

An Exploration of the Ethno-Medicinal Practices among Traditional Healers in Southwest Cebu, Philippines

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ABSTRACT

This study documents the cultural knowledge of herbal remedial measures among Cebuano traditional healers in four municipalities of southwest Cebu, Philippines. It aims to assess the terrestrial and marine resources used by healers in treating illnesses, similarities and differences in the methods of extraction, preparation and administration, the ailments for which the locally available plants are used, and whether there are plants with medicinal usage which have not been documented in previous studies. Free-listing and one-on-one interviews were carried out with eight traditional healers (*mananambal*). The study shows that plants used during treatment episodes and the procedures employed for extraction, preparation and administration do not vary significantly across sites. The ordinary ailments treated were fever, cough, cold, stomachache, headache, hyperacidity, toothache, diarrhea, gas pain, small cuts and wounds, swelling, ascaris and skin fungal infections. Leaves are commonly used in all four sites, and the most common methods of extraction are decoction and expression. In general, the narratives point to actual illness episodes, herbal medication procedures, healers' impressions regarding the efficacy of the plants used, and how they have helped the patients in pursuit of health and well-being.

Keywords: *ethnomedicine, natural products, medicinal plants, mananambal*

1. INTRODUCTION

Anthropologists view humans as both biological and cultural creatures, and are currently involved in applying anthro-pological knowledge in the study of health and illness. Medical anthropology, a sub-discipline of anthropology, is concerned with human health in various environmental and cultural contexts. The concept of culture is essential because belief systems, cultural practices and other complex networks of variables account for actual behaviors. Because every medical system is a cultural system (Rhodes, 1996) and medical knowledge is available to all members of a cultural group (Fabrega, 1970), it is crucial to give cultural importance to the insiders' perspective - what people know, believe, and do. In determining the categories through which people create meanings in their lives, medical anthropologists employ comparative and interdisciplinary approaches to better understand people's own system, in this case, their own folk medicine. They document a wide range of human survival strategies and the consequences of these on health and human welfare (McElroy and Townsend, 2009). Because people perceive symptoms and illnesses in many different ways, medical anthropologists try to understand people's decisions about whether to treat an illness at home, consult a traditional healer or seek biomedical care (Simon, et al., 1996).

Ethnomedicine, a sub-field of medical anthropology, deals with the study of traditional medicines and the variant medical subcultures found in various communities. According to Hughes (1968), ethnomedicine refers to health beliefs and practices which are a result of indigenous cultural development and not explicitly derived from the conceptual framework of

modern medicine. Ethnomedical studies of health intend to determine the insiders' knowledge of various systems of healing by focusing on traditional healers and alternative medicine practices. An illustration of ethnomedicine is the study of herbal medicines of four municipalities in southwest Cebu, Philippines, a project which is part of a larger undertaking on natural products.

A number of natural products, both marine and terrestrial sources, are included in the group of substances which are categorized as part of complementary and alternative medicine practices. These encompass the use of herbal or botanical medicines which are not necessarily considered to be part of conventional medicine. Whether the therapies are safe and effective for the ailments for which they are used is a concern in botanical and chemical research. The practices of traditional healers are considered a form of complementary and alternative medicine (nccam.nih.gov/health).

In Philippine Cebuano society, a traditional healer (*mananam-bal*) is an indigenous medical practitioner who resorts to folk medicine to cure patients suffering from common or ordinary ailments, and sometimes illnesses believed to be caused by supernatural forces. Traditional healers utilize a variety of remedies based on indigenous beliefs and experiences which have been acquired from their elders and handed down from generation to generation. Treatment may include prayer, massage, medicinal herbs, or other ways not employed by modern medicine practitioners. In the countryside, residents often seek the help of the *mananambal* for common ailments because biomedical care is relatively expensive and modern medical facilities and resources are concentrated in big towns or cities. Research suggests that belief systems and patients' trust in herbal medications

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and in the healing power of the *mananambal* shape their decisions in choosing a treatment action. Traditional healers are believed to have a special connection with the spiritual world and that their healing power is derived from their spiritual patron (Lieban, 1978). Whether he/she specializes only in treating ailments of the skeletal and muscle systems (*manghihilot*) or in spiritualist healing (*albularyo*), therapy may also include the use of plants reputed to possess medicinal value.

This paper provides information on (i) herbal and/or medicinal plants used during treatment episodes, (ii) procedures for preparation and administration to achieve the desired results, and (iii) illnesses, ailments, and signs and symptoms for which the plants are used for.

The subject matter here is confined to the identification and descriptions of medicinal plants used by traditional healers for treatment in four southwest municipalities of Cebu, an island province in Central Philippines. It assesses whether there is a pattern or a level of similarity of the materials used, in the method of preparation and administration, the ailments for which they are used, and is not overtly concerned with developing or testing models. Analysis of the illness episodes experienced by patients is not dealt with in this paper. Illness is defined by Stafford (1978) as a term that denotes the patient's perception of a health problem, and such perception governs the patient's behavior including the selection of a remedial measure. In this study, the healers' perception of illness will be considered. It is believed that such recognition is derived from patients who, over time, have come to them for help.

This undertaking also aims to determine whether there are medicinal plants in the target sites which have not been documented in previous studies, and whether the signs and symptoms for which the plants are used for vary across sites.

It is envisioned that this study will inspire other researchers to embark on a more detailed investigation on folk medicine in Cebu. Several studies on indigenous methods of treatment have been conducted in many parts of the Philippines but a dearth of information exists insofar as the province of Cebu is concerned. How healing skills are passed from generation to generation, medical beliefs and practices, patients' explanatory models for the illnesses and their reasons for choosing a specific herbal therapy and a therapist are interesting concerns.

1.1 The Study Sites

The study sites (Alegria, Badian, Dumanjug, and Ginatilan) are all located southwest of Cebu Island in Central Philippines. Alegria, classified as a fifth class municipality, has a population of 22,0272 (NSO, 2010), a land area of 8,949 hectares, and is located approximately 117 kilometers southwest of Cebu City. On the other hand, Badian, a fourth class municipality has a population of 37,699 (NSO, 2010), and is about 97.6 kilometers

southwest of Cebu City. The topography of both Alegria and Badian is generally hilly and mountainous (Zosa et al., 2000). Another fourth class municipality is Dumanjug. It is located about 74 kilometers southwest of Cebu City, has a total population of 46,754, and a total land area of 8,553 hectares. Unlike Alegria and Badian, the topography of Dumanjug is described as moderately undulating/rolling land. The farthest of the four sites is Ginatilan, another fifth class municipality situated approximately 135 kilometers southwest of Cebu City. Of the four sites, Ginatilan has the least number of population, 15,327 (NSO, 2010) and land area, 7,010 hectares. Figure 1 shows the locations of the four study sites.



Fig 1: Study sites in Southwest Cebu

2. METHODS

Fieldwork was conducted between December 2012 and October 2013. A total of eight traditional healers were located and interviewed separately at different occasions. The inclusion criteria for selecting study participants are (i) has been a *mananambal* for more than five years, and (ii) has lived in the community for not less than seven years.

Free-listing, an anthropological interviewing technique used in cultural domain analysis, was employed to better understand the boundaries of what is being studied, in this case, herbal/medicinal plants. The use of free-listing is to ensure that the concepts are defined by the informants themselves, and are, therefore, culturally relevant. The herbalists were requested to mention as many herbal/medicinal plants as they could think of and as many reasons for identifying these. They were also

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requested to present samples of these plants. To further explore the data obtained from the free-listing exercise, they were asked about their perceptions regarding what plant(s) is/are being used to cure certain types of ailments, and which of the plants are frequently used in healing. The herbalists explained why a plant or a group of plants are important in providing treatment or relief to patients with such illness episodes. Care was taken to focus on the exact Cebuano (the local language in Cebu) terms used.

All medicinal plants mentioned were listed and photo-documentation was done on plants which can be found in the backyard of the *mananambal*. The *mananambal* was also requested to perform a demonstration regarding the preparation of one or more of his/her medicine. Samples of the plants were collected so that their identity are confirmed, catalogued in the herbarium, and then turned over to a chemical laboratory for examination of possible bioactive compounds which may be responsible for their medicinal properties. Using open-ended questioning, one-on-one in-depth interviews were carried out to supplement information generated from free-listing as well as provide depth towards understanding their healing culture. Narratives of their healing beliefs and practices were noted. Prior to the interview, a topic guide was developed to ensure that the range of important factors needed to understand their beliefs and practices are properly documented. The interview was lengthy and hour-long sessions were done over several visits to the sites. Participation in the study was voluntary and the participants were interviewed privately after obtaining their consent to participate. The interview was conducted in the local language and the presence of an assistant to the *mananambal* was crucial in providing a clear understanding to the discussion.

3. RESULTS

3.1 The Mananambal

A total of eight traditional healers, four males and four females, were located and interviewed. Their ages range from 42 to 85 years old. Mean age is 70. On average, the *mananambal* provides herbal therapies to residents in the community for 44 years. Payment is left up to the patient and usually ranges from PhP10.00 to PhP50.00, or sometimes, in kind. They say that the herbal plants they are using are as effective as any medicine recommended by doctors for common and ordinary ailments. Because payment is not obligatory and it is up to the patient to offer whatever amount he/she would like to donate, all eight *mananambal* say they are happy to be of service to people who are in need of immediate medical attention.

Generally, they have acquired their abilities through observation and practice. Healing skills were learned from a parent, grandparent, or a close relative who, over time, taught them the value of alternative medicine. Knowledge of indigenous medicine among them is used in association with religious activities

believing that lack of trust and devotion to their spiritual patron will make their healing power disappear. A 61 year old female *mananambal* in Alegria, however, claim that she had died, at age 21, as a result of a car accident and was brought back to life miraculously by the spirits or gods whom she presumed to be living in the tree where her dead body was found. She narrated that her having recovered from a fatal condition is an indication of a divine call. Following her recovery, she started her healing activities using various methods including the use of herbal medicines. She believes that she has been gifted with a healing power and it is her social and moral obligation to help others. The *mananambal* in all the four sites specialize in various forms of treating ailments. In this paper, however, only herbal therapies are considered.

3.2 Herbal/Medicinal Plants Used

Free-listings of the plants used by the traditional healers yielded from as many as 16 items provided by one healer to a low of seven, for a total of 35 medicinal plants. It appears that the use of Mayana (*Coeus blumei*) and Malunggay (*Moringa oleifera*) are common to the *mananambal* in all the four sites. Except for Ginatilan, Mandalosa (*Justicia gendarussa*) is also used in Alegria, Badian, and Dumanjug. Dila-Dila (*Pseudelephantopus spicatus*) is used in Badian and Dumanjug; and Lagundi (*Vitex negundo*), in Badian and Ginatilan. Sibukaw (*Caesalpinia sappan*) and Siko Carabao (*Annona muricata*) are also cited in Dumanjug and Ginatilan, and Badian and Dumanjug, respectively. Other plants used by the *mananambal* are listed in Table 1.

3.3 Ailments and Illnesses

Tables 2 to 5 present the specific part of the plants which are used for healing, the type of extraction and administration, and the ailments for which the plants are used. Common ailments cited include fever (*hılanat*), cough (*ubo*), cold (*sip-on*), stomachache (*sakit sa tiyan*), headache (*labad sa ulo*), hyperacidity (*kabuhi*), toothache (*sakit sa ngipon*), diarrhea (*kalibanga*), gas pain (*panuhot*), small cuts and wounds (*samad-samad*), swelling (*hubag*), ascaris infection (*gibitok*), and skin fungal infections (*nuka-nuka*). [The terms in parenthesis are Cebuano translations.]

Table 1: Medicinal plants used by the *mananambal* in the different sites visited. The names indicated are in Cebuano language.

Medicinal Plants Used	Study Sites			
	1	2	3	4
Abokado (<i>Persea Americana</i>)	X			
Albahaka (<i>Hyptis suaveolens</i>)				X
Ampalaya (<i>Momordica charantia</i>)		X		
Atay-atay (<i>Graptophyllum pictum</i>)	X			
Atis (<i>Anona squamosa</i>)				X
Bangkoro (<i>Morinda citrifolia</i>)		X		
Bila-bila (<i>Elymus repens</i>)				X
Busikad (<i>Cyperus kyllingia</i>)				X
Caimito (<i>Chrysophyllum cainito</i>)				X

Medicinal Plants Used	Study Sites			
	1	2	3	4
Dalapot/Gabon (<i>Blumea balsamifera</i>)		X		
Dapdap (<i>Erythrina variegata</i>)		X		
Dila-dila (<i>Pseudelephantopus spicatus</i>)		X	X	
Dulau (Puti) (<i>Curcuma zedoaria</i>)		X		
Escobilla (<i>Sida acuta</i>)				X
Hilbas (<i>Artemesia vulgaris</i>)		X		
Kamansili (<i>Pithecolobium dulce</i>)				X
Kamias (<i>Hedychium coronarium</i>)			X	
Kipi-kihi/Hibi-hibi (<i>Biophytum sensitivum</i>)			X	
Kwachichao (<i>Orthosiphon aristatus</i>)			X	
Lagnob (<i>Ficus hauli</i>)				X
Lagundi (<i>Vitex negundo</i>)		X		X
Mahogany (<i>Swietenia macrophylla</i>)	X			
Malunggay (<i>Moringa oleifera</i>)	X	X	X	X
Mandalosa (<i>Justicia gendarussa</i>)	X	X	X	
Mayana (<i>Coleus blumei</i>)	X	X	X	X
Nangka (<i>Artocarpus heterophyllus</i>)	X			
Noog-noog (<i>Solanum verbascifolium</i>)		X		
Palad (<i>Eleusine indica</i>)		X		
Salingkapaw/Mangagaw (<i>Euphorbia hirta</i>)			X	
Sibukaw (<i>Caesalpinia sappan</i>)			X	X
Siko Carabao (<i>Annona muricata</i>)		X	X	
Tabing (<i>Abutilon indicum</i>)				X
Tanglad (<i>Andropogon citratus</i>)			X	
Tuba-tuba (<i>Jatropha curcas</i>)				X
Tubo (Pula) (<i>Saccharum officinarum</i>)		X		
Total	7	15	11	14

Study Sites: 1-Alegria; 2-Badian; 3-Dumanjug; 4-Ginatilan

Table 2: Medicinal plants used by the *mananambal* in Badian – by specific part, method of extraction, administration and ailment.

Plant Material/ Specific Part	Extraction	Administration	Ailment
Ampalaya, leaves	Expression	Ingestion	Cough
Bangkoro, leaves	Expression	Skin penetration	Hyperacidity
Dapdap, trunk	Expression	Skin penetration	Hemorrhoids
Dila-dila, sprout	Infusion	Ingestion	Abdominal pain
Dulau, rhizome	Decoction	Ingestion	Arthritis
Gabon, leaves	Decoction	Skin penetration	<i>Pasmo sa kusog*</i>
Hilbas, sprout	Decoction	Ingestion	<i>Pasmo sa kaon**</i>
Lagundi, leaves	Decoction	Ingestion	Swelling, cough, kidney
Mandalosa, leaves	Expression	Skin penetration	Gas pain, back pain
Mayana, leaves	Expression	Skin penetration	Swelling
Noog-noog, leaves	Expression	Skin penetration	Hyperacidity
Palad, sprout & stem	Expression	Skin penetration	Back pains, fractures
Mangagaw, leaves	Decoction	Ingestion	Dengue
Siko Carabao, leaves	Decoction	Ingestion	Diabetes, hypertension
Siko Carabao, leaves	Expression	Skin penetration	Ascaris infection
Tubo (Pula), stalk	Decoction	Ingestion	Hypertension

Table 3: Medicinal plants used by the *mananambal* in Dumanjug – by specific part, method of extraction, administration and ailment.

Plant Material/ Specific Part	Extraction	Administration	Ailment
Dila-dila, sprout	Decoction	Ingestion	Hyperacidity, stomachache, <i>pasmo</i> **
Kamias, leaves	Decoction	Ingestion	Stomach ulcer
Kipi-kiپی, leaves	Decoction	Ingestion	Nervousness
Kwachichao, leaves	Decoction	Ingestion	Kidney problems
Malunggay, leaves	Decoction/ Expression	Ingestion	Kidney problems
Mandalosa, leaves	Expression	Skin penetration	Stomachache
Mayana, leaves	Expression	Skin penetration	Wounds, swelling
Mangagaw, leaves	Decoction	Ingestion	Dengue, measles
Sibukaw, tree bark	Decoction	Ingestion	Anemia
Siko Carabao, leaves	Expression	Skin penetration	Stomachache
Siko Carabao, leaves	Decoction	Ingestion	Cyst, cancer
Tanglad, leaves	Decoction	Ingestion	Hypertension

Table 4: Medicinal plants used by the *mananambal* in Alegria – by specific part, method of extraction, administration and ailment.

Plant Material/ Specific Part	Extraction	Administration	Ailment
Abokado, leaves	Decoction	Ingestion	Kidney stones
Atay-atay, leaves	Infusion	Ingestion	Liver problems
Mahogany, bark	Decoction	Ingestion	Fever, diarrhea
Malunggay, roots	Decoction	Ingestion	Cancer
Mandalosa, leaves	Expression	Skin penetration	Body pain, hyperacidity
Mayana, leaves	Expression	Skin penetration	Swelling, bruises, sprains
Nangka, leaves	Decoction	Ingestion	Stomachache

Table 5: Medicinal plants used by the *mananambal* in Ginatilan – by specific part, method of extraction, administration and ailment.

Plant Material/ Specific Part	Extraction	Administration	Ailment
Albahaka, leaves	Decoction	Skin penetration	Skin fungal infection
Atis, leaves	Expression	Skin penetration	Fracture
Bila-bila, leaves	Expression	Skin penetration	Fever
Busikad, leaves	Expression	Ingestion	Toothache
Busikad, leaves	Decoction	Ingestion	Cough, fever, headache
Caimito, peel	Expression	Ingestion	Toothache
Escobilla, leaves	Expression	Skin penetration	Relapse (<i>bughat</i>)
Kamansili, leaves	Expression	Ingestion	Cyst, cancer
Lagnob, sprout	Expression	Skin penetration	Headache
Lagundi, leaves	Infusion	Ingestion	Cough
Malunggay, leaves	Decoction	Ingestion	Stomach ulcer
Mayana, leaves	Infusion	Skin penetration	Cyst
Sibukaw, tree bark	Infusion	Ingestion	Cyst, cancer
Tabing, leaves	Decoction	Ingestion	Goiter
Tuba-tuba, leaves	Decoction	Ingestion	Arthritis, mild stroke, hypertension

*symptoms are hand tremors, numbness and pains, may be due to extensive use of the hand and quickly bringing this contact with water.

**sickness felt after missing a meal or for not eating a meal on time.

In all the four sites, *Mayana* is used for immediate treatment of wounds, swelling, bruises, sprains, and cysts. On the other hand, *Malunggay* is believed to be an effective cure for cancer (Alegria), kidney problems (Dumanjug), and stomach ulcer (Alegria and Ginatilan). A third commonly used plant is *Mandalosa* and it is used for hyperacidity (Alegria), stomachache (Dumanjug), and gas pain and body/back pains (Badian). The *mananambal* explained that when an ailment persists, biomedical care is advised to patients. In most cases, however, they say that common illnesses are relieved after giving herbal medication.

While the *mananambal* in Badian use Lagundi to cure cough, kidney problems, and swelling; in Ginatilan, it is simply used

For cough. Both the Badian and Dumanjug healers use *Mangagaw* to cure dengue and measles. Similarly, *Dila-Dila* is also used in Badian and Dumanjug for hyperacidity, stomachache, and *pasmo* (pain experienced by a patient due to irregular eating habits). Cure for anemia in Dumanjug is *Sibukaw* while in Ginatilan, the plant is used for cancer and eradicating cyst. *Siko Carabao* in Badian is an effective cure for diabetes, hypertension, and ascaris infection; while in Dumanjug, it is used for stomachache, cancer, and cyst.

3.4 Procedures for Preparation and Application

In most cases, leaves of the plants are commonly used. The usual methods of extraction are decoction (25 mentions) and expression (22 mentions); while infusion (5 mentions) is the least. Decoction (hot aqueous extract) entails boiling in water to extract the medicinal properties from the plant material, allowing the mixture to concentrate, and giving the resulting mixture for the patient to drink (ingestion). On the other hand, the method of expression involves extracting the essential medicinal properties from the plant material by pounding or squeezing and applying the extracts to the affected area, or applying the directly as poultice (skin penetration). Infusion entails the immersion of the plant material in water for a certain period of time before application.

4. DISCUSSION

The data show that several of the plants used by traditional healers are those which have been proven to possess a medicinal value. Traditional healers' extensive knowledge of the medicinal usage of plants and where these can be grown, and their skills in the preparation and administration are remarkable. The use of *Mayana* in the four study sites is an indication that swelling, wounds, bruises, and sprains are illnesses and symptoms frequently occurring in the study areas.

The traditional healers included in this study are popular in the locality and are the most sought after *mananambal*. The way they prepare their ingredients for treatment regimen follow the general principles of extraction, i.e., decoction, expression and infusion. Even with their simple methods, it is presumed that the bioactive compounds from the plant sources which are responsible for the curative effects have been extracted. The study did not deal with questions on whether the healers are certain about the illnesses for which the plants are used. Responses obtained are recorded at face value because qualitative researchers are expected to observe and record what the people they study say and do. The *mananambal* are respected healers in their community and questioning their knowledge on the validity of their diagnoses is not being culturally-sensitive. Hahn (1995: 103-104) notes that anthropologists seek to interpret the world of others as the world appears to them. Hence, researchers must remain open to new ideas emerging from the local setting, and their task is to use the universal framework of observation in order to achieve an understanding of the local framework.

Health is a fundamental right for men, women, and children, and is influenced by a combination of several interrelated factors. Limited financial resources influence treatment choices and actions of residents in the four study areas. In the face of poverty, they have the tendency to resort to affordable means even if the condition requires the attention of biomedically-trained health professionals. Systems of beliefs and cultural ideas about healing also influence people's decisions regarding the type of ailments and symptoms they consult with traditional healers. Given this reality, it is therefore recommended that support for indigenous healers should be extended given their role in the medical system. They must be provided with appropriate knowledge of the symptoms of biomedically-viewed ailments, proper medication for them, and a referral system for ailments for which they are regularly consulted. Further study of the relationship between the patient and the *mananambal* must be explored to better understand the context of folk medicine in Cebu. Above all, a study on the isolation, purification, and characterization of the bioactive metabolites that are responsible for the medicinal properties of the plants must be conducted. This may strengthen the use of these plants as medicinals.

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