AWARENESS, ATTITUDE, AND PRACTICES ON SELF-MEDICATION AMONG RESIDENTS OF BRGY. ALFONSO ANGLIONGTO SR., DAVAO CITY

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Abstract: This study assessed awareness, attitudes, and self-medication practices among adult residents of Barangay Alfonso Angliongto Sr., Davao City, and examined their relationships, predictive effects, and selected sociodemographic moderators.

Methods: A quantitative descriptive-correlational study surveyed 100 adult residents selected through stratified random sampling across 56 puroks. Data were analyzed using descriptive statistics, Spearman correlation, and generalized linear modeling.

Results: Awareness (M = 4.15, SD = 0.57), attitude (M = 4.19, SD = 0.54), and practices (M = 4.01, SD = 0.61) were rated high. Awareness correlated with practices (rs = .60, $p < .01$), as did attitude (rs = .70, $p < .01$). The model was significant, $\chi^2(2) = 16.97$, $p < .01$; attitude predicted practices (B = 0.65, $p < .01$), while awareness did not independently predict practices (B = 0.15, p = .20). Tested demographic moderators were nonsignificant.

IndexTerms - Self-Medication; Awareness; Attitude; Practices; Davao City

I. INTRODUCTION

Self-medication has become a significant public health concern worldwide, particularly because of the increasing accessibility of over-the-counter medications and the tendency of individuals to manage common illnesses without consulting healthcare professionals. Self-medication refers to the selection and use of medications to treat self-recognized symptoms or health conditions without direct professional consultation (Lee, 2022). A systematic review published in 2025 identified financial limitations, time constraints, and the perception of illness as minor among the factors associated with self-medication. The review also identified analgesics, antipyretics, antibiotics, and cough remedies among commonly self-medicated medicines. These findings emphasize that self-medication is influenced not only by medication accessibility but also by how individuals understand, interpret, and respond to their health conditions (Chaudhary et al., 2025).

The situation becomes particularly concerning among parents, who frequently assume responsibility for making healthcare decisions within their households. Parents may independently purchase OTC medications, administer previously prescribed medicines, or rely on personal experiences when treating common symptoms such as fever, headache, cough, colds, and gastrointestinal discomfort. Although these decisions are often motivated by the intention to provide immediate relief, they may also reflect inadequate awareness of medication safety, incorrect interpretation of symptoms, and excessive confidence in personal judgment. A cross-sectional study involving 284 parents in India found that 64.08% had practiced some form of parent-directed medication within the preceding three months. Furthermore, 71.43% of parents who practiced parent-directed medication believed that their chosen treatment could not harm their children (Seth et al., 2023).

In the Philippine setting, self-medication remains an important public health issue because individuals and families may use readily accessible medications to manage common illnesses. More recently, a 2026 systematic review examined self-medication practices among Filipino adults before and during the pandemic, further establishing the relevance of the issue in the national context (Catalo et al., 2023; Estores et al., 2026). In Davao City, the issue of self-medication warrants further investigation, particularly among Filipino parents aged 18–50 who may be responsible for making medication-related decisions for themselves and their families (Kumari, 2025).

Therefore, this quantitative descriptive-correlational study aims to determine the sociodemographic characteristics, level of awareness, attitudes, and extent of OTC self-medication practices among Filipino parents aged 18–50 in Davao City, Philippines. Specifically, it seeks to examine the relationships between awareness, attitudes, and self-medication practices and determine whether selected sociodemographic characteristics moderate these relationships. By identifying potential

gaps between medication-related understanding, personal beliefs, and actual behaviors, the study may help promote safer self-medication practices (Catalo et al., 2023; Estores et al., 2026).

This section presents a synthesis of literature and studies drawn from journals, books, and other scholarly sources that support the conduct of the research.

Awareness of self-medication refers to an individual's recognition and understanding of appropriate medication use, potential health risks, dosage requirements, contraindications, adverse reactions, and the importance of seeking professional healthcare advice. Among parents, awareness is particularly important because medication decisions may affect both their own health and the well-being of family members. Weerasinghe et al. (2025) investigated caregivers' awareness, attitudes, and practices concerning pediatric medication safety in Sri Lanka. Their findings revealed that 96.9% of caregivers recognized the possibility of medication overdose, while 85.5% understood that liquid medications could differ in concentration. Nevertheless, 17.1% incorrectly believed that a child's medication dose was equivalent to half the adult dose.

These findings demonstrate that general awareness of medication risks does not necessarily indicate accurate understanding of dosage calculations or medication administration. Awareness of self-medication refers to an individual's recognition and understanding of appropriate medication use, potential health risks, dosage requirements, contraindications, adverse drug reactions, and the importance of seeking professional healthcare advice. Adequate medication awareness plays a significant role in promoting responsible self-medication practices and preventing medication-related complications (World Health Organization [WHO], 2024). Furthermore, understanding medication instructions, potential adverse effects, and the risks associated with inappropriate drug consumption is essential in improving medication safety and reducing preventable harm (WHO, 2022).

Among parents and caregivers, medication awareness is particularly important because medication-related decisions may affect both their own health and the well-being of family members. Weerasinghe et al. (2025) investigated caregivers' awareness, attitudes, and practices concerning pediatric medication safety in Sri Lanka. Their findings revealed that 96.9% of caregivers recognized the possibility of medication overdose, while 85.5% understood that liquid medications could differ in concentration. Nevertheless, 17.1% incorrectly believed that a child's medication dose was equivalent to half the adult dose. These findings demonstrate that general awareness of medication risks does not necessarily indicate an accurate understanding of dosage calculations or medication administration.

Additionally, the importance of medication literacy and appropriate medicine use is emphasized in international patient safety initiatives aimed at minimizing preventable medication errors (WHO, 2023). The responsible use of medicines also requires individuals to recognize when self-treatment is inappropriate and professional healthcare assessment is necessary (WHO, 2025).

This study aimed to evaluate whether the sociodemographic profile, awareness, and attitude are significant predictors of self-medication practices. Specifically, it sought to answer the following questions:
2. What is the level of awareness of the respondents on self-medication, in terms of:
3. What is the level of attitude of the respondents on self-medication, in terms of:
5. Is there a significant relationship between the awareness and self-medication practices of the respondents?
6. Is there a significant relationship between the attitude and self-medication practices among the respondents?
7. Do awareness and attitude significantly predict the respondents' self-medication practices?
8. Does the demographic profile significantly moderate the relationships of awareness and attitude with self-medication practices among the respondents?

H01: There is no significant relationship between the awareness and self-medication practices.
H02: There is no significant relationship between the attitude and self-medication practices.
H03: The levels of awareness and attitude do not significantly predict the self-medication practices.
H04: The demographic profile does not significantly moderate the relationships of awareness and attitude with self-medication practices.

In this study, several terms are utilized to elucidate the phenomena under investigation. To ensure clarity and understanding, the following key terms are defined:

Attitude. Refers to the respondents' feelings toward self-medication and any preconceived ideas they may have about it.
Awareness. Refers to the respondents' level of knowledge and understanding regarding self-medication, particularly the appropriate use of medicines, correct dosage, possible adverse drug reactions, contraindications, drug interactions, and the importance of seeking professional medical advice.
Practices. Refers to the actual behaviors and actions undertaken by the respondents when engaging in self-medication, including medication selection, dosage determination, frequency of administration, adherence to recommended instructions, and precautions observed to ensure medication safety.
Self-Medication. Refers to the practice of selecting and using medications to treat self-recognized symptoms or health conditions without obtaining a current prescription or direct consultation from a qualified healthcare professional for the particular episode of illness.

METHODS

This chapter presents the methods utilized in the study. It discusses the research design, research locale, research respondents, research instrument, data-gathering procedure, statistical tools, and ethical considerations observed throughout the conduct of the research.

Design

This study employed a quantitative research approach, specifically a predictive-correlational research design, to examine the relationships among sociodemographic characteristics, awareness, attitudes, and self-medication safety practices of residents of Barangay Alfonso Angliongto Sr. Quantitative research involves the systematic collection, measurement, and analysis of numerical data using statistical techniques to identify patterns and examine relationships among variables. According to Mohajan (2022), quantitative research focuses on quantifying and analyzing variables to generate objective and measurable results. Similarly, Salleh et al. (2022) described quantitative research as a systematic investigation of phenomena through the collection of quantifiable data and the application of statistical, mathematical, or computational procedures.

The descriptive-correlational research design was utilized to describe the characteristics of the respondents and determine the statistical relationships among the identified variables. According to Thielfoldt (2022), descriptive research primarily focuses on describing existing phenomena.

Setting

This study was conducted in Barangay Alfonso Angliongto Sr., Davao City, situated on the island of Mindanao, Philippines, at approximately 7.1129° north latitude and 125.6322° east longitude, with an estimated elevation of 22.3 meters or 73.2 feet above mean sea level. According to the 2020 Census of Population and Housing, Barangay Alfonso Angliongto Sr. recorded a total population of 14,962, representing approximately 0.84% of Davao City's total population. Historical demographic records indicated that the barangay's population decreased from 16,179 in 2007 to 14,962 in 2020, reflecting a net reduction of 1,217 individuals. However, between 2015 and 2020, the population increased from 13,539 to 14,962, representing a recorded growth rate of approximately 2.13% annually. In terms of age distribution, individuals aged 20 to 24 constituted the largest age group, comprising 1,541 residents, while those aged 80 years and above represented the smallest group, with 105 individuals (PhilAtlas, 2022).

Participants

The respondents of this study consisted of 100 adult residents of Barangay Alfonso Angliongto Sr., Davao City. Based on the recorded demographic data, the barangay had a total population of 14,962 residents, of whom 11,071 were aged 18 years and above. Following the application of the inclusion and exclusion criteria, the eligible population was reported to comprise 10,935 residents. A total of 100 respondents participated in the study and provided quantitative data concerning their sociodemographic characteristics, awareness, attitudes, and self-medication safety practices. The sample size was utilized to examine the statistical relationships among the identified variables and address the research objectives.

The barangay was divided into 56 geographical strata corresponding to its respective puroks. Stratified random sampling involved dividing a population into distinct, mutually exclusive subgroups and randomly selecting respondents within each subgroup to facilitate representation of the identified population categories (Frey, 2022). The puroks served as the basis for stratification, while eligible adult residents constituted the sampling units. Through this approach, respondents were randomly selected from their respective geographical strata. The sampling procedure was intended to account for the geographical distribution of residents and reduce potential selection bias. Furthermore, the application of stratified random sampling supported the systematic collection of quantitative data for examining the relationships among sociodemographic characteristics, awareness, attitudes, and self-medication safety practices.

Measures

The survey questionnaire consists of four categories: the sociodemographic profile, awareness, attitudes, and practices for self-medication. The first category is the sociodemographic profile of the respondents, which includes sex, age, ethnicity, monthly income, place of residence, occupation, and educational level. The second category, awareness of medication safety, is a 16-item questionnaire with 5 indicators, including awareness of drugs (3 items), characteristics and principles of drug use for older adults (4 items), knowledge and treatment of adverse drug events (3 items), medication according to doctors' advice (2 items), and drug quality identification and storage (4 items). Items 3, 4, 6, 8, and 12 were reverse-scored. The options were yes, no, and uncertain; the participants were given 1 point if they answered correctly and 0 points if otherwise. The total score ranged from 0 to 16. The higher the score, the greater the medication safety knowledge.

The second part of the questionnaire assessed the respondents' awareness of medication safety using a 16-item instrument consisting of five indicators: basic awareness of drugs (3 items), awareness of the characteristics and principles of drug use among older adults (4 items), awareness of adverse drug events and their management (3 items), awareness of medication use according to physicians' advice (2 items), and awareness of drug quality identification and proper storage (4 items). Each item provided three response options: yes, no, and uncertain. Responses were scored dichotomously, wherein one (1) point was assigned to each correct response, while zero (0) points were assigned to incorrect or uncertain responses. Items 3, 4, 6, 8, and were reverse-coded according to their negatively worded statements to ensure consistency in scoring. The total awareness score ranged from 0 to 16 points, with higher scores indicating a greater level of medication safety awareness among the respondents. The scores obtained were utilized to determine the respondents' overall level of awareness regarding medication safety and examine its statistical relationship with their attitudes toward self-medication and self-medication safety practices.

Range of Means	Description	Interpretation
0.8 – 1.0	Very High	Respondents' awareness is
0.6 – 0.79	High	Respondents' awareness is
0.4 – 0.59	Moderate	Respondents' awareness is
0.2 – 0.39	Low	Respondents' awareness is
0 – 0.19	Very Low	Respondents' awareness

The third category, attitude toward self-medication, is a 10-item questionnaire with 6 indicators, including the benefits of drug treatment (2 items), disadvantages of drug treatment (2 items), function of drug instructions (1 item), view of medication compliance (1 item), opinion of medication self-management (2 items), and attitude towards medication selection (2 items). Items 7, 8, 9, and 10 were reverse-scored. Responses were provided on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The higher the score, the more positive the attitude towards safe drug use.

Range of Means	Description	Interpretation
4.20 – 5.00	Very High	Respondents' positive attitude
3.40 – 4.19	High	Respondents' positive attitude
2.60 – 3.39	Moderate	Respondents' positive attitude is sometimes manifested
1.80 – 2.59	Low.	Respondents' positive attitude is seldom manifested
1.00 – 1.7	Very Low	Respondents' positive attitude

The fourth category, self-medication behavior, is a 13-item questionnaire with 5 indicators, including self-purchase drug behavior (1 item), drug instruction reading behavior (1 item), drug-taking behavior (6 items), efficacy of monitoring behavior (1 item), and drug reserving behavior (4 items). Items 1, 3, 6, 7, and 8 were reverse-scored. The responses for the first nine items were scored as never (1 point), occasionally (2 points), often (3 points), and always (4 points).

Range of Means	Description	Interpretation
3.26 – 4.00	Very High	Respondents' practices are
2.51 – 3.25	High	Respondents' practices are
1.76 – 2.50	Low	Respondents' practices are
1.00 – 1.75	Very Low	Respondents' practices are never manifested

This survey questionnaire was adapted from the study of Yu-ting et al. (2023). The survey questionnaire underwent validation by three research experts to determine the content validity index. This is to ensure the accuracy of the survey questionnaire.

After the validation, the experts' documented ratings were analyzed by the statistician. The researcher submitted a letter addressed to the Barangay Captain. After the approval, the researcher sent a letter to the purok leaders of the barangay regarding the study, attaching the approval notice from the Barangay Hall. The letter explained the pilot study and the survey proper. The researcher conducted a pilot test with 25 respondents, and the statistician evaluated the internal consistency reliability (Cronbach's α) (Gao et al., 2020).

Procedure

In gathering the necessary data for this study, the researcher systematically followed the procedures outlined below to ensure the accuracy, reliability, and ethical integrity of the research process.

1. Securing Institutional Approval. The researcher initially sought formal approval from the Dean of the Graduate School of Davao Doctors College (DDC) to conduct the study. A formal request letter was submitted, outlining the research objectives, methodology, target respondents, and significance of the investigation. The approval served as the institutional authorization to proceed with the subsequent research activities.

2. Obtaining Ethical Clearance. Following institutional approval, the researcher secured ethical clearance from the Davao Doctors College Research Ethics Committee (DDC-REC) before commencing data collection. The research protocol, validated survey questionnaire, informed consent form, and other required documents were submitted for ethical review. This procedure ensured that the study adhered to established ethical principles concerning voluntary participation, confidentiality, informed consent, and the protection of respondents' rights and welfare.

3. Securing Permission from Barangay Officials. Upon obtaining the necessary institutional and ethical approvals, the researcher sought permission from the barangay officials of Barangay Alfonso Angliongto Sr., Davao City, to conduct the study within their jurisdiction. The researcher presented the objectives, scope, and data-gathering procedures to the concerned officials and coordinated the implementation of the survey within the identified puroks.

4. Identification and Selection of Respondents. The researcher identified eligible participants based on the established inclusion and exclusion criteria. A stratified random sampling technique was employed, wherein the eligible population was categorized according to the 56 puroks of Barangay Alfonso Angliongto Sr. Respondents were randomly selected from the respective strata based on the sampling procedure adopted in the study. A total of 100 qualified respondents were included in the investigation.

5. Distribution and Explanation of Informed Consent. Before administering the research instrument, the researcher provided the selected respondents with informed consent forms and explained the purpose, objectives, procedures, and expected duration of their participation. The respondents were informed that their participation was entirely voluntary and that they had the right to decline or withdraw without penalty. The researcher also explained the measures implemented to protect the confidentiality and privacy of the information collected. Only respondents who voluntarily provided informed consent were included in the study.

6. Administration of the Research Questionnaire. After obtaining informed consent, the researcher distributed the validated survey questionnaires to the respondents. The questionnaire consisted of four major categories: sociodemographic profile, awareness of medication safety, attitudes toward self-medication, and self-medication safety practices. The researcher provided clear instructions and encouraged the respondents to answer each item truthfully and independently based on their personal experiences and understanding. Adequate time was allotted for completing the questionnaire to minimize response pressure and promote accurate responses.

7. Retrieval and Verification of Accomplished Questionnaires. Upon completion, the researcher collected the accomplished questionnaires and reviewed them for completeness and consistency. The responses were checked for missing entries and other potential data-quality concerns without altering the respondents' original answers. The collected questionnaires were subsequently organized, coded, and prepared for statistical analysis while maintaining the confidentiality of the participants' information.

8. Data Encoding, Tabulation, and Statistical Analysis. The researcher encoded and tabulated the collected responses with the assistance of a qualified statistician. The data were organized according to the study variables and analyzed using appropriate descriptive and inferential statistical procedures. The statistical analysis was conducted to describe the respondents' sociodemographic characteristics, determine their levels of medication safety awareness, attitudes, and self-medication safety practices, and examine the significant relationships among the identified variables.

9. Interpretation and Presentation of Findings. Following the statistical analysis, the researcher interpreted the results in accordance with the research objectives and formulated research questions. The findings were presented systematically through statistical tables and corresponding discussions. The results served as the basis for drawing conclusions and formulating recommendations for community health education, nursing interventions, and the promotion of responsible self-medication practices among residents of Barangay Alfonso Angliongto Sr., Davao City.

Data Analysis

The following statistical tools were used in the study:

Frequency. The completed analysis employed frequency and percentage, mean and standard deviation, Spearman’s rank-order correlation, and a generalized linear model, as documented in the statistician’s certificate. The final analyzed sample comprised 100 respondents.

Mean and Standard Deviation. This statistical tool was used to examine predictors of self-medication practices and interaction terms involving selected demographic characteristics.

Spearman's rho. It is a measure of the strength of a linear association between two variables and is denoted by r. Basically, a Pearson product-moment correlation attempts to draw a line of best fit through the data of two variables, and the r, indicates how far away all these data points are to this line of best fit (Laerd Statistics, 2020).

Generalized Linear Model. This a statistical technique measure for estimating the relationship among variables with cause-and-effect relations. Regression models with one dependent variable and more than one independent variable are called multiple linear regression models (Lee, 2022). Through this statistical tool, the researcher was able to evaluate if the sociodemographic profile, knowledge, and attitude are predictors of self-medication practices among respondents.

This study focused on assessing the factors associated with self-medication safety practices among adult residents of Barangay Alfonso Angliongto Sr., Davao City. Specifically, it examined the respondents' sociodemographic characteristics, level of awareness regarding medication safety, attitudes toward self-medication, and self-medication safety practices. The sociodemographic variables included sex, age, ethnicity, monthly income, place of residence, occupation, and educational attainment. Furthermore, medication safety awareness was assessed through five indicators: basic awareness of drugs, characteristics and principles of drug use among older adults, awareness and management of adverse drug events, medication use according to physicians' advice, and drug quality identification and proper storage.

The study employed a quantitative descriptive-correlational research design to describe the identified variables and determine whether statistically significant relationships existed among sociodemographic characteristics, awareness, attitudes, and self-medication safety practices. A total of 100 adult residents aged 18 years and above were included as respondents, with the 56 puroks of the barangay serving as geographical strata for the sampling procedure. Data were collected using a structured survey questionnaire and analyzed through appropriate descriptive and inferential statistical techniques.

The study was geographically limited to Barangay Alfonso Angliongto Sr., Davao City, and included only residents who met the established inclusion criteria and voluntarily consented to participate. Individuals below 18 years of age, nonresidents of the barangay, and those who were unable to understand or accomplish the questionnaire due to illness or other limiting circumstances were excluded. Furthermore, the investigation was limited to the variables measured by the research instrument and did not comprehensively examine other potential determinants of self-medication practices, such as access to healthcare services, medication costs, pharmaceutical advertising, cultural beliefs, previous medical conditions, and the influence of healthcare professionals. The study relied primarily on self-reported information, which may have been affected by recall bias, social desirability bias, and differences in respondents' understanding of the questionnaire items. Additionally, the sample size of 100 respondents may have limited the statistical precision of the estimates and the generalizability of the findings to the entire barangay or other communities. Since the study employed a descriptive-correlational design, the identified relationships were interpreted as statistical associations rather than direct cause-and-effect relationships.

RESULTS

1. What is the sociodemographic profile of the respondents, in terms of: Age; Sex; Monthly income; Place of residence; Educational Level; Occupation; and Ethnicity?

Table 1. Demographic Profile of Respondents

Table 1 shows that the 100 respondents had a mean age of 32.07 years (SD = 7.64). More than half were female (55%), and the largest income group earned ₱20,000–₱29,999 monthly (42%), followed by ₱30,000–₱39,999 (29%). All respondents identified as Cebuano (100%). Regarding education, most were college graduates (47%) or had reached the college level (45%), whereas only a small proportion had senior high school (5%), master's-level (2%), or postgraduate (1%) education. Overall, the sample consisted mainly of young adult Cebuano respondents with college-level or completed college education and monthly incomes concentrated between ₱20,000 and ₱39,999.

2. What is the level of awareness of the respondents on self-medication, in terms of:

Table 2. The Level of awareness on Self-Medication

Note. Interpretation ranges: 1.00–1.80 = very low, 1.81–2.60 = low, 2.61–3.40 = moderate, 3.41–4.20 = high, and 4.21–5.00 = very high.

As shown in Table 2, respondents demonstrated a high overall level of awareness regarding self-medication (M = 4.15, SD = 0.57). Awareness was highest for prescription and over-the-counter medicines (M = 4.50, SD = 0.63), followed by therapeutic and toxic side effects (M = 4.34, SD = 0.65), both of which were interpreted as very high. The lowest mean was observed for the belief that using more types of medication increases treatment effectiveness (M = 3.99, SD = 0.88), although this remained within the high range. The findings indicate that respondents had substantial awareness of medication use.

3. What is the level of attitude of the respondents on self-medication?

Table 3. The Level of Attitude of Self-Medication

Note. Mean scores were interpreted as follows: 1.00–1.80 = very low, 1.81–2.60 = low, 2.61–3.40 = moderate, 3.41–4.20 = high, and 4.21–5.00 = very high.

As presented in Table 4, respondents demonstrated a high overall level of self-medication practices (M = 4.01, SD = 0.61). The highest-rated practice was reading medication instructions before taking medicine (M = 4.18, SD = 0.76). This was followed by taking medication every day as prescribed and following the correct physician-prescribed dose (M = 4.11, SD = 0.98), although respondents also frequently reported stopping medication when their condition improved without a doctor's consent (M = 4.10, SD = 0.81). The lowest-rated practice was changing the type of medication without a doctor's consent (M = 3.82, SD = 1.11), but this still fell within the high range.

These findings suggest that appropriate medication practices coexisted with frequent self-directed behaviors, indicating a need to reinforce professional consultation and safe medication management. These findings are further supported by the World Health Organization (WHO, 2024), which emphasized that medication-related harm remains a major patient safety concern and highlighted the importance of preventing avoidable medication errors through patient education, safe medication practices, and appropriate involvement of healthcare professionals. This supports the need to address unsafe self-medication behaviors identified in the present study, particularly unsupervised dosage changes and medication discontinuation.

5. Is there a significant relationship between the awareness and self-medication practices of the respondents?

The Shapiro–Wilk test indicated that the data significantly deviated from a normal distribution, W = .98, p = .02. Therefore, Spearman's rank-order correlation (Spearman's rho), a nonparametric test, was used to examine the relationship between awareness and self-medication practices. As shown in Table 5, the analysis indicated a statistically significant, moderate positive relationship between awareness and self-medication practices, rs = .60, p < .01. This finding suggests that higher awareness was associated with higher levels of self-medication practices among the respondents.

6. Is there a significant relationship between the attitude and self-medication practices among the respondents?

The Shapiro–Wilk test indicated that the data significantly deviated from a normal distribution, W = .96, p < .01. Therefore, the nonparametric Spearman's rank-order correlation was used to examine the relationship between attitude and self-medication practices. As shown in Table 6, the analysis revealed a statistically significant, strong positive relationship between the variables, rs = .70, p < .01. This finding indicates that higher attitude scores were associated with higher levels of self-medication practices among the respondents. Furthermore, the findings are supported by Tohan et al. (2024), who examined the relationship between knowledge, attitudes, convenience, and self-medication practices among 417 university students in Bangladesh. Their study demonstrated that attitudes toward self-medication were significantly associated with medication-related behaviors. Using structural equation modeling, the researchers identified attitude as an important factor associated with self-medication practices (β = −0.340, p < .001), with the direction reflecting the coding of their attitude measure. These findings reinforce the importance of attitudinal factors in understanding individuals' decisions regarding medication use.

7. Do awareness and attitude significantly predict the respondents' self-medication practices?

Because the normality assumption was not met, a generalized linear model with a Gaussian family was used to examine whether awareness and attitude predicted the self-medication practices score within a regression framework. As shown in Table 7, the overall model significantly predicted self-medication practices, $\chi^2(2) = 16.97$, p < .01. Attitude was a significant positive predictor of self-medication practices, B = 0.65, p < .01, indicating that higher attitude scores were associated with higher levels of self-medication practices. In contrast, awareness was not a significant predictor, B = 0.15, p = .20. Thus, when awareness and attitude were considered simultaneously, only attitude significantly contributed to the prediction of self-medication practices among the respondents. Recent empirical findings further support this interpretation. Tohan et al. (2024), in a study involving 417 university students in Bangladesh, identified medication knowledge, attitudes, and perceived convenience as factors associated with self-medication practices. Their findings emphasized the importance of attitudinal factors in explaining medication-related behavior. Similarly, Argote et al. (2025), in their investigation of analgesic self-medication among university students in Ecuador, reported a significant positive relationship between attitudes and self-medication practices (r = .524, p < .001), whereas the relationship between knowledge and practices was weak and statistically nonsignificant (r = .118, p = .183). Their regression analysis also identified attitude as a significant predictor, supporting the present study's finding that attitude demonstrated greater predictive significance than awareness.

8. Does the demographic profile significantly moderate the relationships of awareness and attitude with self-medication practices among the respondents?

As shown in Table 8, the interaction of awareness with sex, education, and income did not significantly predict self-medication practices, B = −0.10, SE = 0.53, t = −0.18, p = .85. Similarly, the interaction of attitude with sex, education, and income was not statistically significant, B = 0.23, SE = 0.68, t = 0.33, p = .74. These findings indicate that sex, education, and income did not significantly moderate the relationships of awareness and attitude with self-medication practices among the respondents. Furthermore, a systematic review by a group of researchers (2023) identified inconsistent

associations between demographic characteristics and self-medication behaviors across different populations, particularly concerning sex, educational attainment, and socioeconomic status. This variability suggests that demographic characteristics may not consistently explain differences in medication-related behaviors across populations. Similarly, Adhayanti et al. (2024) reported that sociodemographic factors were associated with knowledge and attitudes toward self-medication, highlighting the complexity of these relationships. Al-Qahtani et al. (2023) further emphasized the relevance of knowledge, attitudes, and appropriate medication practices in promoting responsible self-medication. Collectively, these studies provide context for the present findings, although they do not directly establish the absence of demographic moderation.

Original statistical table 1

Demographic Profile	Category	F	%
Age (years)	18 - 32	100	100
Sex	Female	55	55.0
	Male	45	45.0
Monthly income	Below ₱10,000	12	12.0
	₱10,000–₱19,999	10	10.0
	₱20,000–₱29,999	42	42.0
	₱30,000–₱39,999	29	29.0
	₱40,000–₱49,999	6	6.0
	₱50,000 and above	1	1.0
Ethnicity	Cebuano	100	100.0
Educational level	Senior high school	5	5.0
	College level	45	45.0
	College graduate	47	47.0
	Master's level	2	2.0
	Postgraduate	1	1.0

Original statistical table 2

Variable	M	SD	Interpretation
Prescription and over-the-counter medicines	4.50	0.63	Very high
Therapeutic and toxic side effects	4.34	0.65	Very high
Tonic medicine is beneficial and not harmful	4.10	0.81	High
More medication types increase treatment effectiveness	3.99	0.88	High
Older adults require smaller medication doses	4.04	0.90	High
Older adults are less likely to experience adverse reactions	4.03	0.90	High
Medication for older adults considers liver and kidney function	4.15	0.91	High
Medication type and dosage are the same for people with the same disease	4.06	0.96	High
More medication types and doses increase adverse-reaction risk	4.08	0.84	High

Medication should be discontinued when adverse reactions occur	4.25	0.76	Very high
Overall awareness	4.15	0.57	High

Original statistical table 3

As shown in Table 3, respondents reported a high overall attitude toward self-medication (M = 4.19, SD = 0.54). The highest-rated statement was that medication can ease pain and improve quality of life (M = 4.39, SD = 0.68), followed by managing daily medication based on personal experience and feelings (M = 4.33, SD = 0.78), both interpreted as very high. The lowest mean was recorded for managing medication based on advertisements and friends' recommendations (M = 3.99, SD = 1.08), although it remained within the high range. The findings show favorable attitudes toward medication use; however, the strong endorsement of self-directed medication decisions suggests the persistence of potentially unsafe attitudes toward self-medication.
4. What is the level of self-medication practices of the respondents?

Table 4. The Level of Self-Medication Practices

Original statistical table 4

Indicator	M	SD	Interpretation
I buy medications on my own from the pharmacy without a doctor's diagnosis	3.99	0.99	High
I read the medication instructions before taking the medicine.	4.18	0.76	High
I stop taking my medication on my own when my condition improves without my doctor's consent.	4.10	0.81	High
I take my medication as often as prescribed by my doctor every day.	4.04	0.83	High
I take my medication every day as prescribed by my doctor.	4.11	0.85	High
I change the dosage of my medication without my doctor's consent.	3.89	1.03	High
I change the type of medication I take without my doctor's consent.	3.82	1.11	High
I follow the right dose of medication as prescribed by my physician	4.11	0.98	High
I undergo regular blood pressure, blood sugar, and other routine tests to monitor how well my medication is working.	3.98	0.99	High
I have a special medicine cabinet at home where I store my medications	3.84	1.02	High

Overall Self-Medication practice	4.01	0.61	High

Original statistical table 5

Table 5. The Test of Relationship between Awareness and Self-Medication Practices	Table 5. The Test of Relationship between Awareness and Self-Medication Practices	Table 5. The Test of Relationship between Awareness and Self-Medication Practices	Table 5. The Test of Relationship between Awareness and Self-Medication Practices
Variables	r_s	p value	Remarks
Awareness and self-medication practices	.60	< .01	Significant
Note. r_s = Spearman's rank-order correlation coefficient. Statistical significance was evaluated at α = .05.	Note. r_s = Spearman's rank-order correlation coefficient. Statistical significance was evaluated at α = .05.	Note. r_s = Spearman's rank-order correlation coefficient. Statistical significance was evaluated at α = .05.	Note. r_s = Spearman's rank-order correlation coefficient. Statistical significance was evaluated at α = .05.

Original statistical table 6

Table 6. The Test of Relationship between the Attitude and Self-Medication Practices	Table 6. The Test of Relationship between the Attitude and Self-Medication Practices	Table 6. The Test of Relationship between the Attitude and Self-Medication Practices	Table 6. The Test of Relationship between the Attitude and Self-Medication Practices
Variables	rs	p	Remarks
Attitude and self-medication practices	.70	< .01	Significant
Note. rs = Spearman's rank-order correlation coefficient. Statistical significance was evaluated at α = .05.	Note. rs = Spearman's rank-order correlation coefficient. Statistical significance was evaluated at α = .05.	Note. rs = Spearman's rank-order correlation coefficient. Statistical significance was evaluated at α = .05.	Note. rs = Spearman's rank-order correlation coefficient. Statistical significance was evaluated at α = .05.

Original statistical table 7

Table 7. The Test of Prediction of Awareness and Attitude on Self-Medication Practices.	Table 7. The Test of Prediction of Awareness and Attitude on Self-Medication Practices.	Table 7. The Test of Prediction of Awareness and Attitude on Self-Medication Practices.	Table 7. The Test of Prediction of Awareness and Attitude on Self-Medication Practices.	Table 7. The Test of Prediction of Awareness and Attitude on Self-Medication Practices.	Table 7. The Test of Prediction of Awareness and Attitude on Self-Medication Practices.	Table 7. The Test of Prediction of Awareness and Attitude on Self-Medication Practices.
Effect	B	SE	t/χ^2	df	p	Remarks
Overall model	—	—	16.97	2	< .01	Significant
Intercept	0.68	0.37	1.82	97	.07	Not significant
Awareness	0.15	0.11	1.28	97	.20	Not significant
Attitude	0.65	0.12	5.34	97	< .01	Significant
Note. Outcome variable = overall self-medication practices. The overall model comparison was $\chi^2(2) = 16.97$, $p < .01$.	Note. Outcome variable = overall self-medication practices. The overall model comparison was $\chi^2(2) = 16.97$, $p < .01$.	Note. Outcome variable = overall self-medication practices. The overall model comparison was $\chi^2(2) = 16.97$, $p < .01$.	Note. Outcome variable = overall self-medication practices. The overall model comparison was $\chi^2(2) = 16.97$, $p < .01$.	Note. Outcome variable = overall self-medication practices. The overall model comparison was $\chi^2(2) = 16.97$, $p < .01$.	Note. Outcome variable = overall self-medication practices. The overall model comparison was $\chi^2(2) = 16.97$, $p < .01$.	Note. Outcome variable = overall self-medication practices. The overall model comparison was $\chi^2(2) = 16.97$, $p < .01$.

B = unstandardized coefficient; SE = standard error. Results were interpreted as significant when $p < .05$ and not significant when $p \geq .05$.	B = unstandardized coefficient; SE = standard error. Results were interpreted as significant when $p < .05$ and not significant when $p \geq .05$.	B = unstandardized coefficient; SE = standard error. Results were interpreted as significant when $p < .05$ and not significant when $p \geq .05$.	B = unstandardized coefficient; SE = standard error. Results were interpreted as significant when $p < .05$ and not significant when $p \geq .05$.	B = unstandardized coefficient; SE = standard error. Results were interpreted as significant when $p < .05$ and not significant when $p \geq .05$.	B = unstandardized coefficient; SE = standard error. Results were interpreted as significant when $p < .05$ and not significant when $p \geq .05$.	B = unstandardized coefficient; SE = standard error. Results were interpreted as significant when $p < .05$ and not significant when $p \geq .05$.

Original statistical table 8

Table 8. The Test of Moderation of Demographic Profile on Awareness, Attitude, and Practices on Self-Medication.	Table 8. The Test of Moderation of Demographic Profile on Awareness, Attitude, and Practices on Self-Medication.	Table 8. The Test of Moderation of Demographic Profile on Awareness, Attitude, and Practices on Self-Medication.	Table 8. The Test of Moderation of Demographic Profile on Awareness, Attitude, and Practices on Self-Medication.	Table 8. The Test of Moderation of Demographic Profile on Awareness, Attitude, and Practices on Self-Medication.	Table 8. The Test of Moderation of Demographic Profile on Awareness, Attitude, and Practices on Self-Medication.
Moderating variable	B	SE	t	p	Remarks
Awareness × sex × education × income	−0.10	0.53	−0.18	.85	Not significant
Attitude × sex × education × income	0.23	0.68	0.33	.74	Not significant

DISCUSSION

The observed high scores in awareness, attitude, and reported practices indicate generally favorable medication-related responses but should not be interpreted as proof that all self-medication behavior is safe. The study identified self-directed medication decisions, including discontinuation after symptom improvement without professional consultation.

Both awareness and attitude were positively associated with self-medication practices, with a stronger bivariate association for attitude. When considered together in the generalized linear model, attitude remained a significant predictor whereas awareness did not. This distinction suggests that knowledge alone may not be sufficient to explain reported medication behavior. These associations do not establish causation.

The tested interactions involving sex, education, and income were not statistically significant. The absence of significant moderation in this sample should not be interpreted as evidence that sociodemographic characteristics never influence medication use.

Study Limitations

The study employed a quantitative descriptive-correlational research design to describe the identified variables and determine whether statistically significant relationships existed among sociodemographic characteristics, awareness, attitudes, and self-medication safety practices. A total of 100 adult residents aged 18 years and above were included as respondents, with the 56 puroks of the barangay serving as geographical strata for the sampling procedure. Data were collected using a structured survey questionnaire and analyzed through appropriate descriptive and inferential statistical techniques.

The study was geographically limited to Barangay Alfonso Angliongto Sr., Davao City, and included only residents who met the established inclusion criteria and voluntarily consented to participate. Individuals below 18 years of age, nonresidents of the barangay, and those who were unable to understand or accomplish the questionnaire due to illness or other limiting circumstances were excluded. Furthermore, the investigation was limited to the variables measured by the research instrument and did not comprehensively examine other potential determinants of self-medication practices, such

as access to healthcare services, medication costs, pharmaceutical advertising, cultural beliefs, previous medical conditions, and the influence of healthcare professionals. The study relied primarily on self-reported information, which may have been affected by recall bias, social desirability bias, and differences in respondents' understanding of the questionnaire items. Additionally, the sample size of 100 respondents may have limited the statistical precision of the estimates and the generalizability of the findings to the entire barangay or other communities. Since the study employed a descriptive-correlational design, the identified relationships were interpreted as statistical associations rather than direct cause-and-effect relationships.

CONCLUSIONS

The respondents generally demonstrated high levels of medication safety awareness, attitudes, and self-medication practice scores. However, these findings should be interpreted cautiously because elevated aggregate scores did not necessarily indicate consistently safe medication-related behaviors. Certain questionnaire responses reflected potentially inappropriate self-medication decisions that may expose individuals to preventable health risks.

Awareness demonstrated a statistically significant positive association with self-medication practices, suggesting that medication-related knowledge was related to respondents' reported behaviors. Nevertheless, awareness alone did not establish the appropriateness or safety of actual medication use. This emphasizes that possessing medication-related information does not necessarily guarantee responsible medication practices.

Attitudes exhibited a stronger positive association with self-medication practices than awareness. Furthermore, attitude emerged as a statistically significant independent predictor in the generalized linear model, while awareness did not. These findings suggest that respondents' perceptions, beliefs, and evaluations of medication use may be particularly relevant to understanding variations in their self-medication behaviors.

The tested demographic interaction terms involving sex, educational attainment, and monthly income did not demonstrate statistically significant moderating effects. Thus, the study did not establish sufficient evidence that these combined demographic characteristics significantly altered the examined relationships. However, the absence of statistical significance should not be interpreted as definitive evidence that sociodemographic factors have no relevance to medication-related behaviors.

The findings underscore the importance of strengthening medication safety education beyond the provision of basic drug information. Community health initiatives should also address misconceptions, personal beliefs, medication selection, adherence to appropriate instructions, and recognition of situations requiring professional healthcare consultation.

The findings highlight the importance of examining medication safety awareness, attitudes, and self-medication practices as distinct yet interrelated dimensions of responsible medication use. Although respondents demonstrated generally favorable levels across these variables, the differences in their statistical relationships suggest that medication knowledge and positive perceptions may contribute differently to self-medication behaviors. Therefore, comprehensive medication-safety assessments should consider not only what individuals know and believe but also how they report applying such knowledge and beliefs in actual medication-related decisions.

The significant predictive contribution of attitudes suggests that behavioral and perceptual factors warrant particular consideration in understanding self-medication safety practices. Respondents' beliefs regarding medication effectiveness, perceived treatment benefits and disadvantages, medication compliance, and independent medication management may be relevant to their reported practices. However, the predictive relationship identified in this study does not establish causation. These findings emphasize the importance of addressing medication-related beliefs and perceptions when developing community-based interventions intended to promote responsible self-medication.

The study contributes localized empirical evidence concerning the relationships among medication safety awareness, attitudes, sociodemographic characteristics, and self-medication practices among residents of Barangay Alfonso Angliongto Sr., Davao City. Nevertheless, the findings should be interpreted within the limitations of the study's research design, sample size, and reliance on self-reported questionnaire responses. Consequently, the results provide a foundation for future research involving larger and more diverse populations, additional behavioral determinants, and more comprehensive assessments of actual medication-safety practices.

In conclusion, the study established statistically significant relationships among awareness, attitudes, and self-medication practices among the surveyed residents of Barangay Alfonso Angliongto Sr., Davao City. Attitude was identified as a significant independent predictor of self-medication practice scores, whereas awareness did not demonstrate an independent predictive effect in the fitted model. These findings highlight the importance of integrating medication literacy, appropriate health beliefs, and responsible decision-making into community-based health promotion initiatives. Since the study utilized a descriptive-correlational design, the findings represent statistical associations and should not be interpreted as evidence of direct causal relationships.

II. ACKNOWLEDGMENT

Residents of Barangay Alfonso Angliongto Sr. Residents are encouraged to practice responsible self-medication by carefully reading medication labels, observing recommended dosages, recognizing potential adverse drug reactions, and avoiding the inappropriate reuse or sharing of medications. They should seek professional healthcare advice whenever symptoms persist, worsen, or require further clinical evaluation.

Community Health Nurses and Barangay Health Workers. Community health nurses and barangay health workers are encouraged to strengthen medication safety education through community-based health teaching, individualized counseling, and awareness campaigns. Particular emphasis should be placed on correcting misconceptions regarding medication selection, unsupervised dosage adjustments, adverse drug reactions, and the importance of professional consultation. Educational interventions should address both medication-related knowledge and attitudes that may influence actual behaviors.

Barangay Officials and Local Government Units. Barangay officials are encouraged to collaborate with healthcare professionals in developing sustainable medication safety initiatives. These may include community seminars, educational materials, and health promotion activities emphasizing responsible over-the-counter medication use. Such programs may be integrated into existing barangay health services to improve accessibility and community participation.

Healthcare Administrators and Healthcare Institutions. Healthcare administrators are encouraged to incorporate medication literacy and rational drug use into community health programs. Regular medication counseling, accessible educational resources, and appropriate referral mechanisms may help address unsafe self-medication practices. The effectiveness of these initiatives should be assessed through periodic evaluation and community feedback.

Nursing Educators and Academic Institutions. Nursing educators are encouraged to integrate the findings into community health nursing instruction, pharmacology education, and health promotion activities. Nursing students may be provided with opportunities to develop and implement evidence-based educational interventions addressing medication safety, responsible self-care, and appropriate healthcare-seeking behaviors.

Future Researchers. Future researchers are encouraged to conduct similar investigations involving larger and more diverse populations to improve statistical precision and the generalizability of findings. Further studies may examine additional factors, including healthcare accessibility, financial constraints, medication costs, previous healthcare experiences, and sources of medication information. Researchers are also encouraged to utilize consistently scored and validated research instruments, and clearly document sampling procedures.

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