

# Phytotherapy and Its Use in Rural Environment: Between Trust and Mistrust: Case of the City of Manono

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**Abstract:** *Produced in the City of Manono, this prospective study from 01 January 2018 to 30 June 2018 is based on the analysis of 5000 questionnaires addressed to heads of households (male or female) and adults residing in the different neighbourhoods of the said city. Rate global use of herbal medicine is of 86 %. All ages combined, women use more herbal medicine than men. The ease of obtaining plants (and its components) remains the leading cause of use herbs (40 %). Among the major diseases receiving treatment base in the phytotherapy, diarrhoea, constipation or abdominal pain occupied the primary place with a rate of 18 %. It is only with the introduction of a mechanism of control on Fri you of these plants and products coupled with a well-structured information campaign, awareness and education of the population regarding the different risks and dangers the anarchic use of these plants and products while inserting a training program for specialists in herbal medicine see the creation of records for all plants with a precise identification with the indication and contra-indication and their dangers that the We can drastically reduce certain risks due to the abuse of the use of herbal medicine in our society.*

**Keywords:** Phytotherapy, use, rural environment, trust-distrust

## 1. Introduction

Primary health care remains a major problem in underdeveloped countries in general and African countries in particular. In Africa, the use of medicine and traditional pharmacopoeia is a very common practice in rural areas and even in the cities. More than 80 % of the African population uses traditional medicine and pharmacopoeia in primary health care [1]

As a result, traditional medicine can be considered an integral part of primary health care to improve access to care. Thus, it is necessary to evaluate the clinical effectiveness, to ensure the safety of the medicinal plants, to reinforce the knowledge and the performances of the traditional herbalists and to guarantee a sufficient follow-up of the patients. A renewed interest in herbal medicine in recent years has allowed deepening the analysis of its therapeutic efficacy and especially of its toxicological aspect [2]

According to WHO, in some developing countries in Asia, Africa and Latin America, 80 % of the population depends on traditional medicine, especially in rural areas because of the proximity and accessibility of this type of care is affordable and especially because of the lack of access to modern medicine for these populations [3].

In most developing countries in general, and the Democratic Republic of Congo in particular, the only known pharmacopoeia of populations is the traditional pharmacopoeia.

The Democratic Republic of Congo (DRC) is a privileged ground for the protection of healing plants and has the most diverse flora [4]

According to statistics, traditional medicine treats about 80 % of the population in the DRC. This assertion was confirmed by the members of the Union of Pharmacy Assistants of the Congo (UAPHARCO) who celebrated on December 9th its fiftieth anniversary under the aegis of the provincial Ministry of Health and Social Affairs. The theme chosen this year is "UAPHARCO and phytotherapy, Moringa virtues". Nearly one hundred and fifty pharmacy assistants responded to this invitation. Speaking on this occasion, the vice-president of UAPHARCO traced the history of the association which was born in 1957 at the initiative of the Belgian colonizer, through the school of Indigenous Medical Assistants [5].

With more than 10 million inhabitants, the city of Kinshasa is the largest agglomeration of the DRC where many issues related to food security, health, biodiversity management, etc. are at stake. As a result of the increased impoverishment of populations in peripheral areas, almost 70 % of the population in Kinshasa depends on traditional medicine for primary health care [6].

The valorisation of medicinal plants is a major concern for many researchers in our province, because a large part of the population makes extensive use of traditional medicine. Often, people have no other choice because of the high price of drugs; they prefer to resort to the tradition which is less expensive to be treated [7].

The paradox that exists is that everyone becomes a phytotherapist, a specialist and prescribes a type of plant for each disease.

Genes use and consume plants without knowing their origin, dosage and their action on the body which complicates the state of his health and even sometimes be fatal. Using random plants present a real danger to health: intoxication

(very common), dizziness and vomiting, renal failure and even sometimes fatal, and all this in because:

- The dose exceeded (dosage) ;
- The interaction with other drugs ;
- The toxicity of this plant ;
- Plants have a serious action because of their active ingredient (hypoglycaemic, hyper / hypotensive ...)

In spite of this we find that the gent uses the plants in a way that does not take into consideration the risks and the danger of phytotherapy; and there a central question is posed: **Why gens going to herbal medicine and what s are the risks and the consequences of it?**

Thus, we undertook this work to:

Out the position or opinion of the population of the territory of Manono on utilize are plants or herbs for medicinal virtue.

This work focused on 5,000 people solvents in different areas abundant the city of Manono and having accepted to answer the questionnaire which they have been addressed s.

### 1.1 Bibliographic Survey

In our society the use of plants and herbal products has increased very quickly, all use medicinal plants anarchically without knowing the danger and the risk of this. This is why so many authors are interested in the subject at the occurrence:

KAKULE MULAMBA YIRI (2004), in his study on the fight against HIV / AIDS by the management of PVV by medicinal plants in the city of Goma, presents that studies conducted in North Africa have shown that 75% of PVV make use of the use of traditional medicine, especially herbal medicine in addition to other medicines for several opportunistic symptoms [8].

Indeed, in France, the period 1945 and 1958 distinguished by an important series of studies on Apocynaceae and Rubiaceae of Central Africa in general and DR C, especially [ 9 ]. In this area, the work of Professor Delaude is one of the most important. Published in 1972, the first studies undertaken by Delaude are limited to the saponins of Polygalaceae and Olacaceae. Subsequently, however, the Professor was also interested in alkaloids. He has developed a project to detect, in the DRC, species that have appreciable alkaloid content. [10].

It is worth mentioning also Chifundera (1987), who inventoried the plants used as antidotes in all regions of the Congo and gave instructions on their uses [11].

In the hinterland, among the works undertaken in the field of medicinal plants, it is worth mentioning that of Otshudi *et al*, which is a contribution to the ethnobotanical, phytochemical and pharmacological studies of medicinal plants used against dysentery and diarrhoea [12].

One of the most recently published articles on medicinal plants in the DRC is Makumbelo *et al*. This article presents results of an investigation concerning the use of 49

medicinal species in a sample of 460 households in Kinshasa. It presents the most cited species and makes an observation that their exploitation in the vicinity of Kinshasa accentuates the degradation of savanna ecosystems. [13].

The Kikongo-French Dictionary of Butaye (1909) can be considered as one of the most important documents for the genesis of ethnobotanical research in Bas-Congo. Indeed, this document is the one that presents for the first time a list of names Kongo plants [14].

Given its magnitude and the many impacts it could have on society, particularly in Africa, it is important to further explore this phenomenon of plant misuse as several studies of traditional herbal treatments have reported toxicity or interaction problem that may cause therapeutic failure or accidents. On the other hand, the toxic principles of plants are little known, mainly because of their natural complexity. These medicinal plants must then, like the "conventional medicines", obey strict rules of culture, control and dispensation.

### 1.2 Methods / Approach

For the realization of the present study, we carried out a transversal and prospective descriptive study accompanied by interview and questionnaire techniques. The sampling stratified random proportional helped us to interview an average of 5,000 people distributed in different districts of the city of Manono during the period of our study. Recruitment focused on households living in Kaulu Minono district during the period from 01 January 2018 to 30 June 2018.

Were retained, adult (man and woman) residents in different neighborhood of the said city and interpreting our results, we used the percentage calculation.

Several variables were collected on an individual farm returns: Age Range, marital status , profession pathologies in which people use plants, causes occasion the use of plants, source of supply, one birth on herbal medicine, knowledge on the dangers of herbal medicine, sex , importance of herbal medicine, m ode use.

## 2. Results / Discussion

### 2.1 Distribution according to the use or not Phytotherapy

As the table below on a staff of 50 00 inhabitants , 4300 cases or 86 % use herbal c GAINST 700 cases or 14 %. According to a study, 70 to 80% of Moroccans use medicinal plants for treatment [15].

**Table 1:** Distribution of inhabitants according to the use or not of phytotherapy

Inhabitants and use or not of herbal medicine	Effective	Percentage
Use of herbal medicine	4300	86
Non-use of herbal medicine	700	14
Total	50 00	100

**2.2. Distribution According to the Age Tranche**

It appears from this table that 60 % of the population had an age of 18-25 years, followed by those whose age range is between 26- 34 years is 30 % and those with the age range from 35 -44 years or 6%, finally 4 % of people whose age is between 45 years and beyond . According to a study, 50 % of the population Kasai which makes use of herbal medicines for treatment are aged over 50 years .[ 16 ] .

**Table 2:** Case Distribution by Age Group.

Age Range	Effective	Percentage
18 to 25 years	30 00	60
26-34 years	1500	30
35-44 years	300	6
45 beyond	200	4
Total	50 00	100

**2.3. Distribution According to Sex**

Most of the residents were female, 58% versus 42 % male. In one study, 60 % of Africa was that appeals to medicinal plants for treatment are female. [17].

**Table 3:** Distribution of cases by gender

Sex	Effective	Percentage
Feminine	2900	58
Male	2100	42
Total	50 00	100

**2.4. Distribution according to the Matrimonial Status**

The torque strut t majority and represented to t 63 % and that for the simple reason that the more the couple as are the responsible to take towards other family members including the aspect care.

**Table 4:** Distribution of cases by marital status

Marital status	Effective	Percentage
Single	1850	37
In a relationship with	3150	63
Total	50 00	100

**2.5. Distribution According to Level of Instruction**

The rate of herbal use was high among secondary level adults, 59.1 % of whom, and the observed difference was statistically significant with the other levels. According to one study, 50 % of the population of Bamako who use medicinal plants for treatment is illiterate [18].

**Table 5:** Distribution of cases by level of education

Level of education	Effective	Percentage
Illiterate	70	1, 4
Primary	16 75	33.5
Secondary	2955	59.1
Superior	300	6
Total	50 00	100

**2.6. Distribution according to the causes causing the use of Phytotherapy**

The majority of respondents pinned appearance ease of obtaining as main cause with 40 % followed by item cost

less expensive co same second cause with a rate of 32 % , possibility of self-medication with 20 % and the E point view natural on with 8 % . Regarding the reasons for access to this type of therapy, a study of 356 patients reported that 13% use plants because of their low cost [19].

**Table 6:** Repartition of cases according to the causes causing the use of herbal medicine

Causes	Effective	Percentage
Easy to get	2000	40
natural	4 00	8
Cheaper than drugs	16 00	32
Possibility of self-medication	10 00	20
Total	50 00	100

**2.7. Distribution by Pathology in which People Use Plants**

We identified 13 pathology s where herbal medicine is more commonly used which, gastritis and haemorrhoid (14 %), angina (3.9 %), fractures (5.5 %), constipation and diarrhoea (18 %), burn (7 %), sexually transmitted infection (2.1 %), seizure/epilepsy (3.8 %), anaemia (5.8 %), sexual ability and impotence ( 8 %).

**Table 7:** Distribution of cases according to the pathologies in which people use plants

Diseases	Effective	Percentage
Angina	194	3.9
Impotence / sterility	400	8
Convulsion / Epilepsy	188	3.8
Constipation or abdominal pain	9 00	18
Burn	350	7
IST (Kasele)	105	2.1
Diarrhoea	9 00	18
Anaemia	288	5.8
Gastritis	7 00	14
Fracture	275	5.5
Haemorrhoid	7 00	14
Total	5000	100

**2.8. Distributed on the source of supply**

The percentages of 80 % of people get the plants from friends, 14% from an herbalist and 6 % from the wild. According to a study carried out on 15 Moroccan cities with 2000 people, the supply of medicinal plants is primarily made by druggists (98.4%), followed by herbalists (17.7%), pharmacists (8.1%) and last place of the healers (5.8%) [20].

**Table 8:** Case Distribution by Source of Supply.

Source of supply	Effective	Percentage
Herbalist	4000	80
Pharmacist	0	0
Nature	3 00	6
Others (friends, colleagues ... )	7 00	14
Total	50 00	100

**2.9 Distribution According to the Importance of Phytotherapy**

54 % of people say that the phytotherapy is effective, 24 % speak of very effective and 22 % of inefficient.

**Table 9:** Case distribution according to the importance of herbal medicine

Importance of herbal medicine	Effective	Percentage
Effective	27 00	54
Very effective	12 00	24
Not efficient	11 00	22
Total	5 0 00	100

### 2.10. Distribution according to the knowledge of the existence of danger of the use of the herbal

For this table, we note that 32 % of inhabitants declare that there is a real danger in the use of herbal medicine against 68 % who are unaware of this danger. This is explained by the fact that highlighting the toxicity of herbal medicine is not always easy. Thus, according to De Smet, in order to have 95 per cent chances of observing a secondary reaction to herbal medicine which is reflected in one out of every 1000 patients, a practitioner must have at least 6,500 patients [21].

**Table 10:** Case distribution according to the knowledge on the existence of the danger that presents the phytotherapy

Existence of danger	Effective	Percentage
Yes	16 00	32
No	34 00	68
Total	50	100

### 2.11. Distribution According to Knowledge on the Types of Hazards or Consequences that this Phytotherapy

In relation to the dangers, the table below shows that 40 % of inhabitants speak of allergy as the main danger, followed by those who find no danger with 32%, intoxication with 22 % and sudden death with 6 % of cases. According to a study conducted in households in the Afia Keshero health area in the DRC, all 356 patients surveyed were unaware of any information on the toxicity of the plants used [ 22 ] .

**Table 11:** Case Distribution knowledge on the s types of hazard s or consequences that this herbal medicine

Hazards or consequences	Effective	Percentage
Sudden death	3 00	6
Poisoning	11 00	22
Allergy	20 00	40
Safe	16 00	32
Total	50 00	100

## 3. Conclusion

In approaching this study, our objectives were to highlight the opinion of the population on the use of phytotherapy in a blind manner and pursued as specific objectives:

To get out the position to see the opinion of the population of the Territory of Manono on use of plants or herbs with medicinal virtue. They are results of the survey on behalf of herbal medicine shows that the practical latter in the City is practiced without any extension and supports scientific, legislative and university. And the overall utilization of herbal medicine is of 86%. All ages combined, women use more herbal medicine than men. The ease of obtaining plants (and its constituents) remains the

main cause of use of herbal medicine (40%). Among the main pathologies benefiting from a treatment based on herbal medicine, diarrhoea, constipation or even abdominal pain occupy the first place with a rate of 18%. As for the knowledge on the danger of an abuse of herbal medicine, 68% of the respondents said they did not have this notion of danger. Hence the art plants medicinal, must, like any other medication, obey strict rules that only the standard herbal medicine specialist can answer. This necessarily implies the regulation of the profession in this area in our country.

## 4. Future Scope

In view of all the foregoing, we believe that this study has achieved its goal of providing a response to the factors that explain the misuse of herbal medicine in the Manono Territory. However, this study is not free of limits. The first limitation of our study comes from the fact that it only takes into account the opinions of consumers or users of this herbal medicine without taking into account the arborists or herbal therapists. The second limitation stems from the absence of certain information in our data base due to the absence of a collection of data concerning medicinal plants and the non-botanical identification of medicinal plants in the province and particularly in the Territory.

It is therefore the case that data collection operations on medicinal plants in Tanganyika province and specifically in the Manono Territory, and elsewhere, are carried out with a view to improving the subsequent quality of information on herbal medicine.

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