

An Analysis of The Use of African Traditional Medicine by adult patients attending a Primary Health Care Clinic in Durban, KwaZulu-Natal

Submitted in partial fulfillment of degree MMed(FamMed) to the University of Kwazulu-

Natal

Name: Dr Maphophe T.S

Student Number: 983171922

Supervisor: Prof S.S Naidoo

ABSTRACT

Background: Current evidence indicates that more and more people worldwide are using complementary and alternate medicines. About 80% of people in Africa and Asia have been reported to be using traditional medicines in preference to allopathic medicines.¹

Aim: The study intended to evaluate the prevalence and practice of using traditional medicines by a cohort of patients accessing a local state-clinic located in a semi-urban area in KwaZulu-Natal.

Methodology: All patients attending the chosen local primary health care clinic in Durban South formed the sample population and a systematic random sampling method was used to determine the study sample. Data were analysed using Statistical Package for Social Sciences (SPSS) - version 19.

Results: A total of 299 patients participated in the study. Of these, 224 were female, 73 male and 2 were unspecified. The majority of participants (n=109) were in the age group 20-29 years. The study found that 112(37%) of all participants admitted to the use of African traditional medicines and the majority of these (78%) used them because they expected their illnesses to improve.

Conclusion: This study was conducted among Black African study subjects in a predominantly Black African suburb in South Africa; the study results may have been influenced by this bias. A larger study using a bigger and perhaps more diverse study population is recommended to validate the findings shown in the above pilot study.

ACKNOWLEDGEMENTS

Thanks to my family, especially my wife, for the support that she has always been giving me throughout the study programme.

I would like to acknowledge my supervisor Prof S.S Naidoo for his continuous support. I would also like to thank Dr A.J. Ross for advice given during the drafting of my research protocol, and Dr G. Marincowitz for assistance and advice in the manuscript design and layout.

Thanks also to Mr Sam Ntuli, the Senior Biostatistician at the University of Limpopo - Medunsa Campus, and Mrs Fikile Nkwanyana, a statistician from the University of Kwazulu-Natal, for their statistical support in both the protocol write-up and also the analysis of my research data.

I would also like to extend my sincere gratitude to Mr M.M Mohlake, from the University of Limpopo – Turfloop campus, for the advice on the use of language in the manuscript write-up.

DEDICATION

I dedicate this work to my family. They were very supportive to me throughout the period of study. I also dedicate this research project to my many patients because I am assured that after this qualification I am going to be a better clinician and will be able to serve them better as a family physician.

ACRONYMS AND ABBREVIATIONS

CAM Complementary and Alternative Medicines

TCAM Traditional Complementary and Alternative Medicines

HIV Human Immunodeficiency Virus

ART Anti-Retroviral Treatment

PHC Primary Health Care

USA United States of America

WHO World Health Organization

Table of Contents

Abstract:	i
Acknowledgements:	
Dedication	
Acronyms and Abbreviations	
Chapter 1: Introduction and background	1
1.1 Introduction	1
1.2 Rationale for the Study	2
1.3 Aim.	2
1.4 Objectives	3
Chapter 2: Literature Review	4
2.1 Introduction	4
2.2 Use of Traditional medicines in the international context	5
2.3 Use of Traditional medicines in the African context	7
2.4 Use of Traditional medicines in the South African context	8
Chapter 3: Methodology	10
3.1 Study Design	
3.2 Study Site	10
3.3 Study Population	10
3.4 Sampling Methods	11
3.5 Study sample size	12
3.6 Data Management	13
3.6.1 Data collection	13
3.6.2 Data handling	13
3.7 Data analysis	13
3.8 Ethical Consideration	14
3.9 Validity and Reliability	14
3.10 Bias	14
Chapter 4: Results	16
4.1 Demographic Characteristics of the Participants	
4.2 Prevalence of Use of Traditional Medicine at a PHC in a Semi-Urban Area	
4.3 Relationship between Use of Traditional Medicine and Demographics	
4.4 Participants Reasons for Use of Traditional Medicine	
Chapter 5: Discussion of Results and Conclusion	21
5.1 Main Findings	
5.1.1 Demographic characteristics of Study Participants	21
5.1.2 Prevalence of Traditional medicine Usage.	
5.1.3 Participants' reasons for use of Traditional Medicines.	

5.2 Limitations	
5.3 Conclusion.	24
References:	
Appendices	248
Appendix A: Questionnaire	
Appendix B: Ethics Approval Letter	32

CHAPTER 1

INTRODUCTION AND BACKGROUND

1.1 Introduction

The World Health Organization (WHO), observed that about 80% of the population in Africa and Asia depend on traditional remedies for primary health care. This was further confirmed by two studies done in Africa. A study by Kofi-Tsekpo M, showed that in Africa more than 85% of the people relied on traditional remedies for their ailments. According to a study done by *Hamill et al.*(2000), in rural Uganda, the use of "herbal medicines" amongst people living in rural places in Africa was found to be high. This is thought to be influenced by the increasing price of allopathic health care.

Whilst working as a medical practitioner in a Durban public hospital, I observed that some of my patients would miss their appointments only to return with medical complications which I thought were due to poor adherence to the medications I prescribed. On questioning them, I discovered that most had substituted my prescribed allopathic medicines with African traditional medicines. Some of them would present with complications related to their use of these medicines. The most common presenting secondary clinical problems or complications related to usage of herbal medicine were liver and kidney problems.

A review of safety issues with herbal medicines by Boullata and Nace, showed that the incidence of liver enzyme elevation associated with Chinese herbal medicines was 1%.⁴ Though the above study does not specifically refer to African traditional medicines, I also made an inference that perhaps some of the liver related complications observed in my

patients in my the hospital where I worked, could have been due to African traditional medicines used by these patients.

1.2 Rationale for the Study

Many of the studies in Africa including South Africa have focussed on rural populations, and showed the prevalence of use to be high.¹⁻³ My study sought to clarify if there were any differences between rural and urban populations in using traditional medicines.

As a medical practitioner in a Durban public hospital, I observed a frequent pattern of patients missing their appointments only to return with complications which I assumed were due to either poor adherence to the medication prescribed, or self-substitution of these with traditional remedies. Many of my patients acknowledged the latter reason to be correct. The current study was therefore designed to ascertain the extent of this practice in another clinical setting.

It is hoped that the findings of this study on the use of African traditional medicine will assist health authorities to allocate appropriate educational and awareness resources, and thereby lead to responsible use of traditional medicines as adjuvants or alternates. This study may also open a window of opportunity for further exploration of the use of traditional medicines in other settings.

1.3 Aim

The aim of this study was to analyse the use of African traditional medicine by adult patients accessing a local primary health care clinic in the Durban south area.

1.4 Objectives

The objectives of this study were:

- 1. To establish socio-demographic characteristics of patients participating in the study who used traditional African medicines.
- 2. To establish the prevalence and use of traditional medicine by adult patients using a primary health care in a semi-urban area in Durban.
- 3. To establish the reasons for choosing traditional medicines.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

African traditional medicine is believed to be more attractive to the "consumer" because it uses an outcome-contingent contract.⁵ What happens in this kind of contract is that the user pays a minimal fee for the initiation of therapy and pays the rest based on the outcome of their consultation with the healer. It is very easy for African traditional medicine to operate practically within this kind of contract because most people feel there is a spiritual explanation to their illness and thus traditional healers can communicate with these spirits to tell them the outcome of their illness.^{5,6} The study by Leonard, also reasoned that it would be difficult to replicate the same practice in allopathic medicine settings, since patients may lie about the outcome of therapy.⁶ It was felt that it was easier to implement in traditional medicine settings since patients believed that the healer could actually visualise the outcome and be able to see if they were lying and in turn cast a spell on them, making them sicker.

It is believed that the language used in an African traditional consultation is one that the consumer can identify with, and this may have influenced the type of care preferred by most Africans. A study by Conco (1967), reported that most of the words used in a Western consultation, were not the kind that African people could identify with. In a study done by *Schouten et al.*(2005), in the Netherlands, it was found that there was a gap in the allopathic consultation, particularly in the doctor patient communication, hence the patients failed to understand the instruction given to them. Another study done in the United States of America (USA) noticed that patients may not concentrate well during a consultation if a lot of technical terms were used.

Hence, it was reasoned that Africans may find it expedient to use African traditional medicine as an adjunct to allopathic care.⁷

2.2 Use of traditional medicines in the international context.

Studies have shown that there is a trend especially in the USA to move from allopathic to complementary and alternative medicines (CAM). The rate of use increased from 34% in 1990 to 42% in 1998.¹⁰ This reported trend prompted a move by 75 out of the 125 universities in the USA to offer some form of complementary and alternative medicine teachings within their medical curricula, and thereby improve awareness and understanding of the use of CAM.¹¹

Studies have also shown that the trend in the USA is comparative to that in other parts of the world, for example in New Zealand where a study amongst inpatients in a provincial hospital has shown the rate of use to be at 48.8%,¹² and another study done in Sri Lanka amongst 500 cancer patients has shown the rate to be at 67.4%.¹³

Two studies showed conflicting results in terms of use of CAM. In one study it was revealed that most of the CAM users were above the age of 35 years, whilst in another study, the CAM users were of the mean age of 38.5 years compared to the non-users whose mean age was 40 years.^{14,15}

In a study looking at CAM use in patients with cardiovascular disease, it was found that most patients prefer to use biological rather than chemical products. ¹⁶ This study also showed that, though some of these medications could act synergistically with mainstream medications, there were others that interfered with the action of used drugs. The use of

biological products as the most common form of therapy was also shown in a study by AlOudimat et al.(2011), which showed the rate of use to be 75%. ¹⁷

Though a number of studies have shown that increasing numbers of people are using CAM, the safety of these remedies has not been adequately described in any literature. It has also been recommended that a way forward for registering these products should be sought since many patients who seek allopathic care have in one way or the other been exposed to these remedies.¹⁸

The study done by *Barner et al.*(2010), suggested that, for some patients, it is their belief system that makes them use complementary medicine rather than Western medicine.¹⁹ In this study amongst the African-American populations, it was shown that African Americans used Complementary and Alternative Medicine (CAM) for specific health related problems. Although there is insufficient evidence to prove that CAM is effective for the treatment of any condition, many people still used it as an adjunct to mainstream (allopathic) medicine.

A study done in America looking at the use of integrative medicine for the treatment of asthma amongst children has shown that most parents used these different modalities in a complementary manner and not necessarily in a competitive manner.²⁰ In a study done in Korea by *Yun et al.*(2013), they have shown that the use of CAM had an impact on the health related quality of life of the patients using it compared to those who did not.²¹ In the same breath, another study done in Malaysia by *Hassan et al.*(2010), amongst HIV positive patients had shown mixed results.²² This study had shown that although some forms of CAM may be beneficial to patients who are HIV positive (in that it can suppress the viral

load and cause an increase in the CD4 count) other forms have been shown to be detrimental to the patient's health leading to a host of side effects. A study done in Taiwan has shown that some forms of CAM used in cancer patients may cause distress in the people that are using them.²³

2.3 Use of Traditional medicines in the African context

The use of traditional remedies in Africa is known to be 80%.²⁴ This study also showed that most of these traditional remedies were plant based and indigenous to the area where the users reside. These findings were supported by *Tabuti et al.*(2012), who reported that most of the people of Uganda had a vast knowledge of traditional medicines and used them as first line before using prescribed western remedies.²⁵

In their research on the treatment of childhood illnesses, *Friend-du Preez et al.*(2009), showed that most African people would take their sick children first to a traditional healer or a diviner to establish the problem with their child before seeking other medical attention.²⁶ The authors concluded that some African patients would only come to the hospital if the former method had not yielded any results.

Research done by Friend-du Preez *et al.*(2009), and *Okpako et al*(1999), highlighted that most Africans continue to believe that their illnesses are caused by other people (ukufakwabantu), using supernatural means to send these diseases to others and thus natural or traditional remedies are needed to deal with these.^{5,26} In other words, most African people believed that the origin of their diseases was supernatural; hence the method of treatment employed by traditional healers made more sense to them than the use of allopathic medication.

In another study done in Lagos, Nigeria it was shown that most of the study participants (58%) believed that the herbal medicines were safe to use and 22.9% believed otherwise; 19.1% of these participants were uncertain.²⁷ In this study, the people who believed that these were safe to use cited the reason that these were natural products hence they could not do any harm to the user. This was because most of their products were plant extracts.

2.4 Use of Traditional medicines in the South African context

South Africa is a multi-cultural society and has a diverse approach to treatment of ailments and diseases. It is estimated that almost 70–80% of the population consult traditional healers, and that up to 70% of the population make use of plants in their daily lives for health care. Stafford et al. (2008), in their study on the use of traditional medicines for mental illness, found that most Black South Africans used traditional medicines rather than allopathic medicines. They postulated that the reason for this phenomenon was that the traditional medicines were cheap, individualized and culturally appropriate, thus offering a kind of health care approach that users could identify with.

One of the factors believed to contribute to the high prevalence of use of traditional medicines is that the allopathic medical sector has a limited number of practitioners that are unable to cater for the needs of a large population. This made it difficult for the allopathic doctor to offer individualized care that most patients want, hence the preferential use of traditional healers.³⁰ In support of this theory, research by *Mills et al.*(2005), looking at the use of traditional medication in the management of HIV, showed that most people, especially those with limited access to health care facilities, used traditional healers and traditional remedies to manage any illnesses, including symptomatic HIV.³¹ This study

suggested that this scenario would be applicable particularly for those still awaiting Anti-Retroviral Treatment (ART). In another study by *Peltzer et al.*(2008), on the use of traditional Complementary and Alternative Medicine for HIV patients in Kwazulu-Natal, South Africa, it was shown that even those already on ARTs used these traditional remedies as an adjunct to the given drugs for associated symptoms such as pain, etc.²⁸

According to a study done by *Makunga et al.*(2008), looking at the South African context, there is an apparent increase in the use of CAM by allopathic doctors.³² This study has attributed this growth to the commercialisation of traditional plants and their contribution to the cosmeceutical, nutraceutical and pharmaceutical industries.

CHAPTER 3

METHODOLOGY

3.1 Study Design

This descriptive cross-sectional study was conducted at a Primary Health Care (PHC) clinic in a peri-urban setting within Durban, KwaZulu-Natal.

3.2 Study Site

This study was done at the local PHC clinic in a township 20km outside Durban central, with a population of 29879 (99% of which are of African descent).³³ The township has 1 clinic and has easy access to the Wentworth District Hospital, which is less than 10km from the township. The chosen PHC clinic has 5 professional nurses, 1 enrolled nurse, 1 enrolled nursing assistant, 1 acting clinic manager, 1 clerk and 2 clinic attendants (cleaners). The population of this area therefore has access to a clinic and a hospital as well as a medicine market locally (often referred to as a 'muti-market'), where they can purchase herbal medicines without a prescription.

3.3 Study Population

The study population included all adults older than 18 years of age who presented for care at the clinic between the 1st and the 30th of November 2012. The selection of this age group was informed by the National Health Act (Act 61 of 2003), which defines the age of consent to take part in a study.³⁴ Another Act that influences the choice of age group is the Children's Act of South Africa (Act 38, Chapter 2, Section 17) of 2005 as amended in 2010.³⁵ This Act states that anyone over this age is considered an adult and is allowed to

make legally binding decisions without a guardian's consent since they are by definition a major.

3.4 Sampling Method

The purpose of sampling is to allow generalization of the results to the population. The sampling method used in the study was systematic random sampling where all patients who met the inclusion criteria, and agreed to participate were allowed to participate. This sampling method was chosen to ensure non-exclusion of patients who could add value to the study. The assistant researcher invited the clients/patients to participate in the study during the above mentioned period. Every fourth patient attending the chosen clinic was invited to be part of the study. If the chosen patient refused, then the next patient would be invited following whom then every fourth patient was invited. The sample size was chosen in that manner until the desired number was reached.

Inclusion criteria

- All adult patients attending the Durban south coast PHC facility within the period stipulated above, until the required number was reached.
- All participants who agreed to be part of this survey.

Exclusion criteria

- Patients who refused to take part in the study
- Patients who were below 18 years of age

3.5 Study Sample Size

A biostatistician was approached to help calculate the sample size needed for the study. A study by Van Staden reported that 70% of the study subjects used traditional medicine.²⁹ The sample size for this study was calculated as follows:

$$n = \frac{Z^2 p(1-p)}{e^2} = 323$$

Where:

Z = confidence level of 95%;

p = proportion of people who use traditional medicine ~ 70%

 $e = sampling error \sim 5\%$

The sample size was adjusted using the formula below:

$$n_0 = \frac{n}{1 + \frac{n-1}{N}} = 299$$

Where:

 n_0 = is the adjusted sample size

n= sample size ~ 323

N= is the total population size ~ 4050 (District Health Information System)

.

Therefore, the sample size used for this study was 299 patients.

3.6 Data Management

3.6.1 Data Collection

The structured questionnaires were self-administered by the participants. The assistant researcher who was fully bilingual (English and isiZulu) assisted this process and provided translation (if required), clarification and guidance on how to fill in the questionnaires and minimise errors in responses.

The questionnaire used for this study was translated into isiZulu, which is the language used by almost all clients presenting to this clinic. Those who were literate were given the questionnaire to complete on their own, and those who were not were assisted by the research assistant. The questionnaire was first piloted amongst five clients from a clinic with a similar setting as the study site, to assess understanding of the questions prior to the onset of the study. No amendments were made to the questionnaire as these were not necessary.

3.6.2 Data Handling

All the completed questionnaires have been secured by the researcher in a safe place, to ensure safe handling and confidentiality.

3.7 Data Analysis

The data collected was captured and subsequently analysed using the Statistical Package for Social Sciences (SPSS) version 19. Descriptive statistics such as frequencies and proportions were used for summarizing data. The Pearson Chi-square test was used to test for statistical association between demographic data and use of traditional medicine. ANOVA was used to test association between demographic data and reasons for use of traditional medicine. Level of significance (p value) was set at 0.05.

3.8 Ethical Considerations

The Ethics Committee and the Post Graduate Committee of the University of KwaZulu-Natal approved the study (BREC Approval BE201/11-Appendix B). Permission to conduct the study at the clinic was granted by facility management. The questionnaire was anonymous and the participants were assured of confidentiality. The information gathered was used only for the purposes of this study and this was explained in the consent form.

3.9 Validity and Reliability

Validity: This is a measure to ensure that the questionnaire measured the intended variables.

Reliability: This is a measure to ensure the dependence of the questionnaire in measuring the same thing every time it is intended. The questionnaire was piloted at another site similar to the study site to ensure that the study was understood in the same way and to ensure that it measured the intended variables.

3.10 Bias

Bias: This is defined as anything that produces a systematic (but unexpected) variation in research findings. In this study, the following biases were noted:

Selection bias: Refers to the selection of certain people and leaving others out of the study who would add value. In this study, this was minimized by using a simple random sampling method, wherein every fourth person was invited to take part in the study.

Admission bias: The study was done only at the chosen clinic and may not really explain the general community patterns of health use. Because of the timing of the

study, some other patients might have not sought health assistance in that period, thus leading to their exclusion from the study.

Volunteer bias: people who volunteer may have some ulterior motives, which may not add any value into the study. This usually happens if there is compensation to be gained. In this study, people were approached to take part in the study and no compensation was given.

Information bias: It happens when the estimated effect is distorted either by an error in measurement or by misclassifying the subject for exposure and/or outcome variables. In this study, groups were not stratified.

Interviewer bias: Results when systematic differences occur in the soliciting, recording or interpreting of information from study subjects. On soliciting the results, the subjects might have given false results, especially if they knew that the researcher was a medical doctor. To deal with this, only two interviewers (one being the appointed research assistant), were used. The research assistant was trained by the primary investigator.

Questionnaire bias: Questionnaire bias results when leading questions or other flaws in questionnaire design result in a difference in accuracy between compared groups. The wording of the questionnaire was such that leading questions were minimized. The questionnaire was piloted in a clinic of similar status as the study site.

CHAPTER 4 RESULTS

4.1 Demographic Characteristics of the Participants

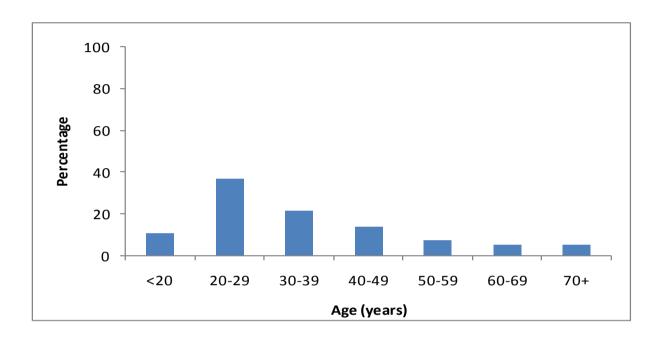


Figure 1. Age distribution of participants

A total of 299 people participated in this study. Of these, 36% (n=109) were in the age group 20-29 years (**Figure 1**), followed by 21% (n=64) in the age group 30-39 years, and 14% (n=42) being 40-49 years. Twenty one participants (7%) were in the age group 50-59 years; 16(5%) in the group 60-69 years, and 15(5%) were 70 years or older. The mean age of the participants was 35.1 ± 15.8 years (range: 18 to 83 years).

Figure 2 shows the gender distribution of the participants. Seventy-five per cent (n=224) of the participants were female. Two (1%) study participants did not indicate their gender.

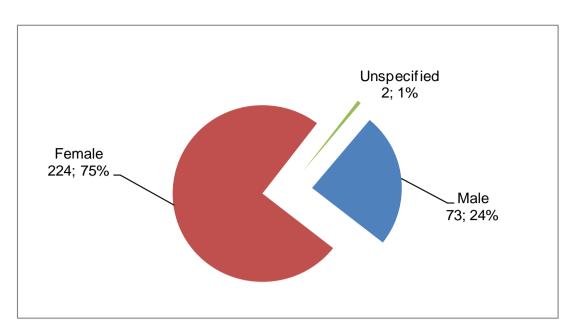


Figure 2. Gender distribution

Figure 3 illustrates the distribution of participants' marital status. Two hundred and twenty-one (75%) of the participants were single, 18% (n=53) were married, 5% (n16) were widowed, and 2% (n=5) were divorced.

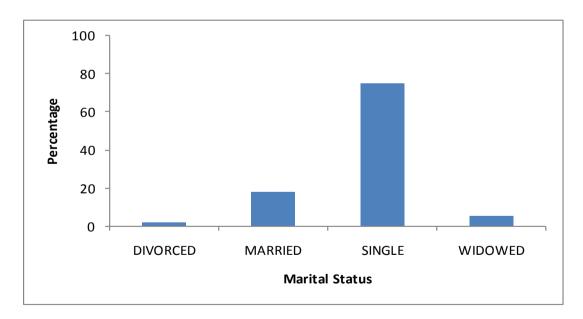


Figure 3. Distribution of Marital Status

4.2 Prevalence of use of traditional medicine

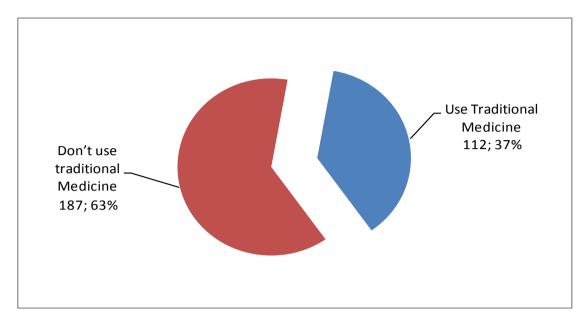


Figure 4. Proportion of participants who used traditional medicine

Thirty-seven per cent (n=112) of the study participants indicated that they used traditional medicine and a large proportion (63%; n=187) of them did not use traditional medicine (**Figure 4**). Twenty-nine (27%) of the study participants said the type of traditional medicine they used were liquids; 20% (n=22) used leaves, 6% (n=7) used powder, and 3% (n=4) used roots. The majority 43% (n=47) indicated that they used a mixture of the above (**Figure 5**).

Sixty-one (58%) participants said they received these medicines from the traditional healers, 29% (n=31) from a "muti-market", 6% (n=6) said they collected the medicines themselves from the "bush" and 7% (n=7) said it got it both from both the "muti-markets" and traditional healers.

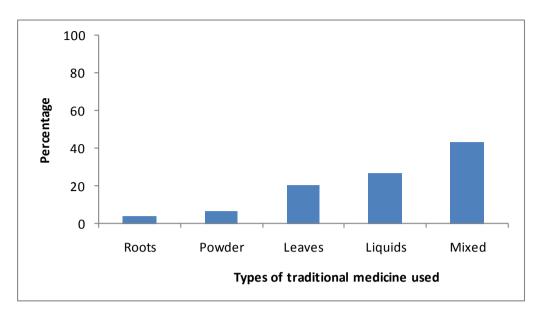


Figure 5: Types of traditional medicine used

4.3 Relationship between Use of Traditional Medicine and Demographic variables

Table 1 shows the relationship between use of traditional medicine and selected demographic characteristics of the study participants. There were no statistically significant differences for all variables studied.

Table 1: Use of traditional medicine

	Use traditional	Don't use	p-value
	medicine, n=112	Traditional	
		medicine, n=187	
Age (years)	35.9±16.0	34.7±15.7	0.536
Gender			
Male	33 (29%)	40 (22%)	0.111
Female	78 (71%)	146 (78%)	
Marital status			
Single	84 (76%)	138 (75%)	0.570
Married	18 (16%)	35 (19%)	
Divorced	1 (1%)	4 (2%)	
Widowed	8 (7%)	8 (4%)	

4.4 Participants reasons for use of traditional medicine

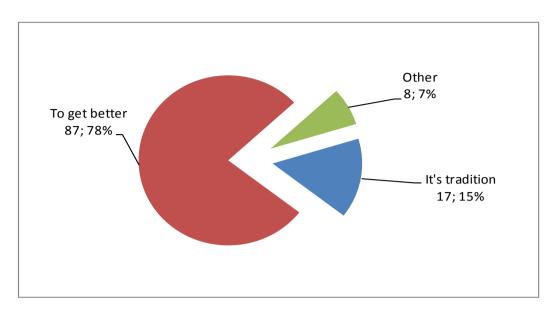


Figure 6: Reason for use of traditional medicine

Of the 112 participants who used traditional medicines, 78% (n=87) said they used them to get better from sicknesses; 15% (n=17) said they followed tradition; and 7% (n=8) had other reasons (**Figure 6**). There was no significant differences between reasons given by age (p>0.05) and gender (p>0.05). However, a significant relationship between reasons for use of traditional medicine and marital status (p<0.05) was observed (**Table 2**).

Table 2: Reasons for use of traditional medicine.

	Reason for use of traditional medicine				
	It is	To get	Other	p-value	
	traditional	better			
Age(years)	32.5±13.4	36.8±16.8	32.8±12.2	0.515	
Gender					
Female	12(15%)	63(81%)	3(4%)	0.106	
Male	5(15%)	23(70%)	5(15%)	0.106	
Marital status					
Single	12(14%)	65(78%)	7(8%)		
Married 4(22%)		14(78%)	0(0%)	0.016	
Divorced	0(0%)	0(0%)	1(100%)	0.010	
Widowed	1(13%)	7(87%)	0(0%)		

CHAPTER 5

DISCUSSION AND CONCLUSIONS

5.1 Main Findings

Most of our study participants were females and in the age group 20 – 29 years of age, and most were single. Our study revealed that about 37% of the clients attending a local primary health care clinic in a semi-urban area, using a Durban south coast clinic as a study site, used African traditional medicines. Though there were no statistical differences in the demographic characteristics of the users, it was shown that most of them used traditional medicines to get better. The findings are further discussed below.

5.1.1 Demographic Characteristics of the Study Participants

In our study, 36% of the study participants were in the age 20-29 years, 75% were female and 75% were never married. These findings were similar to the findings reported in a cross-sectional descriptive study conducted in KwaZulu-Natal Province of South Africa to assess use of traditional medicine among HIV patients; 43.5% of the participants was in the age group 30-39 years; 70.9% was females; and 71% were never married.²⁸ These results were also similar to another study done in KwaZulu-Natal in 2011 where a large number of the participants were female (70.5%).³⁶

Most of the participants who used traditional medicines in our study were females (71%) and most were single (84%). In this study, there were no statistical differences between the use of traditional medicines and gender (p>0.05), or marital status (p>0.05). This differed from a study done by *Singh N et al.* (1996), which showed that 94% of the participants who admitted to the use of CAM were older than 35 years. ¹⁴ In this study, there was no correlation with race and education. In another study done by *Ostrow et al.* (1997), it was

found that most of the complementary medicines users were younger (mean age 38.5 versus 40), though the marital status was not mentioned. The two studies cited above were international studies. My search for local studies which elaborated on the demographic differences of those who used TCAM did not yield any results. In the local studies that I have looked at, only the demographic characteristics of the participants were mentioned and not of those who used TCAM.

5.1.2 Prevalence of Traditional Medicine Usage

In our study, 37% of the patients reportedly used some form of traditional remedy compared to the 63% who denied using traditional remedies. These findings were comparable to those found in other studies done in developed and developing countries. *Evans et al.*(2008), reported that 48.8% of the in-patients treated at a provincial hospital in New Zealand had used herbal therapies. In another study, *Duggan et al.*(2001), reported that 67% of their study patients used CAM at some time to control HIV. In the Kabarole District, Western Uganda, 63.5% of AIDS out-patient reported that they used traditional herbal medicine after HIV diagnosis. *Peltzer et al.*(2008), in their study conducted in Kwa-Zulu Natal among HIV patients, illustrated that 51.3% of their participants commonly used traditional CAM and only 29.6% used herbal therapies.

The types of traditional medicine used by the participants in our study were: liquids (7%), leaves (20%), powder (6%), and roots (3%). A large proportion (43%) of the participants indicated that they used mixed traditional medicine. In their study at an outpatient setting in Ohio and Toledo, *Duggan et al.*(2001), found that the major forms of CAM used were exercise (43%), lifestyle changes (38%), dietary supplements (37%), counselling (27%), and herbal medications (26%).³⁷ *Peltzer et al.*(2008), in their study indicated that the major

herbal remedies that were used prior to ART were unnamed traditional medicine, followed by "imbizacanova, izifozonke, African potato, stametta and ingwe". ²⁸ The most frequently used traditional medicines according to another study in South Africa across two provinces(Gauteng and Mpumalanga), in which 68% of the participants were South African, were African potato and Aloe vera. ³⁹

5.1.3 Reasons for Use of Traditional Medicine

The majority of our study participants used traditional herbal medicines for treatment of none-specific sicknesses. The majority (87%) stated that they used these remedies to get better. Other reasons were also forwarded in a number of studies conducted locally and abroad. Herbal remedies were used mainly for pain relief, as an immune booster and for stopping diarrhoea by persons living in rural areas of KwaZulu-Natal.³⁶ The main reason given by cancer patients for usage of traditional medicine in Sri Lanka was that it would cure their cancer.¹³ In Malaysia, traditional medicine is commonly used for health problems and health maintenance.⁴⁰ A Jamaican study reported that the common reason given by patients for using traditional medicine was that there is no harm in them and hospitals prescribe western based medicine alone, which was perceived to be inadequate.⁴¹ In this study, 78% of the participants who used traditional medicine used it to get better from sicknesses and 15% said it was a tradition to use herbal medicine.

5.2 Limitations

The study was done in a peri-urban community which is predominantly populated by Black South Africans. Additionally, the patients or clients accessing the study site are predominantly Black Africans of all ages. The results cannot therefore be generalizable to other communities, other population groups and to the rest of the country.

5.3 Conclusion

This study was conducted among Black African study subjects in a predominantly Black African suburb in South Africa; the study results may have been influenced by this bias. A larger study using a bigger and perhaps more diverse study population is recommended to validate the findings shown in the above pilot study.

Notwithstanding the fact that this was a pilot study with a small number of participants, our study has provided some indication that African traditional medicines are popular among Black African patients who access the local health care system. Much remains to be done in creating awareness and improving knowledge of these traditional medicines within lay communities. There is a need for further education of the clinic clients on the dangers of using combinations of both proven and unproven remedies upon their health, and the difficulties these would pose in terms of identification and control of the offending agent should there be a problem.

This study suggests that there may be some inadequacies in the allopathic/western health provision that make patients reluctant to give up the traditional remedies that are used to alleviate illnesses.

The findings of this study may not be indicative of the practices in the rest of the country since it involved a small cohort of participants of just one race and in one township, but as mentioned above, this may serve as a basis to influence a change in behaviour and for another bigger study which would be more diverse.

References:

- 1. Traditional Medicine Fact sheet no. 134. 2008. (Accessed at http://www.who.int/mediacentre/factsheets/fs134/en/. in March 2013)
- 2. Kofi-Tsekpo M. Institutionalization of African traditional medicine in health care systems in Africa. African Journal of Health Science 2004;11:i-ii.
- 3. Hamill FA, Apio S, Mubiru NK, Mosango M, Bukenya-Ziraba R. Traditional herbal drugs of southern Uganda. I journal of Ethnopharmacol 2000:281 300.
- 4. Boullata JI, Nace AM. Safety Issues with Herbal Medicine. Pharmacotherapy: The journal of Human Pharmacology and Drug Therapy 2000;20:257-69.
- 5. Okpako DT. Traditional African medicine: theory and pharmacology explored. Trends in Pharmacological Sciences 1999;20:482-5.
- 6. Leonard KL. African traditional healers and outcome-contingent contracts in health care. Journal of Development Economics 2003;71:1-22.
- 7. Conco WZ. The African Bantu traditional practice of medicine: Some preliminary observations. Social Science & Medicine 1967;6:283-322.
- 8. Schouten BC, Meeuwesen L, Harmsen HA. The impact of an intervention in intercultural communication on doctor—patient interaction in The Netherlands. Patient Education & Counseling 2005;58:288-95.
- 9. Liz S. Study: Doctors out of sync with cancer patients' wishes. USA today 2007. (Accesed at http://usatoday30.usatoday.com/news/health/2007-01-21-cancer-doctors-communication x.htm. in March 2013)
- 10. Eisenberg DM, Davis R, Ettner SL. Trends in alternative medicine use in the United States 1990-1997. Journal of the American Medical Association 1998;280:1569-75.
- 11. Berman BM. Complementary medicine and Medical education. British Medical Journal 2001;322:127-132.
- 12. Evans A, Duncan B, McHugh P, Shaw J, Wilson C. Inpatients' use, understanding, and attitudes towards traditional, complementary and alternative therapies at a provincial New Zealand hospital. New Zealand Medical Journal 2008;121:21-34.
- 13. Broom A, Wijewardena K, Sibbritt D, Adams J, Nayar KR. The use of traditional, complementary and alternative medicine in Sri Lankan cancer care: Results from a survey of 500 cancer patients. Public Health 2010;124:232-237.
- 14. Singh N, Squier C, Sivek C, Nguyen MH, Wagener M, Yu VL. Determinants of nontraditional therapy use in patients with HIV infection. A prospective study. Archives of Internal Medicine 1996;156:197-201.
- 15. Ostrow MJ, Cornelisse PG,Heath KV, Craib KJ, Schechter MT, O'Shaughnessy M, Montaner JS, Hogg RS. Determinants of Complementary Therapy Use in HIV-Infected Individuals Receiving Antiretroviral or Anti-opportunistic Agents. Journal of Acquired Immune Deficiency Syndromes 1997;15:115-120.

- 16. Arslan IO, Ozer ZC, Ozen K. Use of complementary and alternative medicine in cardiovascular diseases: a literature review. HealthMed 2012;6:2190-2199.
- 17. Al-Qudimat MR, Rozmus CL, Farhan N. Family strategies for managing childhood cancer: using complementary and alternative medicine in Jordan. Journal of Advanced Nursing 2011;67:591-597.
- 18. Barnes J. Quality, efficacy and safety of complementary medicines: fashions, facts and the future. Part I. Regulation and quality. British Journal of Clinical Pharmacology 2003;55:226-233.
- 19. Barner JC, Bohman TM, Brown CM, Richards KM. Use of complementary and alternative medicine for treatment among African-Americans: a multivariate analysis. Research in Social and Administrative Pharmacy 2010;6:196-208.
- 20. Philp JC, Maselli J, Pachter LM, Cabana MD. Complementary and Alternative Medicine use and adherence with pediatric asthma treatment. American Journal of Paediatrics 2012;129:1-7.
- 21. Yun YH, Lee MK, Park SM, Kim YA, Lee WJ, Lee KS, Choi JS, Jung KH, Do YR, Kim SY, Heo DS, Kim SY, Heo DS, Kim HT, Park SR. Effect of complementary and alternative medicine on the survival and health-related quality of life among terminally ill cancer patients: a prospective cohort study. Annals of Oncology 2013;24:489-494.
- 22. Hasan SS, See CK, Choong CLK, Ahmed SI, Ahmadi K, Anwar M. Reasons, Perceived Efficacy, and Factors Associated with Complementary and Alternative Medicine Use Among Malaysian Patients with HIV/AIDS. Journal of Alternative & Complementary Medicine 2010;16:1171-1176.
- 23. Ku CF, Koo M. Association of distress symptoms and use of complementary medicine among patients with cancer. Journal of Clinical Nursing 2012;21:736-744.
- 24. Addae-Mensah I, Fakorede F, Holtel A, Nwaka S. Traditional medicines as a mechanism for driving research innovation in Africa. Malaria Journal 2011;10:1-4.
- 25. Tabuti JRS, Kukunda C, Kaweesi D, Kasilo OMJ. Herbal medicine use in the districts of Nakapiripirit, Pallisa, Kanungu, and Mukono in Uganda. Journal of Ethnobiology & Ethnomedicine 2012;8:35-49.
- 26. Friend-du Preez N, Cameron N, Griffiths P. Stuips, spuits and prophet ropes: The treatment of abantu childhood illnesses in urban South Africa. Social Science & Medicine 2009;68:343-351.
- 27. Oreagba IA, Oshikoya KA, Amachree M. Herbal medicine use among urban residents in Lagos, Nigeria. BMC Complementary and Alternative Medicine 2011;11.
- 28. Peltzer K, Friend-du Preez N, Ramlagan S, Fomundam H. Use of traditional complementary and alternative medicine for HIV patients in KwaZulu-Natal, South Africa. BMC Public Health 2008;8:255.
- 29. Van Staden J. Ethnobotany in South Africa. Journal of Ethnopharmacology 2008;119:329-330.

- 30. Stafford GI, Peddersen ME, van Staden J, Jäger AK. Review on plants with CNS-effects used in traditional South African medicine against mental diseases. Journal of Ethnopharmacology 2008;119:513-537.
- 31. Mills E, Cooper C, Kanfer I. Traditional African medicine in the treatment of HIV. The Lancet Infectious Diseases 2005;5:465-467.
- 32. Makunga NP, Phikander LE, Smith M. Current perspectives on an emerging formal natural products sector in South Africa. Journal of Ethnopharmacology 2008;119:365-375.
- 33. Van Tonder E, Herselman MG, Visser J. The prevalence of dietary-related complementary and alternative therapies and their perceived usefulness among cancer patients. Journal of Human Nutrition & Dietetics 2009;22:528-535.
- 34. National Health Act. Government Gazette. (Accessed at http://www.info.gov.za/view/DownloadFileAction?id=68039.in June 2012)
- 35. Child Care Act. (Accessed at http://www.justice.gov.za/legislation/acts/2005-038%20childrensact.pdf. in June 2012)
- 36. Peltzer K, Preez NF, Ramlagan S, Fomundam H, Anderson J, Chanetsa L. Antiretrovirals and the use of traditional, complementary and alternative medicine by HIV patients in Kwazulu-Natal, South Africa: a longitudinal study. Afr J Tradit Complement Altern Med 2011;8:337-345.
- 37. Duggan J, Petrson WS, Schutz M, Khuder S, Charkraborty J. Use of complementary and alternative therapies in HIV-infected patients. AIDS Patient Care STDS 2001;15:159-167.
- 38. Langlois-Klassen D, Kipp W, Jhangri GS, Rubaale T. Use of Traditional Herbal Medicine by AIDS Patients in Kabarole District, Western Uganda. Am J Trop Med Hyg 2007;77:757-763.
- 39. Babb DA, Pemba L, Seatlanyane P, Charalambous S, Churchyard GI, Grant AD. Use of traditional medicine by HIV-infected individuals in South Africa in the era of antiretroviral therapy. Psychol Health Med 2007;12:314-320.
- 40. Siti ZM, Tahir A, Farah AI, Fazlin SM, Sondi S, Azman AH, Maimunah AH, Haniza MA, Siti Haslinda MD, Zulkarnain AK, Zakiah I, Zaleha WC. Use of traditional and complementary medicine in Malaysia: a baseline study. Complement Ther Med 2009;17:292-299.
- 41. Delgoda R, Younger N, Barrett C, Braithwaite J, Davis D. The prevalence of herbs use in conjunction with conventional medicines in Jamaica. Complement Ther Med 2010 Feb;18:13-20.

Appendices

Appendix A: Questionnaire

QUESTIONNAIRE:

AN ASSESSMENT OF THE USE OF AFRICAN TRADITIONAL MEDICINE AMONGST ADULT PATIENTS ATTENDING THE LAMONTVILLE CLINIC, IN DURBAN, KWAZULU-NATAL

PLEASE MARK THE APPROPRIATE BOX WITH "X" OR FILL IN THE ANSWER WHERE REQUIRED

SECTION A: DEMOGRA	PHIC INFORMATION	
Q1. AGE	YEARS	
Q2. SEX	MALE	FEMALE
Q3. MARITAL STATUS	SINGLE WIDOWED SEPARATED	MARRIED DIVORCED LIVE IN PARTNER
Q4. WHERE DO YOU LI	IVE? ONTVILLE	OTHER
IF OTHER, PLEAS Q5. WHO DO YOU STAY		er, mother, siblings?)
Q6. HOW LONG HAVE	YOU BEEN LIVING IN 5 – 10 YRS	THE SAME ADDRESS? > 10YRS
Q7. IF YOU MOVED TO ARE YOU FROM?	LAMONTVILLE IN TH	E PAST 5 YEARS, WHERE
RURAL AREA		TOWNSHIP

Q8. HIGHEST STANDARD PASSED :	< Grade 7:	Matric:
Post Matric:	_	
Q9. SALARY SCALE: > 1000	1000-5000	5001-10000
10001-15000	>15	000
SECTION B: RESEARCH INFORMATION.	:	
Q10. DO YOU USE AFRICAN TRADITION		NE?
YES	NO	
Q11. WHO INTRODUCED YOU TO IT? GUARDIAN		OTHER
IF OTHER, PLEASE SPECIFY		
Q12. WHY DO YOU USE TRADITIONAL	MEDICINES?	
Q11. WHAT TYPE OF MEDICINE DO YO	UUSE (e.g., lea	aves, powder, roots,
liquids, etc.)		
O12 HOW DO VOU DECIDE ON THE CH		
Q13. HOW DO YOU DECIDE ON THE CH	OICE OF MIUI	IT TO OSE!

214. HOW DO YOU TAKE THE "MUTI	" OR TRADITIONAL MEDICINE?
15. WHAT DO YOU USE IT FOR? EX	PLAIN
Q16. IN THE PAST YEAR, HOW MANY	
2-5 Q17. WHEN DID YOU LAST USE IT?	> 5
THIS WEEK LAST MONTH	LAST WEEK MORE THAN A MONTH
Q19. WAS THE MEDICINE PRESCRIBED	ED OR SELF MEDICATION SELF MEDICATION
Q20. WHERE DO YOU GET IT FROM TRADITIONAL HEA	
OTHER	
IF OTHER, PLEASE SPECIFY	

Q21. DO	O YOU	U USE CL	INIC/	HOSPITAL/PHARMACY MEDICINES?
		YES		NO
Q22. DO	O YOU	U USE BO	TH "I	MUTI" AND CLINIC/HOSPITAL TREATMENT AT
THE SA	ME 1	гіме?		
		YES		NO
Q23. IF	YOU	R ANSWE	ER TO	Q22 ABOVE IS YES, WHY DO YOU USE BOTH
MODAI	LITIE	S?		



26 October 2012

Dr. TS Maphophe Department of Family Medicine Nelson R Mandela School of Medicine University of KwaZulu-Natal

Dear Dr Machophe

PROTOCOL: The Use of African Traditional Medicine Amongst Adult Patients Attending the Lamontville Clinic. REF:BE201/11

EXPEDITED APPLICATION

A sub-committee of the Biomedical Research Ethics Committee has considered and noted your application received on 18 October 2011.

The study was provisionally approved pending appropriate responses to queries raised. Your responses dated 25 October 2012 to queries raised on 06 August 2011 have been noted by a sub-committee of the Biomedical Research Ethics Committee. The conditions have now been met and the study is given full ethics approval and may begin as from 26 October 2012.

This approval is valid for one year from 26 October 2012. To ensure uninterrupted approval of this study beyond the approval expiry date, an application for recertification must be submitted to BREC on the appropriate BREC form 2-3 months before the expiry date.

Any amendments to this study, unless urgently required to ensure safety of participants, must be approved by BREC prior to implementation.

Your acceptance of this approval denotes your compliance with South African National Research Ethics Guidelines (2004), South African National Good Clinical Practice Guidelines (2006) (if applicable) and with UKZN BREC ethics requirements as contained in the UKZN BREC Terms of Reference and Standard Operating Procedures, all available at <a href="http://research.ukzn.ac.za/Research-Ethics/Biomedical-Research-ethics/Biomedical-Ethics.aspx.

BREC is registered with the South African National Health Research Ethics Council (REC-290408-009). BREC has US Office for Human Research Protections (OHRP) Federal-wide Assurance (FWA 678).

The sub-committee's decision will be RATIFIED by a full Committee at its next meeting taking place on 14 November 2012.

We wish you well with this study. We would appreciate receiving copies of all publications arising out of this study.

Yours sincerety

rofessor D.R Wassenaar

Chair: Biomedical Research Ethics Committee

Professor D Wassenaar (Chair)

Biomedical Research Ethics Committee
Westville Campus, Govan Mbeki Building
Postal Address: Privote Bag X54001, Durban, 4000, South Africa
Telephone: +27 (0)31 260 2384 Facsimile: +27 (0)31 260 4609 Email: brec@ukzn.ac.za
Website: http://research.ukzn.ac.za/Research-Ethics/Biomedical-Research-Ethics.ospx
les: Edgewood Howard College Addical School Pietermarithums

Founding Campuses:

Westville



INSPIRING GREATNESS