



KNOWLEDGE AND PRACTICES OF MOTHERS IN QUIBAL PEÑABLANCA IN USING CONTRACEPTIVES: A BASIS FOR BS PHARMACY DEPARTMENT COMMUNITY EXTENSION PROGRAM

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ABSTRACT

This study aimed to assess the knowledge and practices of contraceptive use among mothers in Quibal, Peñablanca, Cagayan, in order to inform the development of a community extension program for the BS Pharmacy Department. The research specifically focused on understanding the respondents' demographic profiles, their level of knowledge regarding contraceptives, and their practices related to contraceptive use. A quantitative descriptive-inferential research design was employed, utilizing a survey questionnaire to collect data from 57 mothers in the community. The survey gathered information on the respondents' age, civil status, educational background, religious affiliation, number of children, attendance at contraceptive seminars, and employment status, as well as their knowledge about the types, usage, effectiveness, side effects, and sources of information related to contraceptives. Additionally, the study examined the practices of contraceptive use, including methods used, frequency and consistency of use, consultation with healthcare providers, and decision-making factors. The results revealed that the majority of respondents had adequate knowledge about contraceptives, especially in terms of types and usage. However, gaps in knowledge were noted, particularly regarding side effects and sources of information. In terms of practices, respondents showed high consistency in contraceptive use, with a strong emphasis on preventing unwanted pregnancies. Significant differences were found in knowledge based on factors such as religious affiliation, number of seminars attended, number of children, and employment status. The study concluded that while mothers in Quibal are generally informed about contraceptives, further education is needed, particularly on side effects, and increased participation in seminars and access to diverse information sources. The findings suggest that tailored educational programs and community-based outreach initiatives are necessary to improve contraceptive knowledge and practices, especially for mothers with larger families. These findings provide valuable insights for developing a comprehensive community extension program aimed at enhancing contraceptive awareness and decision-making among mothers in Quibal.



Key words: *Keywords: Mothers, Contraceptives, Knowledge, Practices, Community Extension, Health Education, Family Planning, Pharmacy, Awareness, Behavior*

INTRODUCTION

Reproductive health is a fundamental component of public health, and contraceptive use is essential in empowering women to make informed decisions about family planning. In acknowledgement of this, the United Nations Sustainable development goals (SDGs) 3 & 5 emphasizes the need to ensure universal access to reproductive health services to all women (United Nations, 2015). Contraceptive use and access play an important part in attaining women empowerment by allowing them to exercise bodily autonomy, improving overall health and increasing their participation in the labor force (Finlay & Lee, 2018). It is also worth noting that contraception is an important component of sexual and reproductive healthcare as using it have been shown to reduce unsafe abortions, maternal deaths and unintended pregnancies while improving newborn and maternal health (Sully et al., 2020; Ganatra & Faundes, 2016; Barot, 2015).

Effective use of contraceptives not only reduces the risks associated with unintended pregnancies. Moreover, women's empowerment, closely linked to contraceptive use, is positively associated with better maternal and child health outcomes, including antenatal care, skilled birth attendance, and child nutrition (Pratley, 2016). While some challenges remain in measuring women's empowerment and its long-term impacts, the evidence strongly supports the positive effects of contraceptive use on maternal and child health, as well as women's overall socioeconomic status (Finlay & Lee, 2018; Pratley, 2016). Despite their proven benefits, the adoption and use of contraceptives in rural areas like Quibal, Peñablanca, Cagayan, remain a challenge due to various barriers, including socio-cultural norms, lack of access to education, and limited healthcare resources.

In the Philippines, family planning programs have been implemented to address these challenges. However, gaps persist in knowledge and practices, particularly in underserved rural communities. Previous research highlights factors such as economic constraints, educational attainment, and cultural influences as determinants of contraceptive use (D'Souza et al., 2022; Marquez et al., 2017; Lai & Tey, 2014). While these studies provide valuable insights, they often generalize findings without delving into the unique circumstances of specific rural populations. This gap stresses the need for localized studies to identify the specific factors affecting contraceptive knowledge and practices in areas like Quibal.

This research assessed the knowledge and practices of mothers in Quibal regarding contraceptive use and explored the socio-cultural and educational factors influencing their decisions. The findings served as a basis for designing a Community Extension Program under the BS Pharmacy Department, focusing on enhancing awareness, accessibility, and informed decision-making in family



planning. By addressing these issues, the program aimed to empower mothers in Quibal to take control of their reproductive health and improve overall community well-being.

The study's significance lay in its potential to provide a model for tailored, community-based interventions that address the specific needs of rural populations. Through this research, the BS Pharmacy Department established a sustainable initiative to bridge gaps in reproductive health education and services, contributing to broader public health goals.

METHODOLOGY

This chapter served as a guide for the research team, outlining the methodological approach used to assess the knowledge and practices of mothers in Quibal, Peñablanca, regarding contraceptive use. The study aimed to examine how these factors influence family planning decisions. The following are the parts of this chapter:

Research Design

The study employed a quantitative descriptive-inferential design, which was ideal for both describing and analyzing the knowledge and practices of mothers in Quibal, Peñablanca, regarding contraceptive use. The descriptive component systematically gathered data on current knowledge, practices, and influencing factors, providing a clear understanding of the situation. The inferential aspect utilized statistical methods to identify patterns and relationships between variables such as demographic factors (e.g., age, education) and contraceptive use. This approach not only captured the current status of contraceptive knowledge and practices but also provided deeper insights into factors affecting family planning decisions in the community.

Participants of the Study

The study population consisted of married women of reproductive age (18-49 years old) who visited the health center in Barangay Quibal, Peñablanca, Cagayan. Simple random sampling was employed to ensure every mother had an equal chance of selection, providing a representative sample. The sample size was determined using Slovin's

Formula with a 5% margin of error and a 95% confidence level. Applying Slovin's formula, the calculated sample size was 57 mothers. This ensured sufficient precision and reliability in representing the broader population of mothers visiting the health center.

Data Gathering Tool

The primary data collection tool for this study was a modified questionnaire structured in a checklist and Likert-scale format. It was adapted from the study "Knowledge, Attitude, and Practices of Contraceptives Used among Indigenous Women of Reproductive Age in Barangay Hawilian, Esperanza, Agusan Del Sur" by Abejo, Gulle Jr., & Montajes Jr. (2024) and refined to align with the



study's objectives. The questionnaire was validated by experts to ensure cultural, contextual, and linguistic relevance, with modifications made to better suit the mothers in Quibal, Peñablanca.

Data Gathering Procedure

The data gathering procedure followed a structured approach to ensure accuracy, ethical compliance, and reliability. First, the questionnaire, along with the research statement of the problem and a formal communication letter, was submitted to the MCNP-ISAP Research and Development Center (RDC) for review and approval. Upon receiving approval, the Barangay Captain of Quibal and the local government were formally informed, and permission was secured to proceed with data collection. Once authorization was granted, the researchers conducted a briefing for the respondents, explaining the study's purpose, emphasizing voluntary participation, and assuring the confidentiality of their responses. Data collection was conducted through printed questionnaires, distributed in person. Respondents either completed the questionnaire independently or received assistance from the researchers if they had difficulty reading. To ensure completeness and accuracy, the researchers reviewed each questionnaire before concluding the session. This organized and systematic process guaranteed the reliability and validity of the data, making the study replicable for future research.

Data Analysis

The researchers used the following statistical tools to treat the data. A two-way ANOVA estimates how a quantitative variable's mean changes over time when the levels of two categorical variables are changed. A two-way analysis variance (ANOVA) a statistical test used in this study to determine the impact of two nominal predictor variables on a continuous outcome variable. A statistical technique, the weighed mean equation, uses the product of the weight and their respective means to determine the average.

RESULT

This chapter describes the results of the study, focusing on the knowledge and practices of mothers in Quibal, Peñablanca regarding the use of contraceptives. The findings are analysed and interpreted in the context of their relevance to the proposed community extension program for the BS Pharmacy Department. Tables and descriptive analyses are used to present the data systematically.

TABLE 1.1. DISTRIBUTION ON THE PROFILE OF THE RESPONDENTS IN TERMS OF AGE

CATEGORY	FREQUENCY	PERCENTAGE
20 - 25 years old	5	8.80
26 - 31 years old	18	31.60
32 - 37 years old	12	21.10

Table 1.1 shows that most respondents (31.60%) are aged 26–31, while the least represented group (8.80%) is 20–25. This suggests that reproductive planning efforts should focus on women in their late twenties to early thirties for greater impact

TABLE 1.2. DISTRIBUTION ON THE PROFILE OF THE RESPONDENTS IN TERMS OF CIVIL STATUS

CATEGORY	FREQUENCY	PERCENTAGE
Elementary	23	40.40
High School	21	36.80
College	12	21.10
Post- graduate	1	1.80

Table 1.2 shows that most respondents (94.70%) are married, while single (3.50%) and widowed (1.80%) individuals are minimally represented. This suggests that family planning efforts should focus on married couples while ensuring inclusivity for single and widowed respondents.

TABLE 1.3. DISTRIBUTION ON THE PROFILE OF THE RESPONDENTS IN TERMS OF HIGHEST EDUCATIONAL ATTAINMENT

CATEGORY	FREQUENCY	PERCENTAGE
Elementary	23	40.40
High School	21	36.80
College	12	21.10
Post- graduate	1	1.80
TOTAL	57	100.00

The overall community performance of the interns in communication skills was rated as Excellent, with a categorical mean of 3.42. Among the individual items assessed, the highest mean of 3.67 was observed for maintaining professional communication with pharmacy staff, actively listening to patient inquiries, and effectively addressing patient needs. These areas highlight the interns' proficiency in professional interactions and patient engagement. However, the statement Table 1.3 shows that most respondents have an elementary (40.40%) or high school education (36.80%), while only 1.80% pursued post-graduate studies. This suggests a potential gap in reproductive health



knowledge, emphasizing the need for simple, accessible educational materials and culturally relevant communication strategies in the community extension program.

TABLE 1.4. DISTRIBUTION ON THE PROFILE OF THE RESPONDENTS IN TERMS OF RELIGIOUS AFFILIATION

CATEGORY	FREQUENCY	PERCENTAGE
Roman Catholic	43	75.40
Protestant	14	24.60
TOTAL	57	100.00

Table 1.4 shows that most respondents (75.40%) identify as Roman Catholic, while 24.60% are Protestant. This religious distribution suggests that Catholicism may influence contraceptive attitudes, as traditional teachings often discourage artificial contraceptive use. Protestant denominations, however, may offer a wider range of views on the matter. The findings highlight the importance of considering cultural and religious sensitivities in the community extension program. Collaborating with faith leaders and emphasizing shared values, like responsible parenthood, can help address barriers to contraceptive adoption and improve engagement with the community (Bormet, 2020; Alikali, 2017).

TABLE 1.5. DISTRIBUTION ON THE PROFILE OF THE RESPONDENTS IN TERMS OF NUMBER OF SEMINARS ATTENDED

CATEGORY	FREQUENCY	PERCENTAGE
None	42	73.70
1 - 2	15	26.30
TOTAL	57	100.00

Table 1.5 shows that the majority of respondents (73.70%) have not attended any seminars, while only 26.30% have attended 1–2. This suggests a significant gap in access to educational activities on contraceptives and family planning. The low attendance could stem from factors such as limited seminar availability, lack of awareness, or cultural and logistical barriers. The findings underscore the need for targeted educational initiatives in the community extension program. Organizing accessible seminars, considering the community's preferences and schedules, and using local healthcare workers or leaders as facilitators can increase participation and improve contraceptive knowledge (Malhotra & Bhat, 2014).

TABLE 1.6 DISTRIBUTION ON THE PROFILE OF THE RESPONDENTS IN TERMS OF NUMBER OF CHILDREN



CATEGORY	FREQUENCY	PERCENTAGE
None	1	1.80
1 - 2	27	47.40
3 - 4	22	38.60
5 and above	7	12.30
TOTAL	57	100.00

Table 1.6 shows that nearly half of the respondents (47.40%) have 1–2 children, while 38.60% have 3–4 children, and only 1.80% have no children. This suggests that most respondents are actively parenting with moderate family sizes. The higher proportion of families with three or more children points to a potential need for improved family planning education and contraceptive access, as larger families often face challenges in accessing effective contraceptive methods. The findings indicate that the community extension program should prioritize family planning for parents, especially those with three or more children, to address socioeconomic pressures and ensure accessible contraceptive options (Malhotra & Bhat, 2014).

TABLE 1.7 DISTRIBUTION ON THE PROFILE OF THE RESPONDENTS IN TERMS OF EMPLOYMENT STATUS

CATEGORY	FREQUENCY	PERCENTAGE
Unemployed	14	24.60
Self- employed	21	36.80
Employed Part- time	17	29.80
Employed Full- time	5	8.80
TOTAL	57	100.00

Table 1.7 shows that 36.80% of respondents are self-employed, while only 8.80% are employed full-time. This suggests that most respondents rely on self-employment, highlighting the need for flexible family planning programs. To improve engagement, educational materials and contraceptive services should be accessible during non-working hours or through community-based initiatives.

TABLE 2.1. LEVEL OF KNOWLEDGE OF THE RESPONDENTS IN USING CONTRACEPTIVES IN TERMS OF TYPES OF CONTRACEPTIVES



CATEGORY	FREQUENCY	PERCENTAGE
Limited Knowledge	1	1.80
Moderate Knowledge	10	17.50
Adequate Knowledge	46	80.70
TOTAL	57	100.00

Table 2.1 shows that 80.70% of respondents have adequate knowledge of contraceptives, while only 1.80% have limited knowledge. This indicates that most participants are well-informed about contraceptive types, providing a strong foundation for promoting informed family planning decisions. However, the small percentage with limited knowledge suggests the need for targeted education to ensure inclusivity and address remaining knowledge gaps.

TABLE 2.2. LEVEL OF KNOWLEDGE OF THE RESPONDENTS IN USING CONTRACEPTIVES IN TERMS OF USAGE

CATEGORY	FREQUENCY	PERCENTAGE
Moderate Knowledge	13	22.80
Adequate Knowledge	44	77.20
TOTAL	57	100.00

Table 2.2 shows that 77.20% of respondents have adequate knowledge of contraceptive usage, while 22.80% have moderate knowledge, with no respondents having limited knowledge. The majority are well-informed, which can support better adoption and effective use of contraceptives. However, the 22.80% with moderate knowledge highlights the need for additional educational programs to further improve understanding and ensure consistent, correct usage across all knowledge levels.

TABLE 2.3. LEVEL OF KNOWLEDGE OF THE RESPONDENTS IN USING CONTRACEPTIVES IN TERMS OF EFFECTIVENESS

CATEGORY	FREQUENCY	PERCENTAGE
Moderate Knowledge	16	28.10
Adequate Knowledge	41	71.90
TOTAL	57	100.00

Table 2.3 shows that 71.90% of respondents have adequate knowledge of contraceptive effectiveness, while 28.10% have moderate knowledge. Although most are well-informed, the 28.10%



with moderate knowledge suggests a need for further education on the varying effectiveness of different contraceptive methods to ensure informed decision-making.

TABLE 2.4. LEVEL OF KNOWLEDGE OF THE RESPONDENTS IN USING CONTRACEPTIVES IN TERMS OF SIDE EFFECTS

CATEGORY	FREQUENCY	PERCENTAGE
Limited Knowledge	3	5.30
Moderate Knowledge	18	31.60
Adequate Knowledge	36	63.20
TOTAL	57	100.00

Table 2.4 shows that 63.20% of respondents have adequate knowledge of contraceptive side effects, while 36.80% have moderate or limited knowledge. Although most are informed, the gap highlights the need for further education on side effects to help individuals make well-rounded, informed decisions and improve health outcomes.

TABLE 2.5. LEVEL OF KNOWLEDGE OF THE RESPONDENTS IN USING CONTRACEPTIVES IN TERMS OF SOURCES OF INFORMATION

CATEGORY	FREQUENCY	PERCENTAGE
Moderate Knowledge	10	17.5
Adequate Knowledge	47	82.5
TOTAL	57	100.00

Table 2.5 shows that 82.5% of respondents have adequate knowledge of where to obtain information about contraceptives, while 17.5% have moderate knowledge. While most are aware of information sources, efforts should be made to ensure that individuals with moderate knowledge are directed to reliable and accessible resources.

TABLE 3.1. PRACTICES OF THE RESPONDENTS IN USING CONTRACEPTIVES IN TERMS OF METHODS USED



STATEMENTS	MEAN	DESCRIPTION
1. I am using a natural contraception method.	2.82	AGREE
2. I am using a modern contraception method.	3.30	STRONGLY AGREE
3. I used both natural and modern contraception method.	2.82	AGREE
4. I chose contraceptives that worked best for me.	3.35	STRONGLY AGREE
5. I have been using contraceptives as advised by health professionals.	3.23	AGREE
CATEGORICAL MEAN	3.11	AGREE

Table 3.1 shows that respondents generally agree (mean = 3.11) with using contraceptives, with the highest agreement on choosing the most effective method (mean = 3.35). However, there was lower agreement on using natural or combined methods (mean = 2.82), indicating a preference for modern methods. This aligns with research suggesting modern contraceptives are favored due to their higher effectiveness and convenience (Teal & Edelman, 2021). The findings underscore the importance of personal choice and tailored healthcare in contraceptive practices (Rivlin & Isley, 2018).

TABLE 3.2. PRACTICES OF THE RESPONDENTS IN USING CONTRACEPTIVES IN TERMS OF FREQUENCY AND CONSISTENCY

STATEMENTS	MEAN	DESCRIPTION
1. I consistently use or take the contraceptive.	3.44	STRONGLY AGREE
2. I have been using contraceptives for birth spacing.	3.19	AGREE
3. I have been using contraceptives for my health and child's health.	3.14	AGREE
4. I have been using Contraceptives to prevent unwanted pregnancy.	3.54	STRONGLY AGREE
5. I have been using contraceptives for socio- economic concerns.	3.09	AGREE
CATEGORICAL MEAN	3.28	STRONGLY AGREE

Table 3.2 indicates that respondents generally use contraceptives consistently (mean = 3.28), with the highest agreement on using them to prevent unwanted pregnancies (mean = 3.54). The lowest mean (3.09) was for using contraceptives due to socio-economic concerns, suggesting that while economic factors play a role, health-related reasons like pregnancy prevention and birth spacing are stronger motivators. This aligns with research highlighting the primary role of contraceptives in preventing pregnancies and improving health outcomes (Lemoine et al., 2017; Abraham, 2019), with socio-economic factors often being secondary (Shullai et al., 2023).

TABLE 3.3. PRACTICES OF THE RESPONDENTS IN USING CONTRACEPTIVES IN TERMS OF CONSULTATION WITH HEALTHCARE PROVIDERS

STATEMENTS	MEAN	DESCRIPTION
1. If I have health concerns about my reproductive system, I consult with my doctor.	3.19	AGREE
2. I visited regularly the health care provider (doctor, nurse, midwife, barangay health worker, or hilot/mananabang) for consultation about the contraception I am using.	3.23	AGREE
3. I attended seminars to learn more about family planning.	2.81	AGREE
4. I received information on contraceptives from healthcare providers.	3.26	STRONGLY AGREE
5. I seek advice from healthcare providers before starting a new contraceptive method.	3.21	AGREE
CATEGORICAL MEAN	3.14	AGREE

Table 3.3 shows that respondents generally consult healthcare providers about contraceptive use (mean = 3.14), with strong agreement on receiving contraceptive information from them (mean = 3.26). The lowest mean (2.81) is for attending family planning seminars, indicating less frequent engagement in such educational activities. While healthcare providers play a key role in delivering contraceptive information (Zeal et al., 2021), the lower seminar attendance suggests barriers like accessibility or scheduling conflicts. Further community-based educational programs could enhance contraceptive knowledge and usage (Pazol et al., 2018).

TABLE 3.4. PRACTICES OF THE RESPONDENTS IN USING CONTRACEPTIVES IN TERMS OF DECISION- MAKING FACTORS

STATEMENTS	MEAN	DESCRIPTION
1. I discuss with my partner or husband about the contraception we use.	3.44	STRONGLY AGREE
2. I consider the health benefits of contraceptives in my decision-making.	3.44	STRONGLY AGREE
3. I consider the side effects of contraceptives when choosing a method.	3.18	AGREE
4. I take into account cultural or religious beliefs in choosing a contraceptive method.	3.14	AGREE
5. I consider the cost and accessibility of contraceptives in my decision-making process.	3.18	AGREE
CATEGORICAL MEAN	3.27	STRONGLY AGREE

Table 3.4 reveals that respondents strongly consider health benefits and partner involvement in contraceptive decision-making (mean = 3.27), with the highest agreement on discussing contraception with partners (mean = 3.44) and considering health benefits (mean = 3.44). The lowest mean (3.14) is for considering cultural or religious beliefs, suggesting a lesser emphasis on these factors. Health benefits and partner involvement are central to decision-making, while cultural and religious beliefs play



a less significant role. Research supports that health benefits and partner collaboration are key factors in contraceptive choices (Teal & Edelman, 2021; Sarnak et al., 2021).

TABLE 4.1. DIFFERENCE IN THE LEVEL OF KNOWLEDGE OF THE RESPONDENTS IN USING CONTRACEPTIVES BASED ON THEIR PROFILE VARIABLES

VARIABLES		LEVEL OF KNOWLEDGE OF THE RESPONDENTS IN USING CONTRACEPTIVES				
		TYPES OF CONTRA CEPTIVES	USAGE	EFFECTIVEN ESS	SIDE EFFECTS	SOURCES OF INFORMAT TION
AGE	x2-value	.728	4.989	.681	2.612	1.494
	p- value	.948	.288	.954	.625	.828
CIVIL STATUS	x2- value	.741	1.126	1.214	1.768	1.668
	p- value	.690	.570	.545	.413	.434
HIGHEST EDUCATIONAL ATTAINMENT	x2- value	2.758	3.361	3.599	.505	1.951
	p- value	.252	.186	.165	.777	.377
RELIGIOUS AFFILIATION	x2- value	4.343	.020	1.716	2.089	.190
	p- value	.037**	.888	.190	.148	.663
NUMBER OF SEMINARS	x2- value	5.797	1.259	2.151	.298	3.447
	p- value	.016**	.262	.142	.585	.063
NUMBER OF CHILDREN	x2- value	1.233	.425	1.466	1.745	8.651
	p- value	.745	.935	.690	.627	.034**
EMPLOYMENT STATUS	x2- value	4.170	1.742	10.129	3.020	2.353
	p- value	.244	.628	.018**	.389	.502

Table 4.1 reveals significant differences in contraceptive knowledge based on several profile variables.

Religious Affiliation. Protestants have higher knowledge of contraceptives ($p = 0.037$), possibly due to religious or community-led education, while Catholic teachings may influence contraceptive views (Pinter et al., 2016; Colleran & Mace, 2015).

Number of Seminars Attended. Respondents who attended no seminars had higher knowledge ($p = 0.016$), suggesting seminars may be less effective than expected, potentially requiring more interactive methods (Pazol et al., 2018; Chandra-Mouli et al., 2015).

Number of Children. Respondents with 5 or more children had lower access to contraceptive information ($p = 0.034$), highlighting the need for targeted support for larger families (Otterbach et al., 2016; Mashiach & Davidovich, 2023).

Employment Status. Self-employed individuals had higher knowledge of contraceptive effectiveness ($p = 0.018$), likely due to greater autonomy and access to resources (Pekkurnaz, 2019; D'Souza et al., 2022).



TABLE 4.2. DIFFERENCE IN THE PRACTICES OF THE RESPONDENTS IN USING CONTRACEPTIVES BASED ON THEIR PROFILE VARIABLES

VARIABLES		PRACTICES OF THE RESPONDENTS IN USING CONTRACEPTIVES			
		METHODS USED	FREQUENCY AND CONSISTENCY OF USE	CONSULTATION WITH HEALTHCARE PROVIDERS	DECISION-MAKING FACTORS
AGE	f- value	.365	.283	.202	.176
	p- value	.833	.888	.936	.950
CIVIL STATUS	f- value	.827	1.445	1.047	.475
	p- value	.443	.245	.358	.625
HIGHEST EDUCATIONAL ATTAINMENT	f- value	.863	.148	.603	.669
	p- value	.466	.931	.616	.575
RELIGIOUS AFFILIATION	t- value	1.809	.997	.778	1.420
	p- value	.076	.323	.440	.161
NUMBER OF SEMINARS	t- value	.758	.238	1.048	.235
	p- value	.452	.813	.299	.815
NUMBER OF CHILDREN	f- value	.954	1.553	.012	3.490
	p- value	.421	.212	.998	.022**
	f- value	1.991	.319	.590	1.131
EMPLOYMENT STATUS	p- value	.126	.812	.625	.345

Table 4.2 reveals significant differences in contraceptive decision-making based on the number of children ($p = 0.022$). Respondents with 3–4 children had higher decision-making scores (Mean = 3.45), while those with 5 or more children had lower scores (Mean = 3.11), suggesting that larger families face more challenges in shared decision-making. This highlights the need for targeted support for mothers with larger families, addressing constraints like time, finances, and reliance on traditional family dynamics. Other demographic factors did not show significant differences, indicating that contraceptive practices are relatively consistent across these variables. Studies by Shafiqullah et al. (2016) and Norris et al. (2019) support the findings that larger families often prioritize immediate needs over long-term family planning, emphasizing the need for tailored community programs to support informed contraceptive decisions for larger households.

TABLE 5. REGRESSION ANALYSIS ON THE PROFILE OF THE RESPONDENTS AND LEVEL OF KNOWLEDGE AFFECTING THEIR PRACTICES IN USING CONTRACEPTIVES

VARIABLES	PRACTICES OF THE RESPONDENTS IN USING CONTRACEPTIVES
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			METHODS USED	FREQUENCY AND CONSISTENCY OF USE	CONSULTATION WITH HEALTHCARE PROVIDERS	DECISION - MAKING FACTORS
PROFILE VARIABLES	AGE	p- value	0.584	0.863	0.996	0.550
		r- value	0.074	0.023	0.001	0.081
		r2 – value	0.005	0.001	0.000	0.007
	CIVIL STATUS	p- value	0.823	0.976	0.952	0.837
		r- value	0.085	0.030	0.042	0.081
		r2 – value	0.007	0.001	0.002	0.007
	HIGHEST EDUCATIONAL ATTAINMENT	p- value	0.487	0.978	0.691	0.521
		r- value	0.211	0.061	0.164	0.203
		r2 – value	0.045	0.004	0.027	0.041
	RELIGIOUS AFFILIATION	p- value	0.281	0.874	0.742	0.441
		r- value	0.302	0.151	0.191	0.261
		r2 – value	0.091	0.023	0.036	0.068
	NUMBERS OF SEMINARS ATTENDED	p- value	0.305	0.942	0.661	0.591
		r- value	0.329	0.152	0.245	0.261
		r2 – value	0.108	0.023	0.060	0.068
	NUMBER OF CHILDREN	p- value	0.331	0.976	0.780	0.624
		r- value	0.352	0.152	0.245	0.285
		r2 – value	0.124	0.023	0.060	0.081
	EMPLOYMENT STATUS	p- value	0.284	0.976	0.866	0.605
		r- value	0.392	0.179	0.245	0.317
		r2 – value	0.154	0.032	0.060	0.101
LEVEL OF	TYPES OF CONTRACEPTIVES	p- value	0.442	0.217	0.960	0.413
		r- value	0.104	0.166	0.007	0.111
		r2 – value	0.011	0.028	0.000	0.012
	USAGE	p- value	0.417	0.467	0.923	0.314
		r- value	0.179	0.167	0.054	0.250
		r2 – value	0.032	0.028	0.003	0.042
	EFFECTIVENESS	p- value	0.414	0.173	0.724	0.000**
		r- value	0.228	0.298	0.156	0.538
		r2 – value	0.052	0.089	0.024	0.289
	SIDE EFFECTS	p- value	0.544	0.012**	0.613	0.001**
		r- value	0.238	0.464	0.222	0.538
		r2 – value	0.057	0.215	0.049	0.290
	SOURCES OF INFORMATION	p- value	0.678	0.025**	0.684	0.003**
		r- value	0.241	0.466	0.240	0.539
		r2 – value	0.058	0.218	0.057	0.290

Table 5 presents significant correlations between knowledge and practices of contraceptive use among mothers in Quibal, Peñablanca.

Effectiveness with Decision-Making Factors. A moderate correlation ($r = 0.538$, $p = 0.000$) shows that mothers knowledgeable about contraceptive effectiveness are more likely to make informed decisions. Educating about success rates can enhance confidence and decision-making (Zhu et al., 2014; Pazol et al., 2018).

Side Effects with Frequency and Consistency of Use. A moderate correlation ($r = 0.538$, $p = 0.001$) indicates that awareness of side effects improves adherence. Education on managing side effects can increase consistency (Ochako et al., 2015; Schrupf et al., 2019).

Side Effects with Decision-Making Factors. A moderate correlation ($r = 0.538$, $p = 0.001$) shows that knowledge of side effects helps mothers make informed choices. Tailored counseling can reduce anxiety and improve decision-making (Cicerchia et al., 2022; Dehlendorf et al., 2014).

Sources of Information with Frequency and Consistency of Use. A moderate correlation ($r = 0.539$, $p = 0.003$) indicates that reliable information improves adherence. Access to trusted sources, like healthcare providers, enhances consistency (Agushyana et al., 2022; Ali et al., 2021).

Sources of Information with Decision-Making Factors. A moderate correlation ($r = 0.539$, $p = 0.003$) suggests that accurate information empowers mothers to make informed decisions. Collaborations with healthcare providers and community leaders can improve information access and decision-making (Japaridze et al., 2015; Dehlendorf et al., 2016).

DISCUSSIONS

This study assessed the knowledge and practices of contraceptive use among mothers in Quibal, Peñablanca, Cagayan, serving as a basis for the BS Pharmacy Department's community extension program. Findings showed that most respondents were 26–31 years old (31.60%), married (94.70%), and had elementary-level education (40.40%). The predominant religious affiliation was Roman Catholic (75.40%), and 73.70% had never attended contraceptive seminars, highlighting a gap in educational outreach. Nearly 47.40% had 1–2 children, and 36.80% were self-employed, reflecting potential barriers to accessing contraceptive education. In terms of knowledge, respondents demonstrated high awareness of contraceptive types (80.70%), usage (77.20%), effectiveness (71.90%), and sources of information (82.50%). However, knowledge of side effects was lower (63.20%), indicating a need for further education in this area. Regarding practices, respondents strongly agreed (mean = 3.11) with using modern contraceptives, with high consistency (mean = 3.28) in preventing unwanted pregnancies. Healthcare consultations were moderate (mean = 3.14), while decision-making (mean = 3.27) was influenced by health benefits and discussions with partners. Significant differences in knowledge were observed based on religious affiliation, seminar attendance, number of children, and employment status. In practices, only decision-making varied significantly with the number of children. Finally, knowledge of contraceptive effectiveness, side effects, and sources of information significantly influenced practices, particularly in decision-making and contraceptive use frequency. More informed respondents made better contraceptive choices and used them consistently.

CONCLUSION

The study found that mothers in Quibal generally possess adequate knowledge about contraceptives, positively impacting their practices. However, gaps remain in understanding side effects and accessing diverse information. While practices like consistent use and informed decision-making were strong, limited seminar attendance and lower access to information, especially among larger families, point to areas for improvement. Most respondents are well-informed, particularly about contraceptive types and usage, leading to positive practices. However, further education, especially on side effects, and increased seminar participation are needed to enhance contraceptive use and decision-making.

RECOMMENDATIONS

The proposed community extension program aims to enhance mothers' knowledge and practices regarding contraceptive use in Quibal, Peñablanca. Key strategies include organizing community seminars, developing simple educational materials, and leveraging multimedia platforms for broader reach. Local healthcare providers will receive training to serve as contraceptive educators, and mobile health clinics will ensure access to contraceptives. The program will target married women, larger families, and those with limited seminar attendance, using a culturally sensitive approach. Continuous feedback and assessment through surveys and a community advisory board will guide program improvements. The action plan will be implemented in phases, with monitoring to track progress and adjust strategies. Key indicators of success include increased seminar attendance, improved knowledge, and higher contraceptive usage.

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