# The aboriginal culture and medicine: A comparative study

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**Abstract:** In the aboriginal culture nothing is written down, it is in most cases passed from generation to generation through singing and dancing. Indigenous people were not easily affected by various illnesses since they used the plants in various ways to quell their illnesses. Indigenous materia medicodo not consist of dietetics alone, it also include many potent herbs. Few indigenous herbs are recognized in the modern pharmacopoeias. There is a list of herbs that were used by indigenous peoples, however within that list there are few herbs, if any that are recognized by modern herbal producers and phytopharmaceutical manufacturers. These herbs are meant as an aid to conventional therapy, and cannot do any harm if they are used correctly. These herbs are aiding in recovery for sick persons. This research does not intend to have the said list replace modern medical science, it suggests that the notion of indigenous plant medicine should be well accepted by western culture of medicine since such herbs have survived time immemorial. Further that the indigenous people in the world survived and still survive on same plants and herbs. The advent of nutraccutical or dietary supplement in the western system of medicine should be encouraged and to be vigorously implemented. The indigenous medicine findamentally employs the same basic method as the western medicine with additional contributions from the spiritual dimension. The indigenous medicine gives the healing depth and meaning within the indigenous cosmology and experience.

**Keywords:** Aboriginals, Indigenous People, Fundamental Rights, Medicinal Leaves, Human Rights, right to culture.

## I. Introduction

The human rights, in some ways share certain parallels or philosophical strains with the general practices, custom, and value of indigenous societies. Indigenous Australians or Aborigines are the original inhabitants of Australia. It is postulated and estimated that they migrated from Africa to Asia about seventy thousand years ago and from Asia to Australia about fifty thousand years ago. When the British arrived in Australia and began to settle in the continent, they brought with them disease such as measles, smallpox and tuberculosis causing massive amount of damages to Aboriginal population. The British appropriated land and water resources in Australia. The British converted the land to sheep and cattle grazing thereby depriving the Aborigines the land. "Aboriginal voice have been often largely ignored in the portrayal of our country's history, with the history of discovery and settlement often taught and interpreted as Australia's first beginning, Tasmania Aboriginal, Theresa Sainty, hope adding voice to the conversation could help others gain an understanding and appreciation of Aboriginals history and culture, and the way it has, and continue to play a part in Australian history"<sup>1</sup>. Tasmanians Aborigines have lived in *lutruwita* that is *lu-tru-wee-tah*, currently referred to as Tasmania, and it has been for many generation. The Aborigines have a dynamic, diverse and constant evolving culture. It has survived for at least thirty-five thousand years. Lutruwita supported approximately nine nation before it was invaded. Each nation had its own culture and language, and it was responsible for the country. Everything changed drastically since 1803, in that within a short space of time many nations no longer existed either as a result of conflict, or having died of introduced diseases. The surviving Aborigines were offered alternative opportunity for further survival, the promise to return to their home lands. Aboriginal leaders and their people were reluctant to accede to the offer to return to their home land. The Aborigines were discouraged to speak their languages, practice their culture and they had English names forced to them, similarly to what happened to colonized Indigenous People. Aborigines became a mixed people and then there arose the necessity to understand each other, hence a development of lingua franca. Since 1990's the Tasmania Aboriginal communities have been reviving their language, which include words from many of the original Tasmanian Aboriginal languages spoken by Aborigines prior to be invaded<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Theresa Sainty is a Pakana (Tasmania Aboriginal) woman who works with Aboriginal Educator Services, Department of Education and also continues her work (which began in 1997) as Aboriginal Linguistic Consultant with the Palawa Kani Language Program. Theresa has developed a number of curriculum resources with a focus on Tasmania Aboriginal culture, including DVD's, Reader and Puzzles.

<sup>&</sup>lt;sup>2</sup> This page was produced by Aboriginal Heritage Tasmania, a branch of the Natural and Cultural Heritage Division. Department of Primary Industries, Parks, Water and Environment. Modified: 25/11/2015

# II. The Purpose of the research paper

In traditional indigenous medicine, many food plants are used for therapeutic purposes, and are not viewed as necessarily a poison. This is in contrast to western orthodox medicine in which drugs are seen as poisons in that, in low doses drugs may cur diseases, however, if drugs are over dosed drugs may cause death. One of the most unfortunate ironies of herbal medical practice is that while indigenous medicines consist primarily of herbs and health food, modern herbal producers and phytopharmaceutical manufacturers seldom, if ever, include indigenous medicinal plants in their list. It seems there is a paradigm change with the advent of nutraccutical or dietary supplement in the western system of medicine. Does these mean that there is a change of perception in the western system of medicine? Will the notion of indigenous plant medicine be well accepted by western culture of medicine?

### **III. Research methodology**

This research has adopted doctrinal legal research approach as a data collection method. This method is also known as the "black letter law". Pearce, Cambell and Harding define doctrinal legal research approach as a research which provides a systematic exposition of the rules governing a particular legal category, analysis of the relationship between rules and they explain areas of difficult and perhaps predicts future developments. Therefore, doctrinal method basically means reading, law reports, internet information, books, articles, legislation, government gazette, commission reports, international instruments etc.

### **3.2 Ethical Principles**

Ethical principles in research merit some discussion, to include the intellectual honesty, informed consent and confidentiality.

#### **3.2.1 Intellectual honesty**

The researcher is aware and has observed the policy pertaining to plagiarism, that among others it entails commission of literary theft, that is, to present as new and original an idea or product derived from an existing source.

### **3.2.2Informed Consent**

In conducting the study the researcher observed a number of ethical principles. The first principle that was observed is that of informed consent. In observing the ethical principle of informed consent the researcher provides the key informants who are intended to serve as respondents in the study with the opportunity to choose what shall or shall not happen to them. As Diener and Crandall<sup>3</sup> noted, informed consent is the procedure in which individuals choose whether to participate in an investigation after being informed of facts that would be likely to influence their decision. According to Frankfort-Nachmias and Nachmias,<sup>4</sup> the idea of informed consent derives from both cultural values and legal considerations. It is rooted in the high value that is attached to freedom and self-determination.

## **3.2.3**Confidentiality and Anonymity

The researcher complied with the ethical guidelines of confidentiality and anonymity when carrying out the study. According to Boynton<sup>5</sup>, the principles of confidentiality and anonymity mean that the participants (informants) who participate in the research need to be reassured that what they reveal will be treated as confidential and that they will not be identified through the research (anonymity). This may mean changing people's names in qualitative research, using identification numbers in quantitative studies, or finding other ways of keeping participants' details private.

## 3.2.4 Plagiarism

The researcher is aware of the policy pertaining to plagiarism, that among others it entails commission of literary theft, that is, to present as new and original an idea or product derived from an existing source.

<sup>&</sup>lt;sup>3</sup> Diener, E. and Crandall, R*Ethics in Social and Behavioural Research*,(1978) at 34

<sup>&</sup>lt;sup>4</sup>Frankfort-Nachmias, C. and Nachmias, D *Research Methods in the Social Sciences,(1996) FifthEdition at* 82

<sup>&</sup>lt;sup>5</sup> Boynton,P.M*The Research Companion ,A Practical Guide for the Social and HealthSciences,* (2005)at 101 SomeBasic Guideline on How to Conduct Research *Potch Law Manual* (2011)

## IV. Aboriginal medicine in Australia

The traditional medicines date back to time immemorial. The traditional Chinese are drinking tea that is from wormwood leave, that tea is alleged to cure chills and fever. It is against this background that other indigenous people were using various leave as medicine and perhaps the leave were proved to functional. The Egyptians are also using herb from plant called *klella* to assist in passing kidney stones, and all around the world. This also proves the close relationship between Australian Aboriginals with Asians and Africans, hence it is postulated that the Australians Aboriginals share their roots with Africans<sup>6</sup>. The Aboriginals used leeches to place them on the sores to stop blood from clotting. While these traditional methods are well known as natural cure, Aboriginals bush medicine, much like the bush itself is still in very much a mystery<sup>7</sup>. It has been highlighted that the information was not properly documented or not documented at all<sup>8</sup>. Dr Evelin Tiralongo held that lot of information is lost.<sup>9</sup> According to Evelin most Aboriginal treatments were derived from food. Aboriginal people did not fall sick, they used the plant in various ways to quell they illnesses.<sup>10</sup>.

Some plants like goat's foot, were crushed, heated and applied to the skin. Others were boiled and inhaled and occasionally drank. Native Americans, Alaska Nation and Native Hawaiian healers all have a long history of using indigenous, or native plants for a wide variety of medicinal purpose. The medical plants and their applications are as diverse as the tribes who use them.Beyond their medical benefits, indigenous plants were a staple of Native people's diet before Western contact. Currently indigenous plants are central to efforts to improve dietary health for current generation. Most Hawaiian medical plants are food that have additional curative properties. Healers view food as medicine, along with fresh, clean air and water. In all cases, the healers offer a prayer to ask permission and give thanks for the medicine before harvesting and preparing them, and ask permission to facilitate medical healing on behalf of the Creator<sup>11</sup>.

It is alleged that the painting depicts particular leaves known by Aboriginals from plants species, which contain medical properties. The Aboriginal women from Utopia in Central Australia gather leaves, and boil the leaves, they will add resin and mixed into a paste, which is used as bush medicine for all ailments. At least bush medicine leaves is a well-documented story painted by the women artists of Utopia in the Central Australia. The bush medicine leaves are collected by women and are sometimes exorbitantly prized for their restorative powers as part of traditional health practices. Bush medicine leaves is derived from a particular native shrub which grow abundantly in the desert region of Utopia, north-east of Alice Springs. During the life of the plant, the leaves change colour and exhibit different medicine properties. When the leaves of the shrub are green they are gathered by women and grind up using a stone. Then, the medicine leaf compound is mixed with water to form a milky solution, which can be used to cure cough, colds and flu like symptoms. The medicine leaves can be collected and boiled to extract the resin, which is then mixed together with Kangaroo fat. The past that is collected can be stored in bush conditions. The resulting medicine can be then used to heal cuts, wounds, bites, rashes and spread as an insect repellent. It is said that the bush medicine leaves can also be made into a mixture to apply to aching joints, or to place on the temples to cure headaches. Like all other aspects of traditional Aboriginal culture, knowledge of bush medicines has been passed down from generation to generation over thousands of years and still being used currently by people of Utopia<sup>12</sup>.

#### V. Eastern United States Medicinal Plants

In the eastern United States there are more than eight hundred plants species that can be documented as having at least some medical use. These medicinal species have important historical uses, present use or future potential. According to Foster *et al* the medical species researched cover Colorado, Montana and New Mexico, however, it does not fully cover southern half of Florida or the southern and western of Texas. It was found that these plants are arranged by visual features, based on flower colour, number of petals, habitant, leaf arrangement etc. These medicinal plants were historically used by the native people of North America, that is, American Indians. The leaf as Hepatica species was thought to be useful in treating liver disease. The leaf of Hypercom Perforatum appears to have numerous holes pricked through the surface. The resemblance between these holes

<sup>8</sup>Abstract para 1

<sup>10</sup>As indicated above

<sup>&</sup>lt;sup>6</sup>Page 2 para 2 of this paper.

<sup>&</sup>lt;sup>7</sup>Top 10 Aboriginals bush medicines, available at: http://www.australiangeographic(retrieved 20 Jan 2017).

<sup>&</sup>lt;sup>9</sup>Pharmacist Expert from University of Griffith in Queensland, Top 10 Aboriginals bush medicines, available at:(*http://www.australiangeographic* retrieved 20 Jan 2017).

<sup>&</sup>lt;sup>11</sup> Traditional healers and healing plants, available at: *http://www.nim.nih.gov/nativevoice/exhibition(r*etrieved 20 Jan 2017).

<sup>&</sup>lt;sup>12</sup> Bush Medicine by David Wroth, Japinska Gallery 2015

and the pores in human skin let some people to believe that preparations made from the leaves of this pant were used for healing cuts. Some of the concepts have no scientific basis, though uses conceived centuries ago have persisted and may even have been corroborated by scientific evidence. Pursuant to American Indians, European, or Folk use by other indigenous groups, the current status of these plants are included. Pharmacological studies on individual chemical component or extract of a plant or plant part confirm ethnobotanical uses. In many instances, these herbs are actually approved for therapeutic use in various countries.<sup>13</sup>

### VI. Africa Medical Plants

The African continent is believed to have the oldest known habitation and is generally considered the cradle of mankind and human civilization. The ancient kingdoms and empires of Africa had extensively codified healing recipes. The historical healing arts in Africa can be traced back to about three thousand, two hundred BC. The ancient African healers had an elaborate *materia medica* which consisted of various herbs, animal parts, minerals and clays. The list is dominated by numerous food plants, in keeping with believe that every disease to which men are likely to be exposed are as a result of the substances that they consume. Even, nowadays there is no clear distinction in traditional African medicine regarding when a herb ceases to be a health food and when it becomes a medicine. In traditional African medicine, many food plants are used for therapeutic purposes, are not viewed as poison<sup>14</sup>.

The western orthodox medicine had a tendency of viewing drugs as poisonous if not properly administered, for example, if a drug is over dosed tends to be poisonous and may in certain circumstances cause death, while herbs are less likely to be poisonous. One of the most unfortunate ironies of herbal medical practice is that while African medicines consist primarily of herbs and health food, modern herbal producers and phytopharmaceutical manufacturers seldom, if ever, included African medicinal plants in the lists. But that is perhaps the beginning to change, particularly with the advent of nutraceutical or dietary supplements in the western system of medicine. African materia medica do not consist of dietetics alone, it but includes many potent herbs. Few African healing herbs are recognized in the modern pharmacopoeias<sup>15</sup>.

Interestingly, any one plant species can be found in different countries around the world, which also shows how plants have migrated just like humans to every corner of the planet. A plant that does not appear as anything special but has remarkable healing property is Ashwagandha. The plant is originally from India and has become naturalized in South Africa. This plant has powerful uses as a tonic for immune system problems and stress. In appearance it is ordinary but on digging up the roots one find a very powerful medicine. In South Africa it is known as Ubuvimbho, it is used for its roots internally but the berries and leaves are tonic, the leaves are only used externally. It must be taken into consideration that many plants look similar that is one medicine plant can look similar to a poisonous plant. Plants can have parts that can be used as medicine and parts that must not be used as medicine since they are poisonous<sup>16</sup>.

South Africa is renowned for its botanical wealth. If one wants to appreciate the magnitude and diversity of this natural resources one need only to look at the Cape Floral Kingdom. The indigenous people of South Africa have been exploring the natural healing qualities of African medicinal herbs for thousands years. In fact, traditional healers were the most people tapping into this medicinal herbs for the natural healing qualities. The population currently choose accessible and affordable home-grown herbs and plants to treat a plethora of health issues<sup>17</sup>. The research reveals that in the wild many animals seek out medicinal plants when they are ill. When using plants as part of food source, one is using cellulose and lignin. These provide structural support for plants, and they are important in nutrition, because they are not digested by most animals<sup>18</sup>. The South African Herbal &Medicine Institute at University of The Western Cape strives to be a world class research institution focused on scientifically and clinically unlocking the value of traditional medicines in the service of humanity. The research is based on the investigation of phytomedicines or indigenous medicinal plants<sup>19</sup>.

<sup>&</sup>lt;sup>13</sup>Steven Foster and Jake A Duke, A Field Guide to Medical Plants and Herbs of Eastern and Central North America, second edition

<sup>&</sup>lt;sup>14</sup>Maurice M Iwu Handbook of African Medical Plant second edition at 1, available at: http://books.google.co.za(retrieved 21 Jan 2017)

<sup>&</sup>lt;sup>15</sup> Maurice M Iwu Handbook of African Medical Plant second edition at 1

<sup>&</sup>lt;sup>16</sup> Jean-Francois Sobiecki, African Medicinal Plants- South African Ethnobotany, available at:www.ethnobotany.co.za(retrieved 21 Jan 2017)

<sup>&</sup>lt;sup>17</sup>Top performing African Medicinal Herbs-Arabella *www.arabella.co.za* retrieved 21 Jan 2017

<sup>&</sup>lt;sup>18</sup>Medicinal Plants- The Care Centre *www.carecentre.org.za* retrieved 21 Jan 2017

<sup>&</sup>lt;sup>19</sup> South African Herbal Science and Medical Institute-Research Interest and Current Projects-University of Western Cape, available at: *http://www.uwc.ac.za*(retrieved 21 Jan 2017)

South Africa is rich in medicinal plants, which have been used by indigenous peoples for centuries. Certain plants are more prevalent in certain areas. Hoodia gordonii is a spiny succulent that grow in Northern Cape, it is up to a meter tall. It has a very off-putting smell of rotten meat, but its medicinal effects are more desirable. The stem and leaves of the plant are widely used as an appetite suppressant and as a mood enhancer. The bitter aloe is found in the Eastern Cape. It grows up to three meters in height, the leaves of the bitter aloe have traditionally been used to treat stomach cramps and when applied topically, to treat arthritis and eczema. Although better aloe is also found elsewhere in South Africa, it is common in the Eastern Cape. The buchu plant is found in the Western Cape. It has been used by the Khoi people of South Africa for centuries. It is a natural diuretic and anti-inflammatory, and currently is available as a topical gel, in capsules and in herbal water drinks. It is also often steeped in hot water to make tea or steeped in brandy. Wild garlic is a perennial, fast-growing, bulbous plant that grows in KwaZulu-Natal and also in other provinces in South Africa. It is most prominent in KwaZulu-Natal. Its rhizomes and leaves are used to treat fever, rheumatism, asthma and constipation. Its bulbs can also be boiled in fresh water to create a decoction, it can be taken orally to clear up colds and coughs. The strongly aromatic herb called Kooigoed is found in Free State. It is known as Everlasting in English and Imphepho in isiZulu. The full plant is used for medicinal purposes. Its twigs and leaves treat coughs, infections, menstrual pains and fevers. The pepperbark tree is a tall and aromatic tree. It has a strong smell. It is found in Limpopo province and it is peppery, bitter stems and bark are used to treat symptoms of many ailments. Dried, crushed bark powder can also be mixed with water to treat sores in the mouth.

The African potato is a perennial, hardy and beautiful garden plant. It is found in Gauteng province, the tuber is used primarily to treat benign prostate hypertrophy and urinary tract infections. The leaves and bulbs are used to treat dizziness, heart weaknesses and even depression. The bulb of the pineapple flower is traditionally used to treat fever, urinary tract infections, colic and even a mean hang over. It is found in Mpumalanga province. It can also be used to treat back-ache and assist in recovery from fractures. Moringa is also known as the drumstick tree because of its unusual shape, tampering its thick trunk to its thinner top. It is found in Northwest province, the leaves, roots and immature pods are used to create a tincture for treating diarrhea, as well as liver and spleen problems. The leaves, when ground to a mulch, helps wound and insect bites to heal faster<sup>20</sup>.

### VII. Conclusion

In this conclusion, it is pertinent to submit that the indigenous medical system does not fall into the sphere of what is known as alternative medicine but it is rather a complimentary and a different medical system. It uses a medicine in somehow a conventional manner for the treatment of diseases. It fundamentally employs the same basic method as the western medicine with additional contributions from the spiritual dimension. The indigenous medicine gives the healing depth and meaning within the indigenous cosmology and experience. It should not be understood and reduced to simply herbalism, it should also be perceived as a substitute for qualitative health care for the rural poor population of nowadays. It must also be noted that certain countries, particularly in Africa there is an inadequacies of public health programs. In such countries it can be assumed that the indigenous medicine is one of the only viable and possible tool in health care.

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