# Alternative Medicine and Health Care Practices of the Community People of Alaminos City, Pangasinan, Philippines

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Abstract—The use of alternative medicine or herbs has been gaining popularity this past few year in the Philippines and worldwide as more clinical proof emerges that validates many of the age-old alternative medicines used by Filipino folks that have been passed on. This study was conducted in nine (9) selected barangays in the City of Alaminos to determine the utilization of alternative medicine and health care practices of the people in the far-flung barangays. A total of 120 practitioners of alternative medicines were selected as respondents of the study. Results show that those who use medicinal plants in treating maladies are middle adults, female, have not finished basic education, and belong to average-size, low-income families. The practitioners use medicinal plants in treating various illnesses even without knowing the exact medical content and properties of the plants. Blanching, chewing, crushing and sniffing, decoction, frying, heating, poultice, pounding, squeezing and toasting are the different processes used in the preparation of alternative medicines.

Keywords—Alternative, medicine, herbs, health care, medicinal plants.

### I. INTRODUCTION

Healthcare concern for most parents in the Philippines, particularly for those who cannot afford medical care and often live in communities that lack even the basic health care services is so important. Alternative Healthcare Treatment and Practices has been the forefront of bringing health to the people through effective and sustainable strategies.

Herbal plants are mostly propagated in backyard gardens and greenhouses as a source of medicines for treating varied diseases. Individuals who applied herbal plants in curing illnesses were called "albularyo", "herbolario" or quack doctors. Each herbal doctor utilizes his/her own preference for medicinal plants and has his/her own way of administering them patients to (www.quackwatch.org) [1]. The use of medicinal plants or herbs has been gaining popularity this past few year in the Philippines and worldwide. More and more clinical proof emerges that validates many of the age-old alternative medicines used by Filipino folks that have been passed on. The curative effects of the herbs were tested by traditional healers on their patient. The knowledge and skills on the curative application of any given herbal medicine has been handed down from generation to generation (http://www.stuartxchange.org/TAMA) [2]

Plants had been used for medicinal purposes long before recorded history. Ancient Chinese and Egyptian papyrus writings describe medicinal plant uses. Indigenous cultures such as African and Native American used herbs in their healing Rituals (www.powershow.com/.../Indigenous\_Health\_Knowl edge)[3]. While others developed traditional medical systems in which herbal therapies were used systematically. People in different parts of the globe tended to use the same or similar plants for the same purposes.

Later, chemists began making their own version of plant compounds, beginning the transition from raw herbs to synthetic pharmaceuticals. Over time, the use of herbal medicines declined in favor of pharmaceuticals (http://hea.sagepub.com/content 13/3/317.abstract [4]

At present, the Department of Health (DOH) and Non-Governmental Organizations (NGO) are joining hands in forging resources, to be able to help the people especially those who are in far-flung

barangays. The Department of Health (DOH) have likewise identified some herbal plant. Drug companies, either multinational or local are likewise trying to convert some herbal plants into capsules or syrups as a substitute for expensive brands of medicines which is beyond the financial capabilities of the underprivileged. As modernization comes so fast there is also a fast-growing number of healthrelated problems which affects an individual in the community. In most of the far-flung barangays, medicines are expensive and likewise difficult to secure. Most residents resort to the use of herbal medicines and alternative practices in treating illnesses since they cannot avail them readily and cannot afford to buy the branded and expensive pharmaceutical products.

This research has focused on the study of the Alternative Medicine and Health Care Practices of the People in the City of Alaminos. Specifically, on its Nine (9) selected barangays. A total of 120 respondents including the albularyos were interviewed.

#### II. MATERIALS AND METHODS

The study was carried out in nine (9) selected barangays of Alaminos City, Pangasinan namely: Pangapisan, Mona, Quibuar, Limansangan, Dulacac, Sta Maria, Telbang, and Victoria which are considered as far-flung barangays and City Proper or Poblacion.

The different barangays are shown in Figure 1. The study sites were identified based on their distance to the city proper. Those who were available at the time of the survey were chosen to be the respondents. A total of ten (10) respondents per barangay were interviewed except for barangay Poblacion in which there are 40 respondents. Before the survey proper, approval from the City Mayor was sought and eventually endorsed to the officials of each barangays.

The study utilized the descriptive survey method of research design wherein questionnaires were formulated and translated to Filipino and Ilocano. The instrument of this study contained sections of A, B, C and D. Section A contained the attributes of respondents profile; section B has been designed to collect data on the Herbal Medicines with its medicinal properties which were commonly used in Treating Illnesses, section C was concerned with the illnesses treated by the alternative medicines; section D gathered data on the different practices in the preparation of alternative medicines.

For the attributes of the respondents, medicinal properties commonly used by the people in treating illnesses, illnesses treated and preparation practices of alternative medicine, frequency counts, and percentage distribution were used.

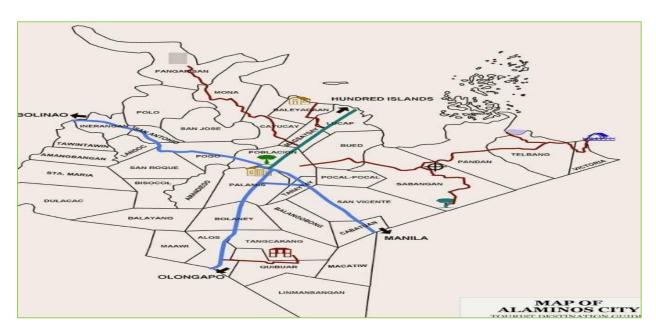


Fig. 1. The map of different barangays of Alaminos City, Pangasinan, and the selected study areas.

#### III. RESULTS AND DISCUSSION

# Attributes of the Respondents

A total of 120 respondents (10 for eight far-flung barangay and 40 for barangay Poblacion) were interviewed in this study. The attributes of the respondent are presented in Table 1. Most of the respondents are 41 years old and above with a frequency of 60, mostly female with a frequency of 111 and mostly high school graduate with manual occupations (fishing, farming, driving, homemaking) with three (3) or fewer children. Majority of the respondents has a monthly income of 10,000-below with a frequency of 87.

# Herbal Medicines and its medicinal Properties

Plants medicinal properties in which most of the respondents believe that the plant has is shown in Table 2. From the list, Akapulko has a frequency of 89 as an antifungal, ampalaya as an anti-tussive for 69 respondents, garlic as antihypertensive with a frequency of 100, gawed with a frequency 23 as antirheumatism. Moreover, guava has a frequency of 88 which is used as an anti-bacterial while guyabano has a frequency of 44 as an anti-vertigo and herba buena with the frequency of 49. Herbaka is also an antibacterial, with a frequency of 50, katakataka as an anti-inflammatory frequency of 37, kusay as an antiinflammatory with a frequency of 41. Lagundi with frequency 61 as anti-rheumatism and 58 as an antitussive, oregano with the frequency of 47 as antivertigo. Furthermore, sambong with a frequency of 57 is also considered as antipyretic, and tsaang gubat with a frequency of 26 as an analgesic. This only shows that garlic is the most commonly used plant with its medicinal property followed by akapulko, and guava.

## Various Illnesses Treated by Alternative Medicines

For various illnesses treated with alternative medicines, it is shown in Table 3. Guava was used in treating eight (8) illnesses namely: wounds, dizziness, diarrhea, pruritus, colic, stomachache, and an-an. Meanwhile, the respondents also identified seven (7) illnesses which can be cured by garlic particularly, hypertension, headache, toothache, balisawsaw, boils, colds, and rheumatism. Also with

sambong which was identified in curing seven (7) illnesses namely: fever, rheumatism, headache, fever, balisawsaw, wounds and stomachache. Alternative medicine Akapulko shows that there are five (5) illnesses being treated by this plant namely: an-an, balisawsaw, buni, cough, and pruritus. Guava has been considered by the respondents to treat eight (8) identified illnesses such as wounds, dizziness, diarrhea, colic, pruritus, stomachache, toothache, and an-an. These findings also support supports the previous findings that guava is known to the respondents as having the most number of medical properties. Other commonly used herbs that have been cited to cure at least seven to four identified illnesses are garlic, sambong, herba Buena, akapulko, ampalaya, gawed, oregano, lagundi and tsaang gubat.

# Different Practices in the Preparation of Different Alternative Medicines

To determine the manner or ways the herbal medicines are prepared, the researcher included in the survey the different practices being done by the respondents to this commonly used herbal plants in which they considered effective. Results of this part are shown in table 4. For the different preparation practices garlic has the most number of preparation which includes the following: chewing, pounding, poultice, heating, decoction, and frying. This is followed by six (6) preparations such as decoction, pounding, poultice, squeezing crushing and sniffing and chewing. Gawed with processes such as chewing, heating, pounding, and poultice. Meanwhile, akapulko is prepared by decoction, pounding, poultice and squeezing. Sambong for pounding, poultice, decoction, and heating. Moreover, ampalaya has the only blanching preparation among the alternative medicine listed. Also, this is prepared by decoction, squeezing and chewing.

The practices of the respondents regarding the preparation of commonly used alternative medicines are varied, diverse and not confined only to a single preparation. Some of the identified herbal pants are prepared by blanching, frying, heating, squeezing, toasting but these are practiced by relatively few practitioners. Whereas, most of the respondents have the practice of preparing their alternative medicine through decoction, pounding, poultice, and chewing.

Table 1 Attributes of the Alternative Medicine respondents					
n=120					
Variable	Categories	Frequency	Percentage		
Age					
	15-30 years old	8	6.67%		
	31-40 years old	52	43.33%		
	41 years old and above	60	50%		
Sex					
	Male	9	7.5%		
	Female	111	92.5%		
<b>Educational Attainment of Respondents</b>					
-	Elementary Level	16	13.33%		
	High School Level	73	60.83%		
	Vocational Level	17	14.17%		
	College Level	14	11.67%		
Occupation of the Respondents					
•	Manual	87	72.5%		
	Professional	10	8.33%		
	Business	23	19.17%		
Number of Children					
	3 or less	62	51.67%		
	4 to 6	35	29.17%		
	7 and more	23	19.16%		
Monthly Family Income					
	10,000-below	87	72.5%		
	10,001-29,999	20	16.67%		
	30,000-above	13	10.83%		

Table 2 Alternative Medicines and its Medicinal Properties Used in Treating Illnesses			
ALTERNATIVE MEDICINE	MEDICINAL PROPERTIES	FREQUENCY	PERCENTAGE
Akapulko	Anti-bacterial	37	30.83%
	Antifungal	89	74.15%
	Antitussive	1	.83%
	Anti-inflammatory	19	15.83%
Aloe Vera	Analgesic	26	21.67%
	Antipyretic	2	1.67%
	Anti-inflammatory	42	35%
Ampalaya	Anti-diabetes	77	64.17%
•	Anthelmintic	1	.83%
	Antitussive	69	57.50%
	Analgesic	22	18.33%
	Antipyretic	17	14.17%
Garlic	Antihypertension	100	83.33%
	Anti-rheumatism	41	34.17%
	Analgesic	22	18.33%
	Anti-inflammatory	24	20%
Gawed	Anti-spasmodic	18	15%
	Antitussive	6	5%
	Anti-rheumatism	23	19.17%
	Analgesic	18	15%
Guava	Antibacterial	88	73.33%
	Anti-fungal	59	49.17%

	Anti-vertigo	84	70%
	Anti-spasmodic	61	50.83%
	Anti-diarrhea	77	64.17%
	Analgesic	24	20%
Guyabano	Antivertigo	44	36.67%
Herba-buena	Anti-vertigo	49	40.83%
	Anti-spasmodic	41	34.17%
	Aanalgesic	41	34.17%
	Anti-pyretic	7	5.83%
Herbaka	Antibacterial	50	41.67%
	Analgesic	41	34.17%
Katakataka	Anti-viral	30	25%
110001000100	Antivertigo	4	3.33%
	Antipyretic	4	3.33%
	Anti-inflammatory	37	30.83%
Kusay	Analgesic	35	29.17%
Trubuy	Antipyretic	1	.83%
	Anti-inflammatory	41	34.17%
Lagundi	Antitussive	58	48.33%
Dagunui	Anti-rheumatism	61	50.83%
	Analgesic	41	34.17%
	Antipyretic	1	.83%
Niyog-niyogan	Antitussive	9	7.5%
141yog-myogan	Anti-rheumatism	3	2.5%
	Analgesic	3	2.5%
Oregano	Antivertigo	47	39.17%
Oregano	Antitussive	36	30%
	Analgesic	32	26.67%
	Antipyretic	26	21.67%
	Anti-inflammatory	14	11.67%
Sambong	Antibacterial	20	16.70%
Bambong	Antitussive	1	.83%
	Anti-rheumatism	49	40.83%
	Analgesic Analgesic	42	35%
	Antipyretic	57	47.5%
	Diuretic	37	30.28%
Tsaang Gubat	Anti-spasmodic	14	11.67%
1 saang Guvat	Anti-spasmodic Anti-diarrhea	17	14.17%
	Analgesic	26	21.67%
	Allargeste	۷0	41.0770

Table 3 Various Illnesses Treated by Alternative Medicines			
Alternative Medicine	Illnesses	Frequency	Percentage
Akapulko	An-an	93	77.55%
	Balisawsaw	22	18.33%
	Buni	38	31.67%
	Cough	1	.83%
	Pruritus	27	22.5%
Ampalaya	Burns	2	1.67%
	Cough	74	61.67%
	Diabetes	80	66.67%
	Fever	29	24.17%
	Headache	25	20.83%

Garlic	Balisawsaw	16	13.33%
	Boil	8	6.67%
	Colds	1	.83%
	Headache	100	83.33%
	Hypertension	100	83.33%
	Rheumatism	1	.83%
	Toothache	53	44.17%
Gawed	Colic	18	15%
Guirea	Cough	6	5%
	Headache	23	19.17%
	Rheumatism	23	19.17%
	Stomachache	18	18%
Guava	An-an	1	.83%
Guuvu	Colic	61	50.83%
	Diarrhea	77	64.17%
	Dizziness	84	70%
	Pruritus	59	49.17%
	Stomchache	46	38.33%
	Toothache	24	20%
	Wounds	88	73.33%
Guyabano	Diarrhea	6	5%
Guyabano	Dizziness	45	37.5%
Herba buena	Burns	3	2.5%
Tierba buena	Cough	1	.83%
	Dizziness	49	40.83%
	Fever	70	58.33%
	Headache	41	34.17%
	Stomachache	41	34.17%
Herbaka	Colic	41	34.17%
Ticibaka	Headache	50	41.67%
	Stomachache	41	34.17%
Katakataka	Burns	37	30.83%
Ratakataka	Fever	3	2.5%
	Mumps	30	25%
Lagundi	Cough	58	48.33%
Lagunai	Fever	41	34.17%
	Rheumatism	61	50.83%
	Toothache	41	34.17%
Niyog-niyogan	Cough	9	7.5%
111yog-myogan	Headache	3	2.5%
	Rheumatism	3	2.5%
Oregano	Boils	14	11.67%
Oregano	Cough	36	30%
	Dizziness	42	35%
	Fever	26	21.67%
	Headache	32	26.67%
Sambong	Asthma	1	.83%
Dambong	Balisawsaw	37	30.83%
	Fever	62	51.67%
	Headache	34	28.33%
	Rheumatism	47	39.17%
	Stomachache	11	9.17%
	Wounds	24	20%
	11 Ounds	Δ¬τ	20/0

Tsaang Gubat	Colic	14	11.67%
	Cough	1	.83%
	Diarrhea	17	14.17%
	Stomachache	26	21.67%

Ta	able 4 Different Practices on A	Alternative Medicine Prepa	ration
<b>Alternative Medicine</b>	Preparation	Frequency	Percentage
Akapulko	Decoction	93	77.5%
	Pounding	35	29.17%
	Poultice	35	29.17%
	Squeezing	32	26.67%
Ampalaya	Blanching	25	20.83%
•	Chewing	1	.83%
	Decoction	107	89.17%
	Squeezing	49	40.83%
Garlic	Chewing	100	83.33%
	Decoction	1	.83%
	Frying	1	.83%
	Heating	3	2.5%
	Pounding	64	53.33%
	Poultice	63	52.5%
	Soaking	16	13.33%
Gawed	Chewing	23	19.17%
Guirea	Decoction	18	15%
	Heating	23	19.17%
	Pounding	23	19.17%
	Poultice	18	15%
Guava	Chewing	24	20%
Guava	Crushing & Sniffing	84	70%
	Decoction Decoction	88	73.33%
	Pounding	88	73.33%
	Poultice	88	73.33%
	Squeezing	83	69.17%
Guyabano	Crushing & Sniffing	43	35.83%
Guyabano	Decoction Decoction	10	8.33%
Herbaka	Decoction	41	34.17%
iici vaka	Pounding	50	41.67%
	Poultice	50	41.67%
	Squeezing	50	41.67%
Katakataka	Pounding	46	38.30%
Natakataka	Poultice	40 41	34.20%
Lagundi	Decoction	58	48.33%
Lagunui	Pounding	61	50.83%
	Poultice	61	50.83%
Ni			
Niyog-niyogan	Decoction	9 3	7.5%
	Pounding	3	2.5%
0	Poultice		2.5%
Oregano	Crushing & Sniffing	41	34.17%
	Decoction	36	30%
	Pounding	32	26.67%
	Poultice	32	26.67%
Sambong	Decoction	37	30.83%
	Heating	10	8.33%

	Pounding	69	57.5%
	Poultice	68	56.67%
Tsaang Gubat	Decoction	27	22.5%
	Toasting	1	.83%

# IV. CONCLUSION

In conclusion, the respondents with various make use of the different alternative medicines in treating their various illnesses. They do believe that the different chemical properties of the alternative medicines are capable of treating various illnesses. Moreover, respondents do prepare the alternative medicines in a different manner based their own identified practices and preferences.

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