

Empowering Communities: Reviving Traditional Medicine for Sustainable Health and Poverty Reduction

Lucille L. Bautista¹, Aristeo C. Salapa²

¹PhD Student, Philippine Nurses A

²PhD

Abstract

The objective of this study was to assess the knowledge and attitudes toward the utilization of traditional medicinal plants and their impact on health improvement and poverty alleviation among the residents of Barangay Mintal, Davao City. The primary goal was to provide essential baseline data to support the enhancement of Republic Act 8423 (PITAHC), which aimed to enhance the quality and delivery of healthcare services in the Philippines by developing traditional and alternative healthcare and integrating it into the national healthcare system.

The study was conducted at Barangay Mintal, Davao City, with a population of 18,677 (City Population, 2020), the study focused on a community that, despite being highly urbanized and diverse in tribal representation, continued to rely on traditional herbal medicine for treating illnesses within their homes. The preference for herbal medicines stemmed from their accessibility, ease of preparation, cost-effectiveness, and perceived efficacy, in alignment with indigenous traditions.

Utilizing in-depth interviews and documentation through qualitative analysis, the research sought to explore the community's knowledge and attitudes regarding herbal usage. The study aimed to determine whether such practices contributed to alleviating health-related expenses within families. Ten respondents, aged 18-60, were randomly selected for in-depth interviews, utilizing open-ended questions.

The qualitative analysis brought to light the need for the revitalization of traditional herbal medicine practices within the barangay and health centers. Collaborative efforts with the Department of Health (DOH) were recommended, emphasizing the establishment of educational programs to raise community awareness. These programs would focus on improving practices, ensuring correct usage, and promoting the protection and conservation of medicinal plants. The findings also highlighted the importance of extending this knowledge to other barangays and schools.

Keywords: Herbal medicine, underprivileged, Barangay

INTRODUCTION

This study aims to determine the knowledge and attitude of the constituents of the Mintal community towards herbal medicine usage and its impact on health alleviation and poverty. Based on the data from Mintal Comprehensive High School (MCHS) students who were sent home due to flu-like symptoms, it was observed that they were not initially treated with medications from their homes. One

primary reason is that not all parents can afford to purchase conventional medicine for common ailments like colds, fever, and cough, as it constitutes an additional expense. Some students were referred to the City Health Office/ Rural Health Unit (CHO/RHU), where free consultations are available. However, not all prescribed medicines are provided for free, potentially exacerbating the condition of these simple ailments. (Quilon, 2019)

However, in the year 1997, the Philippine Institute of Traditional and Alternative Health Care (PITAHC) successfully identified ten herbal medicines suitable for community use. The Department of Health (DOH) supports pertinent scientific studies to advance herbal medicine, particularly prevalent in rural areas. This support would foster additional scientific research to improve the effectiveness and understanding of herbal medicine within the community. (Mendoza, 2009)

Globally, the number of individuals using dietary supplements and herbal medicine products is continuously increasing in many countries. In some nations, supplement use is limited to general health and well-being, while others permit it for medicinal purposes. However, certain countries still lack surveillance programs to establish transparent analytical approaches with emerging technology, which would ensure the worldwide quality and safety of dietary supplements and herbal products. (Thakkar, 2020)

The Philippines is often categorized as a Third World country and is ranked 73rd among the world's poorest nations. Many people attribute this classification to issues such as corruption, unemployment, crime, and poverty, which they believe hinder the country's progress toward development. However, politicians frequently make promises to address these challenges in their quest for votes. While some may genuinely try to help and empathize with these issues, the benefits provided often fall short. (Ventura, 2023)

Nevertheless, The Philippine Institute of Traditional and Alternative Health Care (PITAHC) holds legislative control over herbal medicine in the Philippines to integrate it into the national healthcare system. Current policies encompass measures to oversee, implement, and monitor herbal medicines from production to consumption. Moreover, there is a need for enhancements based on international standards to ensure efficacy and safety for public use. Notably, existing policies lack provisions addressing the long-term effects, efficacy on specific populations (such as children, the elderly, and pregnant women), and potential interactions with other food and drugs. Additionally, there is a pressing need for more research to understand how environmental factors influence herbal products and to assess the cost-effectiveness of herbal medicines, which addresses a significant gap in our current knowledge (Zarsuelo, 2018).

Furthermore, the Bagobo tribe residing in the Malagos watershed in Davao City prefers utilizing various medicinal plants indigenous to their community for treating minor pains, itchiness, burns, and other common bodily ailments. However, having a health center in their vicinity, the community continues to rely on these traditional remedies and is knowledgeable about their preparation and application. These plants thrive abundantly, found either in the forest or cultivated in their backyard gardens (Gascon, 2011).

In any event, Baranggay Mintal community is also affected by the Philippine healthcare system, which still faces several problems. Branded drugs in the Philippines are 22 times more costly than international references. Despite the Cheaper Medicine Act of 2008 and the Generics Act of 1988, individuals in the lower-income brackets still struggle to afford maintenance medicines for conditions like hypertension, diabetes, and antibiotics. However, Filipino Traditional Herbal Medicine, widely

accepted for centuries, has played a significant role. Therefore, validating these traditional herbal medicines through research is essential to establish evidence-based practices. The aim is to develop safe, efficacious, and low-cost Philippine Herbal Medicines, providing a long-term solution for a healthy community and alleviating poverty (Lazarte, 2020).

Statement of the Problem

The research aimed to evaluate the knowledge and attitudes regarding the use of traditional medicinal plants and their influence on health enhancement and poverty alleviation among the residents of Barangay Mintal in Davao City. Specifically, the study sought to address the following inquiries:

1. What is the socio-economic profile of the participants in terms of:

- a. Age
- b. Sex
- c. Civil Status
- d. Income
- e. Occupation
- f. Educational Attainment

1. To ascertain the usage of herbal medicine for treating ailments in households.

2. To determine the significance of reintroducing herbal medicine in the community and conducting training sessions at the barangay level on the appropriate utilization and application of herbal remedies.

Significance of the Study

The findings will be beneficial to the following:

Underprivileged families in Barangay Mintal- These families will gain access to affordable and effective healthcare, improve their health outcomes, and potentially experience economic benefits from herbal medicine cultivation and sales.

The Barangay Mintal community- The community as a whole will benefit from improved health outcomes, reduced healthcare costs, and the preservation of cultural knowledge and practices.

For future generations reviving herbal medicine practices, the research can ensure that this traditional knowledge and its potential benefits are available to future generations.

Researchers and policymakers' research findings can inform future research on herbal medicine and guide policymakers in developing strategies to promote the use of traditional medicine for sustainable healthcare and poverty reduction.

Scope and Limitation

The study aimed to assess the knowledge and attitudes of households in Barangay Mintal, Davao City, which has a population of 18,677 (City Population, 2020). Primary data were collected from Barangay council staff, specifically the two Barangay Kagawad, and three Barangay Health Workers. Additional interviews were conducted with five barangay constituents to ensure an unbiased data collection process that incorporated perspectives from both barangay officials and the community level. The research was conducted in

November 2023, and it was verified that all ten participants were residents of Barangay Mintal, Davao City.

Definition of Terms

The following terms are defined operationally.

herbal medicine- refers to medicinal herbs, plants, and their extract.

Traditional medicine- refers to cultural rituals and spiritual healing.

Alternative medicine- refers to mainstream medical treatment a diverse modalities like acupuncture, chiropractic care, and homeopathy.

Underprivileged- refers to community in need, poor

Poverty -refers to being poor.

METHODOLOGY

This section covers the research design, sources of data, sampling methodology, tools for data collection, study procedures, statistical methods, and the analysis of data.

Research Design

This study utilized a qualitative research design, employing an in-depth interview process, a method often utilized in descriptive qualitative research. This approach is tailored towards exploring and understanding the intricacies of the phenomena under investigation, emphasizing a comprehensive comprehension of the subject matter's depth. The qualitative research in this study aligns with an interpretivism paradigm, with a primary goal of attaining a profound understanding of the research subject rather than predicting specific outcomes.

Interpretivism, as adopted in this research, seeks to enrich knowledge by delving into individuals' unique perspectives and the significance they attribute to them. Essentially, qualitative research values the lived experiences of individuals, inherently embracing subjectivity and recognizing potential biases from both researchers and participants (Tomaszewski, 2020).

Source of Data

The study aimed to assess the knowledge and attitudes of households in Barangay Mintal, Tugbok, Davao City. Primary data were obtained from five Barangay Council staff, comprising two Barangay Kagawad and three Barangay health workers. Additionally, interviews were conducted with five other barangay constituents. However, it is acknowledged that key informant interviews may have limitations in fully grasping the intended meaning. To ensure an unbiased data collection process, in-depth interviews were conducted with both barangay officials and community members.

The study is scheduled for November 2023, involving five members from the Barangay Council and five members from the barangay constituents, who were representatives of the households in the area. The research locale for this study is Barangay Mintal, Tugbok, which has a population of 18,677.

Data Gathering Technique

The researcher will be conducting interviews with key informants using guided questions derived from the research inquiries. Open-ended questions will serve as the foundation for the data-gathering instrument, aligning with the qualitative design of this study. The use of open-ended questions allows respondents to provide free-form responses. Participant validation, involving the sharing of preliminary interpretations and seeking feedback, contributes to ensuring the validity of the findings.

Flexibility in shaping the research process and findings is considered, explicitly addressing biases and assumptions and their potential impact on data analysis and interpretation. Triangulation is also contemplated and may involve additional data sources, such as community-level observations, to corroborate the interview findings.

The analysis and interpretation of data involve assigning significance and meaning to the gathered information, as well as determining the conclusions and implications of the findings. In this qualitative study, the process entails systematically organizing interview transcripts, observation notes, and other non-textual materials collected by the researcher. This systematic arrangement aims to enhance comprehension of the phenomenon under investigation.

Participants of the Study

This study involved 10 key participants, including representatives from the Barangay Local Government Unit (BLGU). The BLGU was represented by two Barangay Kagawad, three barangay health workers, and five Barangay constituents. All 10 key informants were individuals from the Barangay Mintal community, acknowledged and trusted by their respective households in the area.

The Procedure of the Study

The researcher has identified three topics for the study and presented a concept paper to elicit feedback and suggestions aimed at improving the research. Following established procedures, the researcher systematically collected the necessary data and developed a study concept paper addressing specific issues and gaps in the research area.

Permission for data gathering through key informant interviews was obtained after submitting a formal letter request to community leaders. An in-depth interview was then conducted with five selected Barangay Council Staff members and five barangay constituents as part of the study. To further validate information and enhance triangulation, supplementary data were collected from additional ordinary households or individuals.

Data Analysis Techniques

This qualitative study is guided by the interpretivism paradigm, it involves delving into the rich terrain of interview transcripts and observation notes to uncover hidden stories. The Content is employed, where the researcher meticulously sorts and categorizes the data, identifying key themes and patterns. This process includes the careful transcription of interviews to capture nuances of speech and nonverbal cues. Coding entails the identification and labeling of recurring concepts, ideas, and experiences within the data. Subsequently, related codes are categorized and grouped into broader themes to reveal overarching patterns.

Furthermore, narrative analysis, coupled with thematic exploration, transforms fragments into a cohesive narrative. This involves reformulating or recrafting participants' stories while considering their context and individual experiences. The thematic analysis aims to identify recurring patterns in meaning across individual narratives, unveiling the broader cultural tapestry. Interpretation involves examining the relationships between themes and delving into the reasons behind participants' actions and beliefs.

However, validation and refinement processes are implemented to ensure the accuracy and trustworthiness of the findings. Reflexivity is integral, as it involves recognizing and acknowledging the researcher's own biases and assumptions, ensuring that they do not unduly influence the analysis.

DISCUSSION

The analysis of qualitative data revealed several themes concerning the uncertainty surrounding the use of herbal medicine within households. The primary theme that emerged was the widespread utilization of herbal medicine in the community, with participants frequently expressing their dependence on herbal remedies for various health concerns. This underscores the prevalent and deeply rooted use of herbal medicine within the community. Despite its increasing global popularity, herbal medicine is often linked to self-administration. The practice of using herbs for healing purposes predates recorded history and serves as the foundation for a significant portion of modern medicine (Abdelmola, 2021).

Commencing treatment with herbal medicine before resorting to conventional medical approaches was a recurrent practice among patients. Individuals highlighted the constraints of herbal remedies when dealing with severe illnesses. The preference for herbal medicine as a treatment choice stemmed from dissatisfaction with conventional therapies, positive past encounters, and the influence of family traditions. The most frequently cited reasons for opting for herbal remedies included personal satisfaction with prior experiences, positive attributes associated with herbal treatments, and adherence to family traditions. In terms of information sources, independent reading and adherence to family practices were deemed equally, if not more, significant than seeking advice from medical professionals (Samojlik, 2013).

Based on responses from the key informant interviews, participants numbered 1 to 10 consistently expressed a strong reliance on herbal medicine. Their responses underscore a notable emphasis on preserving traditional knowledge and practices associated with herbal remedies. Despite this reliance on traditional approaches, there is also a discernible cautious stance toward modern medicine evident in the collected data.

Additionally, the data highlights a prevailing skepticism among participants regarding pharmaceuticals and vitamins, with concerns voiced about potential side effects associated with contemporary medications and supplements. The findings suggest a nuanced perspective that balances the perceived benefits of herbal medicine with reservations about the safety of certain modern healthcare interventions.

In specific geographical locations, robust cultural influences and persistent beliefs significantly shape the utilization of herbal medicines. This trend often corresponds to situations where a healthcare system is either absent or inadequate. The patronage of herbal therapies is experiencing rapid growth globally, reflecting a cultural or economic context where reliance on traditional remedies is prominent.

Across various communities, the use of herbal medicine is deeply intertwined with their cultural identity, with many considering it an integral and indispensable aspect of their heritage. This growing acceptance emphasizes the enduring significance of herbal therapies on a global scale. (Rondilla, 2021)

However, over the last three decades, there has been a notable increase in the adoption of herbal medicinal products and supplements, with a substantial 80% of the world's population integrating them into various aspects of primary healthcare. Unfortunately, their usage is frequently insufficiently monitored or, in certain instances, not monitored at all.

Given these concerns, the attention to toxicity-related issues and significant safety considerations stemming from the use of herbal medicinal products highlights the imperative to tackle challenges linked to the effective monitoring of their safety. This underscores the necessity for comprehensive regulatory measures aimed at bolstering the overall safety and quality assurance of herbal remedies (Ekor, 2014).

The responses of key informant interviews number 5 and 10 reflect that there is a great influence of community teaching as regards to the use of herbal medicine in the household. Over 50% of the respondents believed that herbal medicines were effective and should be integrated into the modern health care system.(Nworu,2015)

GUIDE QUESTIONS	RAW INTERVIEW DATA/RESPONSES	FIRST LEVEL CODE	THEME
	KII1,KII2,KII3,KII4,KII5,KII6,KII7,KII8,KII9,KII10		
1.To ascertain the usage of herbal medicine for treating ailments in households	Usually, I use herbal medicine. Because I am used to it and, since we stayed in the rural area, before and we are quite far from the hospital, my mother usually gives us herbal medicine when we get sick unless no improvement in my condition's the time I am brought to the hospital. as a sort of prevention what I usually know is Lagundi,calabo, which is very common. So the collabo now that I got married, I usually use it for my child,I just steam the leaves then squeeze it,then measure it that it would reach to10 ml..making it sure that it is pure or concentrated then thats the time I give it to my child.I also give this 3 times a day.with Lagundi I also tried it ,I just boil it then .there is no specific measurement I just give it and make it as her water intake.if the child doesnt have fever I just give herbal with in three days,unless there is no alleviation of the symptoms thats the time I give modern medicine.I dont even give vitamine C ,I just give fruits and juices then .but if fever will still continue with in 2 days thats the time I go for check up at the doctor.. there are stories where everything that we take has a side effect. because we are going to natural.while watching tiktok I found out that eventually intake of vitamins can also have its side effect.(KII1)	1.Use of herbal medicine. 2. Reliance on herbal medicine. 3.Skepticism towards pharmaceuticals and vitamins	Preservation of traditional knowledge Cautious approach to modern medicine Reliance on herbal medicine Skepticism towards pharmaceuticals Preservation of traditional knowledge
	Our family commonly use herbal medicine ,my parents usually drink boiled sambong leaves as their routine intake,they make it as their water intake.(KII2)	Routinely drink boiled sambong leaves	Use of herbal medicine
	My son john john usually drink herbal like serpentina,if he does have abdominal discomfort he	Drink herbal like serpentina	Health benefits and efficacy of

	<p>usually drink it first before taking western medicine,we do research from the internet ,with this herbal intake.even Lagundi it really helps with my daughters illness she had already finished with her antibiotics intake.which is expensive. but her cough did not subside.I tried to give her boiled Lagundi leaves..oh for just one intake her cough was cured.when she even had chicken pox. I bath her with boiled lagundi leaves with some pomelo or lemon leaves,it only took 1 week and her chicken pox got dried up easily.(K113)</p>		<p>herbal medicine Reliance on herbal medicine</p>
	<p>At present I usually use modern medicine,though before a often use herbal medicine..due to that I had already transferred residence , and we have herbal garden at home and I am always given with this herbal meds since I was taught by my mother(K114)</p>	<p>Preference for herbal medicine over modern medicine Family tradition and cultural heritage</p>	<p>Preference for herbal medicine over modern medicine. Family tradition and cultural heritage Preservation of traditional knowledge</p>
	<p>If we get sick at home we commonly use herbal medicine in the family like the leaves of gabon, we just boil its leaves and use it for abdominal pain,even highblood,we were taught by our neighbors and from the barangay(K115)</p>	<p>Community teaching</p>	<p>Community teaching Preservation of traditional knowledge</p>
	<p>We use Cortal before, there is no medicol before ,we also use tiktiki, when we were still young,though when If we fall and have abrasions,its only “kamungay leaves that is used for the wounds, recently I took insulin plant leaves because I am diabetic,but I don’t feel good with it,it doesn’t taste good in my tongue that why I instead purchase herbal medicine on-line,I prefer to use herbal (K116)</p>	<p>Integration of herbal medicine into daily routine “Kamungay” leaves for abrasion</p>	<p>integration of herbal medicine into daily routine Family tradition and cultural</p>

			heritage Preservation of traditional knowledge
	Yes we use Tanglad, even ginger we use it in the family(KII7)	Use of ginger and tanglad in the family	Family tradition and cultural heritage
	Oh when we have cough we use lagundi in the family, the syrup form, before when we still have this herbal plants we use it for bathing and make as a cocktail of herbs .as treatment for fever.to my grandchildren(KII8)	Health benefits, personal experience and testimonials Bath with herbs for fever	Health benefits Personal experience and testimonials
	We really drink herbal medicines at home, every morning with my husband a concoction of malungay,kamote tops,labana leaves,bayabas leaves,I just boil it and that is what we drink in the morning I dont drink coffee,I also give kalabo to my kids.(KII9)	Drink a concoction of herbal medicine at home	Personal experience and testimonials
	Yes mam since I am taught by my parents with those herbal medicines on how to use it I also use it at home for my children when they get sick we just don't depend of antibiotics intake .(KII10)	administer it to sick children at home	Family tradition and cultural heritage

In conclusion, the thematic analysis of the raw interview data from the 10 key informant interviews revealed three main themes: Empowerment and self-sufficiency, Cost-effectiveness of herbal medicine, and Community teaching and revival of herbal medicine. These themes reflect the perceived significance of reintroducing herbal medicine in the community and conducting training sessions at the barangay level on the appropriate utilization and application of herbal remedies, as expressed by the key informants.

GUIDE QUESTIONS	RAW INTERVIEW DATA/RESPONSES KI1,KII2,KII3,KII4KII,5,KII6,KII7,KII8,KII9,KII10	FIRST LEVEL CODE	THEME
2. To determine the significance of	Yes ,reviving herbal medicine really helps in the community, that's really good.(KII1)	Herbal medicine really helps in the	Empowerment and self sufficiency

<p>reintroducing of herbal medicine in the community and conducting training sessions at the barangay level on the appropriate utilization and application for herbal remedies</p>		<p>community</p>	
	<p>it is good to revive the teaching of herbal medicine in our community since it is no longer affordable to buy modern medicine as of now.(K112)</p>	<p>good to revive the teaching of herbal medicine</p>	<p>Cost – effectiveness of herbal medicine</p>
	<p>Yes it good to teach the community regarding the herbal medicine benefits.because if they will plant on their backyard they will no longer have difficulty to buy or add expenses just to buy western medicine.it is really expensive to buy western medicine. (K113)</p>	<p>Teach community about the benefits of herbal medicine</p>	<p>Accessibility and availability of herbal meds; Empowerment and self-sufficiency</p>
	<p>it is really a big help if this herbal medicine will be revived in the community as well as teaching the community,it also helps in the budget of the family .(K114)</p>	<p>Revival of teaching herbal medicine , helps in the budget</p>	<p>Cost – effectiveness of herbal medicine -community teaching and revivial of herbal medicine</p>
	<p>yes it is really good to bring back herbal medicine use in the community, we can financially save of its use. (K115)</p>	<p>Good to bring back herbal</p>	<p>Cost – effectiveness</p>

		medicine use in the community	
	yes those are herbal medicines,its really good to bring back those teachings(K116)	Good to bring back teachings of herbal medicines	Empowerment and self sufficiency
	actually we are teaching the community to plant back herbs aside from the backyard gardening of vegetables in every purok,we teach them to make use camote leaves as juice with tanglad (K117)	Community to plant herbs and vegetables in their backyard	Community teaching
	its really expensive if we buy the tablet form, but I still have herbal plants at home.Yes it really Ok if we enhance the usage of herbal medicine in the community.(K118)	good to enhance usage of herbal medicine in the community	Cost – effectiveness Community teaching
	it is really ok mam,if we revive the intake herbal medicine in the community (K119)	Ok to revive herbal medicine in the community	Community teaching
	It is really good if we go back and be thought on it mam since we can really save money and at the sametime we are taught on the importance and proper use of the herbal meds in our backyard (K1110)	Can save money,taught on the importance and proper use of herbal meds on backyard	Cost – effectiveness Community teaching

CONCLUSION

Based on the findings of the study, the following conclusion was drawn:

The interview data reflects a strong consensus on the benefits of reintroducing herbal medicine in the community. The themes of empowerment, self-sufficiency, cost-effectiveness, and community teaching emerged as key factors driving the support for herbal medicine revival. The responses underscore the potential positive impact on the community's well-being, budget, and accessibility to essential remedies.

RECOMMENDATION

Based on the findings of the study the researcher recommended the following:

To strongly recommend that community-level initiatives be established to reintroduce and promote the use of herbal medicine.

The consensus among participants on the benefits, such as empowerment, self-sufficiency, cost-effectiveness, and the opportunity for community teaching, suggests a widespread positive sentiment toward herbal remedies. Community members appear receptive to the idea of incorporating herbal medicine into their healthcare practices, viewing it as a means to enhance overall well-being, optimize budgetary resources, and improve accessibility to essential remedies.

To operationalize this recommendation, collaborative efforts between local health authorities, community leaders, and herbal medicine practitioners should be encouraged. Establishing educational programs and workshops within the barangay can play a pivotal role in disseminating knowledge about the proper identification, preparation, and utilization of herbal remedies.

Furthermore, the creation of community gardens or herbal cooperatives could foster self-sufficiency and provide a sustainable source of medicinal plants. This recommendation aligns with the expressed sentiments of the community, emphasizing the potential benefits that a revived interest in herbal medicine can bring to the overall health and resilience of the barangay residents.

References

1. Abdelmola, A. O., et al. (2021). Prevalence, knowledge, and perception about the use of herbal medicines Jazan - Saudi Arabia. *Journal of Family Medicine and Primary Care*, 10(6), 2386-2393. https://doi.org/10.4103/jfmprc.jfmprc_2475_20
2. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
3. Ekor, M. (2014). The growing use of herbal medicines: issues relating to adverse reactions and challenges in monitoring safety. *Frontiers in pharmacology*, 4, 177.
4. Gascon, M. G. (2011). Traditional and modern practices enhance health knowledge of the Bagobo tribe *International Peer Review Journal*, 1(1), 143-159.
5. Krippendorff, K. (2013). Content analysis: An introduction to its methodology (3rd ed.). *Sage Publications*.
6. Mendoza, R. (2009). Is it really medicine? The traditional and alternative medicine act and informal health economy in the Philippines. *Asia Pacific Journal of Public Health*, 21(3), 333-345.
7. Nworu, C. S., et al. (2015). Perception, usage and knowledge of herbal medicines by students and academic staff of University of Nigeria: A survey. *European Journal of Integrative Medicine*, 7(3), 218-227.
8. Quilon, E. R. C., & Singun, A. P. (2019). Teleconsultation System for Rural Health Units (RHUs) for Metro Vigan, Philippines. *International Journal of Recent Technology and Engineering (IJRTE)*, 88.
9. Rondilla, N. A., et al. (2021). Folk medicine in the Philippines: A phenomenological study of health-seeking individuals. *International Journal of Medical Students*, 9(1), 25-32. <https://doi.org/10.5195/ijms.2021.125>
10. Samojlik, I., et al. (2013). Consumers' attitude towards the use and safety of herbal medicines and herbal dietary supplements in Serbia. *International Journal of Clinical Pharmacy*, 35, 835-840.

11. Thakkar, S., et al.(2020). Regulatory landscape of dietary supplements and herbal medicines from a global perspective. *Regulatory Toxicology and Pharmacology*, 114, 104647.
12. Tomaszewski, L. E., et al. (2020). Planning qualitative research: Design and decision making for new researchers. *International Journal of Qualitative Methods*, 19, 1609406920967174.
13. Ventura, L. (2023, September 17). Poorest Countries in the World 2023 [UpdatedSeptember].*GlobalFinance*.Retrievedfrom <https://www.globalfinance.com/insights/the-worlds-poorest-countries>
14. Zarsuelo, M. A. M., et al. (2018). Review of regulatory policies on and benefits ofherbalmedicineinthePhilippines.*Acta MedicaPhilippina*,52(5).Retrievedfrom <https://actamedicaphilippina.upm.edu.ph/index.php/acta/article/view/1078>