional Medicine for modern times: Facts and figures. [Internet]. [Cited 2016 Feb 27]. Available from <http://www.scidev.net/global/indigenous/feature/integrating-modern-and-traditional-medicine-facts-and-figures.html>
19. A prescription for danger. *Sunday Times*. 2014 May 25;p.20.
20. Brand-Jonker N. Registrasiepil nog nie gesluk. *Rapport*. 2014 Apr 13;p.3.
21. Jurgens A. State to face court battle over alternative medicines. *Sunday Times*. 2014 May 25;p.5.
22. Traditional healers of South Africa. Wikipedia Free Encyclopaedia. [Internet]. [Cited 2014 Feb 2]. Available from http://en.wikipedia.org/wiki/Traditional_healers_of_South_Africa
23. Gumede MV. Traditional healers: A medical doctor's perspective. Johannesburg: Blackshaws; 1999.
24. Bless C, Higson-Smith C. Fundamentals of Social Research Methods. An African Perspective, 2nd ed. Kenwyn: Juta; 1995.
25. Louw GP. A guideline for the preparation, writing and assessment of article-format masters dissertations and doctoral theses. Faculty Education, Mafikeng Campus: North-West University; 2013.
26. Petersen L. Comments. In: Wilkinson K. Do 80% of South Africans regularly consult traditional healers? The claim is false. AFP Foundation, Africa Check: 2013 July 3; p.1–13. (Electronic store on Africa Check web-site:

- <https://africacheck.org/report/do-80-of-s-africans-regularly-consult-traditional-healers-claim-is-false/3>).
27. Dennill K, King L, Swanepoel T. Aspects of primary healthcare: Community healthcare in Southern Africa. Oxford: Oxford University Press; 2001.
 28. Nxumalo N, Alaba O, Harris B, et al. Utilization of traditional healers in South Africa and costs to patients: Findings from a National House Survey. J Pub Health Policy. 2011;32:S123–S136.
 29. Wilkinson K. Do 80% of South Africans regularly consult traditional healers? The claim is false. AFP Foundation, Africa Check: 2013 July 31;p.1–13. (Electronic copy store on Africa Check web-site: <https://africacheck.org/reports/do-80-of-s-africans-regularly-consult-traditional-healers-the-claim-is-false/3>).
 30. Wilkinson K. Use of traditional healers vastly exaggerated. Mail and Guardian. 2013 Aug 1;p.1–9. [Internet]. [Cited 2016 Feb 21]. Available from <http://mg.co.za/article/2013-08-01-usage-of-traditional-healers-vastly-exaggerated>
 31. General Household Survey 2013. Statistics South Africa. Pretoria: Government Printers; 2014.
 32. McKean, S, Mander, M. Traditional Medicine and the Vulture Trade: Case study. In: Harrison, S, Bhana, R, Ntuli, N, eds. S Afr. Health Review. 2007;13:197–199.
 33. Ah Goo, DFS. The contribution of the trade in Medical Plants to urban livelihoods: A case study of the informal markets in the Nelson Mandela Bay Municipality, Eastern Cape. Master's dissertation. Port Elizabeth: Nelson Mandela Metropolitan University; 2012.
 34. Witchcraft Suppression Act of 1957, No 3. Republic of South Africa. Pretoria: Government Printers; 1957.
 35. Starbird, M. Meaning from Data: Statistics Made Clear. Virginia: The Teaching Company; 2006.
 36. Churnalism or News? How PRs have taken over the media. Available from <http://www.theguardian.com/media/2011/feb/23/churnalism-pr-media-trust>(Accessed 26/02/2016).
 37. Araie, F. Trump exposes CIA's fibbing over Clinton's e-mails. Citizen. 2017 Jan 4;p.13.

PEER REVIEW

Not commissioned. Externally peer reviewed.

CONFLICTS OF INTEREST

The authors declare that they have no competing interests.

FUNDING

None

Table 1: Turnover on complementary medicines and health products (in Rand thousands)²

Product category	1998	1999	2000	2001	2002	2003
Homeopathy	41,172	47,693	52,509	52,678	57,766	68,102
Homeopathic remedies	24,917	29,429	32,445	30,502	33,270	41,236
Tissue salts	2,216	2,706	2,631	3,629	3,742	4,107
Homeopathic creams	4,648	5,397	6,642	5,755	6,209	6,487
Anthroposophical medicines	7,100	7,600	7,910	9,697	9,327	9,327
Energy substances	2,291	2,561	2,881	3,094	5,219	6,946
Herbal medicines	45,862	65,705	86,733	111,034	145,252	141,673
Western herbal medicine	45,593	65,018	84,967	107,171	133,609	129,717
Chinese herbal medicine	-	-	-	3,093	8,592	7,273
Ayurveda & Unani-Tibb	0,269	0,326	0,326	0,220	1,051	2,684
African herbal medicine	-	0,360	1,440	0,550	2,000	2,000
Aromatherapy	3,475	4,711	6,083	9,928	11,392	11,075
Nutritional supplements	254,419	297,192	326,070	587,520	714,573	889,066
Vitamins	60,501	70,553	88,812	53,640	69,329	72,419
Minerals	46,506	47,402	54,080	45,233	48,543	62,768
Amino acids	4,915	5,835	6,455	4,707	4,410	12,437
Multivitamins	55,274	67,343	70,314	95,069	104,202	113,224
Vitamin / mineral	42,512	53,083	52,273	200,297	216,152	256,703
Vitamin combinations	44,712	52,977	54,137	180,168	257,919	338,307
Other combinations	n/a	n/a	n/a	8,405	14,018	33,206
Foods	1,74,212	240,334	319,179	208,688	230,042	238,550
Food supplements	58,753	90,461	126,074	48,914	59,634	65,259
Sports nutrition	21,934	27,272	32,924	12,109	17,307	29,846
Slimming products	46,269	58,226	56,863	49,536	59,798	47,598
Health drinks	24,257	31,216	64,574	60,507	43,934	48,670
Herbal teas	13,088	20,715	23,963	28,872	38,322	36,400
Total invoiced sales revenue (excluding VAT)	519,141	655,636	790,573	969,848	1,159,027	1,348,466

Derived: Gqaleni et al.,^{p.185}
Table 2: Retail structure for complementary medicines

Retail outlets	Number of outlets	% of business
Health food stores	250	20
Pharmacies	2,500	50
Supermarkets, chain stores, toiletry discounters	600	30

Derived: Caldis,^{1 p27}

Table 3: Medical scheme expenditure on CAM, 2005 (in Rands)²

All registered schemes in 2005	Total benefits
General practitioners	3,633,078,604
Complementary practitioners	62,073,868
Chiropractors & Osteopaths	40,962,086
Homeopaths	20,617,553
Naturopaths & phytotherapists	28,260
Therapeutic massage, aromatherapy & reflexology	319,299
Ayurveda practitioners	144,662
Acupuncture & Chinese medicine	2,008
Medicines	7,185,152,825,825
Dispensed by pharmacists	6,381,064,777
Dispensed by practitioners	769,128,256
Dispensed by allied and support professionals	34,959,793
Total benefits	45,620,539,398

 Derived: Gqaleni et al.,^{2 p. 183}