# Understanding the Socioeconomic Characteristics of the Filipino Elderly Population in relation to their Knowledge, Attitudes, and Practices on Complementary and Alternative Medicine Use in a Rural Community: A Basis For A Community Outreach Initiative

<sup>1</sup>Pearl Irish V. De Paz\*, <sup>2</sup>Annielyn C. Ermenio, <sup>3</sup> Karen Antonette T. Gelig, <sup>4</sup>Rhea Lett B. Macanas, <sup>5</sup>Willard N. Riveral, <sup>6</sup>Ludito V. Ramirez, <sup>7</sup>Mahal B. Rosel, <sup>8</sup>Sherrie Ann C. Labid

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## **ABSTRACT**

Over the years, Complementary and Alternative Medicine has been used to improve human health, especially in the elderly population. Understanding socio-demographic factors influencing its uptake is important, especially in rural communities. Moreover, research in a rural community in the Philippines focused on elderly knowledge, attitudes, and practices towards CAM. The study employed a descriptive- cross-sectional survey methodology utilizing survey questionnaires to ascertain the level of knowledge, attitude, and practices regarding the utilization of Complementary and Alternative Medicine among 500 respondents in a rural community in the Philippines. Additionally, the correlation between the variables was also examined. The findings unveiled that majority had average knowledge and highly positive attitude towards CAM use. Likewise, the use of herbal medicine was predominant with minimal alternative treatments. Age and income showed significant relationship among variables. The Lack of statistical evidence for correlation between knowledge and attitudes highlights need for further education on approved herbal remedies and interventions.

# **KEYWORDS**

alternative, rural community, medication, complementary, indigenous

## Introduction

Various therapies have played a pivotal role in traditional healing practices across diverse cultures,

<sup>&</sup>lt;sup>1</sup>Professor VI, School of Nursing and Health Sciences, Biliran Province State University, Philippines pearlirish.depaz@bipsu.edu.ph

<sup>&</sup>lt;sup>2</sup>BS Nursing, School of Nursing ,School of Nursing and Health Sciences, Biliran Province State University, Philippines <a href="mailto:annielyn.ermenio@bipsu.edu.ph">annielyn.ermenio@bipsu.edu.ph</a>

<sup>&</sup>lt;sup>3</sup>BS Nursing, School of Nursing ,School of Nursing and Health Sciences, Biliran Province State University, Philippines <a href="mailto:karenantonettetapayagelig@gmail.com">karenantonettetapayagelig@gmail.com</a>

<sup>&</sup>lt;sup>4</sup>BS Nursing, School of Nursing ,School of Nursing and Health Sciences, Biliran Province State University, Philippines <a href="rttbmacanas04@gmail.com">rttbmacanas04@gmail.com</a>

<sup>&</sup>lt;sup>5</sup>Associate Professor IV, School of Nursing ,School of Nursing and Health Sciences, Biliran Province State University, Naval, Biliran, Philippines willard.riveral@bipsu.edu.ph

<sup>&</sup>lt;sup>6</sup>Professor VI, Southern Leyte State University, Philippines <u>lramirez@southernleytestateu.edu.ph</u>

<sup>&</sup>lt;sup>7</sup> Instructor 1, Jose Rizal Memorial State University, Philippines <u>mahalrosel@jrmsu.edu.ph</u>

<sup>&</sup>lt;sup>8</sup> Professor VI, Samar State University, Philippines, sherrieann.labid@ssu.edu.ph

offering a comprehensive approach to health and well-being that encompasses the realms of the mind, body, and spirit. These ancient remedies often drew upon natural elements, such as herbs, plants, and minerals, to realign equilibrium and vigor within individuals (World Health Organization, 2013). The resurgence of traditional medicine systems such as Traditional Chinese Medicine, and Indigenous healing methodologies highlights the enduring significance and effectiveness of these time-honored therapies in addressing contemporary health challenges in the modern context (Bodeker, G., & Ong, C. K. (2005).

Moreover, as per the World Health Organization (2019), complementary and alternative medicine is acknowledged as a valuable yet frequently underestimated healthcare asset with a diverse array of applications, particularly in the management and prevention of chronic ailments.

Current research underscores the importance the importance of scrutinizing patterns of complementary and alternative medicine (CAM) use among the elderly, considering their inclination towards managing multiple chronic conditions and preference for holistic healthcare approaches (Barnes, P. M., Bloom, B., & Nahin, R. L., 2008). From a sociological perspective, it is essential to recognize the influence of broader societal factors on individuals' choices in opting for unconventional medical treatments, surpassing mere demographic considerations. Recent research has demonstrated that the scope and trends of CAM utilization within the elderly population have significant implications for public health policy development, warranting continuous epidemiological investigations and fostering awareness among healthcare providers and patients (Buchanan et al., 2021). According to the National Center for Complementary and Integrative Health (2020), blending the finest components of traditional and contemporary medical practices, individuals can avail themselves of a more comprehensive and diverse healthcare system that caters to their unique needs and preferences.

In a study conducted in the Philippines by Ramos, M. D., & Roque, M. C. (2012) among residents of specific rural and urban communities in the Philippines indicated a higher prevalence of CAM utilization among rural participants (64%) in comparison to their urban counterparts (51.5%). Similarly, a study conducted by Ernst, E. (2011) illuminated instances of severe complications and even fatalities stemming from the utilization of complementary and alternative therapies. The existing disparity in viewpoints between conventional and alternative medicine poses a significant challenge. To tackle this issue, a thorough evaluation of the knowledge, attitudes, and behaviors of elderly individuals towards complementary and alternative medicine, as well as their inclination towards utilizing them, is imperative. Nevertheless, most studies have predominantly concentrated on students within the general population. There is a noticeable absence of research carried out in the municipalities of Naval, Biliran, Philippines, with limited nationwide studies exploring the perceptions and practices of the elderly regarding the use of complementary and alternative medicine.

The research was carried out utilizing a cross-sectional research design with the aim of ascertaining the knowledge, attitude, and practices regarding Complementary and Alternative medicine among the elderly populace in Naval, Biliran, Philippines. The findings of the study served as the foundation for the creation of a community outreach initiative.

# 1. Objectives

Generally, the study aimed to delve into the elderly Filipinos' knowledge, attitudes, and practices on complementary and alternative medicine (CAM) use within a rural community setting. Specifically, the study aimed to determine the socio-demographic characteristics, level of knowledge, attitudes, and practices concerning the use of complementary and alternative medicine. Moreover, the study scrutinized the interconnections among these variables.

# 2. Scope and Methodology

The study employed a cross-sectional design to assess the knowledge, attitudes, and practices (KAP) of elderly individuals towards complementary and alternative medicine (CAM) in the Municipality of Naval, Biliran, Philippines. A multi-stage cluster sampling method selected 500 participants aged 60 and above from 10 barangays, with further purposive sampling applied. Inclusion criteria required participants to be 60 or older, residents for at least three years, and willing to participate.

Data were collected using a standardized questionnaire adapted from previous tools. The questionnaire had four sections: socio-demographic profiles, CAM knowledge (10 true/false items), attitudes (Likert scale), and practices (multiple-choice). After obtaining informed consent and ethical clearance, surveys were administered to

participants, and data were analyzed using statistical methods such as frequency, percentage, weighted mean, and Pearson's correlation.

Ethical considerations included voluntary participation, confidentiality, and data retention for one year before secure disposal. The study ensured honesty, objectivity, and respect for participants' privacy throughout.

## 3. Literature Review

Existing literature emphasizes the importance of examining patterns of complementary and alternative medicine (CAM) use among the elderly, given their tendency to manage multiple chronic conditions and preference for holistic healthcare. Beyond demographics, societal factors influence the choice to use unconventional treatments. Research has shown that CAM utilization trends have significant implications for public health policy, necessitating ongoing studies and raising awareness among healthcare providers and patients. The integration of traditional and modern medicine can offer a more comprehensive healthcare system.

A study in the Philippines revealed higher CAM usage in rural areas (64%) compared to urban ones (51.5%). However, there have been cases of severe complications and fatalities from CAM use, highlighting the challenge posed by differing views between conventional and alternative medicine. Evaluating the elderly's knowledge, attitudes, and behaviors toward CAM is crucial, but most studies focus on younger populations. There is limited research on the elderly's CAM practices in Naval, Biliran, Philippines. The present cross-sectional study in this area aimed to fill this gap and laid the groundwork for a community outreach program based on its findings.

## 4. Result and Discussion

This study aimed to evaluate the knowledge, attitudes, and practices concerning complementary and alternative medicine (CAM) among the elderly population in selected municipalities in Naval, Biliran, Philippines.Likewise, the relationship between the variables were also tested.

# I. Respondents' Socio-demographic Profile

As to the socio-demographic profile characteristics of the respondents, it was observed that the most of the respondents belonged to the 71 to 80 age bracket (52.2%), were united in matrimony (74.60%), signifying a resilient familial structure among the participants. Moreover, the substantial proportion of Roman Catholic participants (70.60%) mirrors the prevalent religious inclination within the study cohort. Regarding the age distribution, the preponderance of respondents falling within the 71 to 80 age category implies a potential emphasis on an older demographic in the study.

Moreover, the data showing that a significant proportion of respondents had only an elementary level of education (68%) sheds light on the educational background of the participants. The prevalence of unemployment (59.20%) among the respondents highlights potential economic challenges faced by this group. Additionally, the range of monthly income from Php 500.00 to P5,999 (55.7%) indicates a diverse socioeconomic status among the participants, with a majority falling within this income bracket.

Overall, the socio-demographic profile of the respondents provides valuable insights into the characteristics of the study population, offering a comprehensive understanding of the sample involved in the research.

# II. Respondents' Level of knowledge on complementary and alternative medicine

The study's findings revealed that the majority of participants accurately recognized the following: Herbal remedies or medications are inherently organic in nature and therefore deemed harmless or safe, devoid of adverse effects (85.40%); garlic possesses the ability to reduce blood lipid levels (92.80%); ginseng can be safely utilized by individuals with hypertension (90.00%); ginkgo biloba is commonly employed among those afflicted with Alzheimer's disease (87.40%); acupuncture can effectively mitigate withdrawal symptoms and alleviate pain (51.80%); chiropractic medicine specializes in spinal manipulation, specifically targeting low-back pain (52.60%); the utilization of herbal products constitutes a legitimate form of medication capable of addressing a myriad of ailments (84.60%); patients derive significant benefits from physicians well-versed in alternative medicine (73.00%); alternative medicine serves as a valuable adjunct to conventional pharmacological treatments (97.00%); and the outcomes of alternative medicine are predominantly attributed to the placebo effect (94.60%).

Moreover, Table 2 presents a summary of the assessments conducted among the 500 respondents regarding their familiarity with complementary and alternative medicine. The ratings range from 0 to 10, with 44.4 percent of participants achieving scores between 8 and 10 on all statements, 54.60 percent scoring between 5 and 7, and 1.00 percent scoring between 0 and 4 on all statements. The findings indicate that the majority of the respondents possess a moderate understanding of Complementary and Alternative Medicine, reflecting a profound grasp of this subject among all participants in the entire cohort. A study carried out by Smith, Johnson, and Thompson (2022) suggests that a substantial portion of the populace possesses a profound understanding of complementary and alternative medicine.

However, research by Frass, M., Strassl, R. P., Friehs, H., Müllner, M., Kundi, M., & Kaye, A. D. (2012) revealed that a notable segment of individuals exhibit inadequate levels of comprehension and awareness regarding complementary and alternative medicine.

## III. Respondents' Attitude towards CAM

According to the study findings, perspectives attained an average weighted mean of 3.34 for the third objective, which assessed respondents' viewpoints on complementary and alternative medicine. This indicates a markedly favorable perception towards the utilization of CAM. Similar results were echoed in the works of Aydin, S., & Uzun, S. (2016); Koc, Z., & Topatan, S. (2012); Cheung, C. K., & Wyman, J. F. (2011) where elderly individuals exhibited elevated levels of positive attitudes towards CAM usage, particularly in the management of chronic conditions and the enhancement of life quality. Nevertheless, the research by Gould, A., & MacPherson, H. (2001); Bishop, F. L., et al. (2007); Bailey, J. L., & Cahill, M. (2011) did not align with the aforementioned studies, highlighting a prevalence of neutral or ambivalent perspectives regarding the application of complementary and alternative medicine.

## IV. Respondents' Practices towards CAM

The findings revealed that among the 500 participants, 468 individuals, equating to 93.6%, had availed themselves of Complementary and Alternative Medicine (CAM) at some juncture in their lives within the preceding 12 months, with only 6.4% having never experimented with it. Herbal medicine emerged as the most prevalent form of complementary and alternative medicine (CAM) within the past year (47.8%) and over the span of an individual's lifetime (46.9%).

The majority of CAM utilization stemmed from recommendations by acquaintances and relatives (27.8%). Common medical issues prompting CAM usage included back problems (9.6%), headaches (25.4%), and high blood pressure (23.5%). A significant portion of respondents allocated over >Php 100 (65.2%) monthly towards CAM, with a majority of > 100 (76.8%) participants expressing willingness to financially support such treatments each month. A notable 84% reported simultaneous use of CAM alongside conventional medicine. Surprisingly, 64.9% refrained from consulting a physician, while 52.6% opted against seeking advice from a pharmacist, citing the lack of encouragement from healthcare professionals towards CAM usage as a deterrent. Impressively, 78.3% expressed extreme satisfaction, with a staggering 97.1% indicating their inclination to recommend CAM to friends and family. Overall, the data indicates that the majority of respondents do not actively engage in CAM practices.

The study's findings align with Clarke, T. C, et al. (2015) research, highlighting the infrequent utilization of CAM among adults in the United States. Conversely, Barnes, et al. (2004) study showcases a prevalent adoption of CAM among both adults and children. Furthermore, the results suggest that herbal medicine (64.9%), acupuncture (14.0%), and aromatherapy (91.1%) rank as the top 3 CAM modalities that respondents express interest in attending lectures or seminars on. Garrow, D., and Edge, L. E.'s (2009) study underscores a predominantly positive attitude towards complementary and alternative medicine among the populace. Conversely, Bishop, F. L., Yardley, L., and Lewith, G. T.'s (2007) findings suggest a prevalent negative perception of complementary and alternative medicine among the public.

## V. Relationship between the variables

## A. Respondents' socio-demographic profile and respondents' level of knowledge on CAM.

The hypothesis was supported by the results, which indicated that there is no significant relationship between the level of knowledge and employment, gross personal income, education, religion, or civil status. Nonetheless, there was a significant correlation between the respondent's age and knowledge level. The study's findings are consistent

with those of Chang, H. Y., et al. (2007) and found that age is one factor that can affect one's knowledge and comprehension of CAM use. On the other hand, Cramer et al. al (2016) found no correlation between knowledge of complementary and alternative medicine (CAM) and socio-demographic characteristics.

#### B. Respondents' socio-demographic profile and respondents' level of attitude on CAM.

The level of attitudes toward complementary and alternative medicine and any socio-demographic variable did not significantly correlate, according to the results. The findings of the study support those of Woodward, A. T., Bullard, C., Taylor, S. L., Van Tiem, J., & Jolton, J. (2018), which showed that attitudes toward CAM and the socio-demographic profile variables do not significantly correlate. Nevertheless, Nguyen, L. T., Phillips, R. S., Davis, R. B., and Kaptchuk, T. J. (2011) demonstrated a correlation between the socio-demographic profile factors and the CAM attitude.

## C. Respondents' knowledge & attitude on CAM

As shown in Table 8, the findings revealed no relationship between attitudes toward CAM and knowledge. The study's outcomes validated the research conducted by Gilmour, J., et al. (2018), that there was no correlation between the respondents' attitudes toward CAM and their level of knowledge. Still, the research by Tiralongo E. and Holcombe B. (2013) backs up the idea that an individual's attitude toward complementary and alternative medicine is greatly influenced by their knowledge.

#### 5. Conclusion

Based from the results gathered, the following conclusions were drawn:

Results revealed that most of the participants in the study were between the ages of 71 and 80, married, adherents of the Roman Catholic faith, possessed a low level of education, were unemployed, and reported a low monthly income. Additionally, the majority of respondents displayed an average level of knowledge and a highly positive standpoint towards the use of Complementary and Alternative Medicine. Nevertheless, the practice of Complementary and Alternative Medicine was prevalent with minimal alternative therapies among the respondents. Moreover, there was no notable association between the level of knowledge and various sociodemographic factors such as marital status, religion, educational attainment, employment status, and monthly income, except for age in relation to Complementary and Alternative Medicine. Furthermore, no statistically significant correlation was discovered between the respondents' attitudes and socio-demographic characteristics like age, marital status, religion, educational level, and employment status, with the exception of monthly income concerning CAM use.

Moreover, the following recommendations are now forwarded:

- 1. Future researchers should gather a more significant number of respondents to participate in the study for better results voluntarily.
- 2. Include the lower age group in the study to assess further knowledge, attitudes, and practices on complementary and alternative medicines.
- 3. Future researchers should explore further different complementary and alternative medicines used by the barangay to be able to recognize their effects and for precaution purposes.
- 4. Promote awareness of the approved herbal medicines by the Department of Health among the entire population in Barangay Imelda.
- 5. Conduct a study on the effects on a person's health and the application of complementary and alternative medicine to particular diseases.

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