Journal of Ecosystem Sciences and Eco-Governance (JESEG)
www.jeseg.carsu.edu.ph

Vol. 4, No. 1 | June 2022
PRINT ISSN 2704 4394 | ONLINE ISSN 2782 8522
DOI: https://doi.org/10.54610/jeseg/4.1.2022.004

Knowledge, Attitude, and Practices on Responsible Parenthood and Family Planning Among Beneficiaries of the Family Alleviating Program on Poverty of Caraga Region, Philippines

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Received: April 20, 2022
Revised: June 17, 2022
Accepted: June 28, 2022
Available Online: June 29, 2022

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Cite this article: Makinano, R.B., Miranda, C.F.B., Galolo, A.R.V., Mendez, A.G. & Elvira, M.V., (2022). Knowledge, Attitude, and Practices on Responsible Parenthood and Family Planning Among Beneficiaries of the Family Alleviating Program on Poverty of Caraga Region, Philippines. *Journal of Ecosystem Science and Eco-Governance*, **4**(1):31-42.

A B S T R A C T

Responsible parenting requires commitment, the right values, and a certain level of maturity to raise a family with a quality life. This research assesses the knowledge, attitude, and practices (KAP) on Responsible Parenthood and Family Planning (RPFP) among selected 4Ps beneficiaries (n=659) in the five provinces of the Caraga Region. The socio-demographic and economic profiles of the respondents were correlated to their KAP on RPFP using multiple regression analysis. Results showed that most respondents are in their prime working age, married, Cebuano, high school graduates, embracing Christianity, from rural areas, nurturing a nuclear family with an average monthly income of P7, 287 for a family of six. Further, respondents are highly knowledgeable on RPFP while moderately knowledgeable about modern natural and artificial Family Planning Methods (FPM). Interestingly, they show a positive attitude towards RPFP and FPM but very frequently practice the principles of RPFP and occasionally practice FPM. The number of children and the age when they first become pregnant negatively affect their understanding of natural family planning. Whether their socio-demographic and economic status influences their KAP on RPFP, different government agencies whose mandate includes development should continue addressing various population issues. The study recommends a multi-dimensional, integrated, and holistic approach to addressing the various concerns that can contribute to an increased KAP among 4Ps beneficiaries towards the RPFP.

Keywords: *Family planning methods, responsible parenthood*

1 Introduction

To be a parent is no simple task. Responsible parenting requires commitment, the correct values, and a certain level of maturity to raise a family that attains a quality of life. Isteni (2007) defines responsible parenthood as the recognition of children's claims to parental care and education, wise stewardship of family resources, attention to the needs and problems of broader society, and the consideration of claims of future generations. Part of being a responsible parent is planning what's best

for the family, especially on the number of children they want and the desirable age gap between them. Everyone has the right to decide on the number and timing of children without discrimination, violence, and oppression. Proper information, good facilities, and access to sexual and reproductive health services are necessary (Akgun, 2006).

Family planning is a way of thinking and living adopted voluntarily based on knowledge, attitude, and responsible decisions by couples and individuals (WHO, 2006). Individuals who learn about modern family planning and have a positive attitude towards this method may increase its usage and thus, contribute to forming healthy communities (Cayan, 2009). It has consistently shown encouraging results in keeping children healthy and in school. Both outcomes are important indicators of human capital accumulation, leading to increased productivity in adulthood and eventually breaking the intergenerational transmission of poverty (UNICEF, 2020).

Increasing uncontrolled population growth in the Philippines has been recognized as the most crucial impediment to national development, although the Philippine Population Management Program has been implemented for decades. So, it is essential to ensure that all pregnancies are wanted or intended at the national and regional scales.

One primary focus on this impending issue is looking into the status of those beneficiaries of the Pantawid Pamilya Pilipino Program (4Ps). The 4Ps is a human development measure of the national government that provides conditional cash grants to the poorest of the poor to improve the health, nutrition, and education of children aged 0-18. As the flagship national social assistance program, it directly benefits around 4.3 million poor households with 7.8 million children as of June 2020 (UNICEF, 2020).

Caraga Region has around 176,992 4Ps beneficiaries comprising 6.10% of the total 2.9 million population (RDP-Caraga, 2020). Of this number, approximately 8243 beneficiaries have actively attended various Demand Generation activities on Responsible Parenthood and Family Planning conducted by the Commission on Population and Development-Caraga. To date, there have been studies already on 4Ps. Still, none yet uncovered their knowledge, attitude, and practices on Responsible Parenthood and Family Planning (RPFP), more so on their psychosocial well-being concerning RPFP. This study focused on determining the knowledge, attitude, and practices on Responsible Parenthood and Family Planning of the 4Ps mothers of reproductive age. They attended the various Demand Generation Activities on RPFP in the Caraga Region. The result of this study could be of significant help in assessing the effectiveness of the education campaign on RPFP of the Commission on Population and Development (PopCom) in the Philippines.

2 Materials and Methods

Research Locale

The site of this study is the Caraga Administrative Region, officially designated as Region XIII, located in the northeastern section of Mindanao. The region is composed of five provinces: Agusan del Norte, Agusan del Sur, Surigao del Norte, Surigao del Sur and Dinagat Islands; six cities: Bayugan, Bislig, Butuan, Cabadbaran, Surigao and Tandag; 67 municipalities and 1,311 barangays. Its identified regional center is Butuan City (PhilAtlas, 2020) (Figure 1).

The region's total population as of August 2015 was 2,596,709 based on the 2015 Census (PSA, 2016). Among the five provinces in the region, Agusan del Sur had the biggest population in 2015 with 701 thousand, followed by Surigao del Sur (592 thousand), Surigao del Norte (485 thousand), and Agusan del Norte (355 thousand excluding Butuan City). Dinagat Islands had the smallest population, with 127 thousand. Meanwhile, Butuan City, the only highly urbanized city in the region, had a population of 337 thousand (Philippine Statistics Authority, 2016).

Research Design

Sample Procedure

Before the actual sampling, a list of 4Ps beneficiaries who have attended the various Demand Generation activities on RPFP was acquired from POPCOM Regional Office. Sampling areas were randomly identified, and the sample size was proportionally allocated to the identified sampling areas. Convenience sampling was performed in selecting respondents.

In this study, specific criteria were pre-determined and served as a guide in choosing the sampling areas that would meet the study's

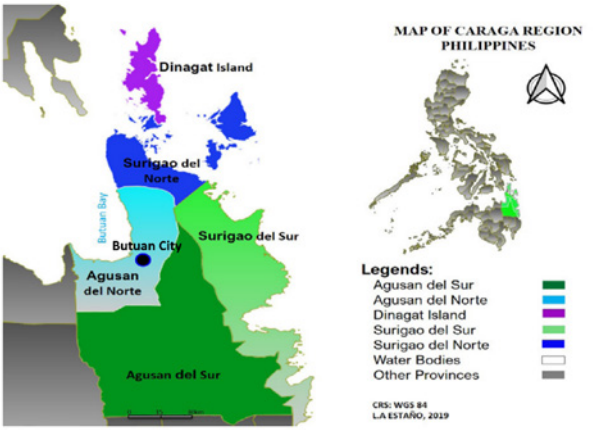

Figure 1. Map of the study area showing the five provinces and Butuan City, Caraga Region. Source: Estaño et al., 2020

objectives. The selection of areas included those with high number of 4Ps beneficiaries who have attended the various RPFP Demand Generation activities. Also, areas were chosen regardless of its classification whether it is rural or urban.

Respondents to the survey were drawn using purposive and convenience sampling. In this method, samples were taken from a group of people who are easy to contact or reach (Saunders et al., 2012). The study covered 4Ps mothers of reproductive age (15-49) who have attended the various Demand Generation activities on RPFP. The respondents were identified by the 4Ps parent leader under the supervision of the Municipal Link Officer, with the help of the RPFP Project Assistant assigned in each province and some personnel from the Municipal and City Population Office. Modified face-to-face interviews were used in administering the survey. A sort of community assembly among mothers was done to gather in a larger venue and simultaneously answer a pre-tested questionnaire provided to them with the supervision of the research team.

Sample Size Calculation

The Cochran's formula (1963) was used to yield representative samples in the sampling areas and obtained a total of 659 respondents from a total of 8,243 target population. In allocating this sample size per municipality/city, Butuan obtain 109, Agusan del Sur with 112, Agusan del Norte with 101, Surigao del Norte with 83, Surigao del Sur with 202, and Dinagat Island with 52, respectively.

Survey instrument design

The survey questionnaire consisted of six main sections: (1) Socio-demographic and economic, (2) Knowledge, (3) Attitude, and (4) Practices. The Socio-demographic and economic section included questions on the profile of the respondents such as age, ethnicity, area of residence, marital status, religion, type of family, educational background, actual income, family source of income, number of working household members, number of household members, number of desired children, the gap of children, years of usage of family planning methods, the distance of health center, age of first pregnancy, and fertility intent.

The Knowledge section encompassed questions on the respondent's level of knowledge on Responsible Parenthood and Family Planning and Family Planning Methods, the same with attitude and practices. A 5-point Likert scale (Likert, 1932) was used in rating the responses to the questions.

Ethics Statement

A Free Prior Informed Consent was secured from participants before the conduct of the interviews.

Data Analysis

Descriptive statistics such as means, frequency, and percentages were used to present the data on the socio-demographic and economic profile of the respondents and their KAP and psychosocial well-being responses. The individual Likert responses were aggregated to generate a total score for each domain. Gujarati (2003) discussed that multiple

regression analysis was used to analyze the effects of the respondents' socio-demographic and economic profile on their knowledge, attitude, and practices (KAP) towards RPFP and Family Planning methods. Each parameter of the respondents' socio-demographic and economic profile was treated as independent variables, while KAP responses were treated as dependent variables. Data were cleaned using Excel and processed for multiple regression analysis using STATA.

3 Results and Discussion

I. Socio-demographic and Economic Profile

Most respondents across all locations were already of the prime working age (25-49 years old). Moreover, respondents from the provinces of the Caraga Region belonged to the early working age (15-24; Table 1). Several studies have shown that this age bracket has a high labor and delivery complications risk. For instance, Cavazos-Rehg et al. (2015) found severe preeclampsia, eclampsia, postpartum hemorrhage, poor fetal growth, and fetal distress were more common in pregnant women aged 15–19 years old.

In terms of ethnicity, it is apparent that most of the respondents were Cebuano (316), followed by Manobo (95), Higaonon (8), and Mamanwa (1). The remaining 239 respondents under the "others" were the ones who claimed mixed ethnicity as a product of intermarriages among ethnic groups. The data suggests how the government program on RPFP is inclusive regarding ethnicity.

As to the area of residence, over half (78.45%) of those surveyed were from rural areas. On the other hand, only 21.55% or 142 respondents were from the urban area. In terms of marital status, 74.20% of the respondents were married. It is followed by 19.42% in a common-law relationship, 5.46% were single and were solo parents, while 1.06% were separated, and another 1.06% were widowed.

Christianity was the religion of an overwhelming with the majority (92.26%) of respondents, while 1.82% followed Islam. Moreover, 5.91% of respondents were of other faiths outside the two religions mentioned. These findings mean that although the respondents belong to different ethnic origins, most were already assimilated into the mainstream group or society as a product of intermarriages.

Several informants (494 or 74.96%) claimed they belonged to a nuclear family, which is a family composed of a father, mother, and children. Moreover, 21.39% who lived in an extended family referred to a family unit that includes other relatives besides the nuclear family. Interestingly, 3.64% or 24 respondents said that they were from single-parent households.

In Table 1, it is apparent that 39.45% of the respondents across all locations had completed high school. It is worth noting, however, that only 13.05% of respondents have reached college level, and 4.40% graduated college, further showing the level of access to higher education among respondents in the region.

As to the actual income of the respondents, results showed that the average mean income across locations is Php 7,267.00. The common sources of income were daily wage jobs (323), farming (177), fishing (89), small-scale business (77), and other sources (84). As shown in table 1, there is an average of one working family member. It can be gleaned from the result that the respondents were from low-income families. Albert et al. (2018) categorized low-income families belonging to poor income clusters with less than Php 9,520.00 family income per month. The survey showed an average of six household members across all locations, signifying an increase compared to the 2010 average household size in the Caraga Region of 4.8 people (National Statistics Office, 2012). A Filipino family of five (5) needs not less than Php 10,481 to live above the poverty line (Philippine Statistics Authority, 2019). Hence, having more than one family earner can significantly assist in meeting monthly basic food and non-food needs.

The respondents across all locations answered three (3) as the average number of their desired children. The respondents claimed an average mean of four (4) years regarding the children's gap. Furthermore, the respondents used the family planning method for an average of 5 years. The respondents were also asked about the distance of the health centers from their homes. Table 1 shows that Agusan del Norte and Butuan City respondents claimed they lived far from health centers at 2.3 km and 3.1 km, respectively. In comparison, respondents from provinces from Agusan del Norte, Surigao del Norte, Surigao del Sur, and Province of Dinagat Islands were living an average of 0.75 km or 700 meters away from health centers. Their distance from the health center might imply how

Table 1. Socio-demographic and economic Profile of the respondents

	Butuan		ADN		ADS		SDN		SDS		PDI		TOTAL
VARIABLES	Freq	Mean	Freq	Mean	Freq	Mean	Freq	Mean	Freq	Mean	Freq	Mean	
Age													
Early working age (15-24)	3	22	4	24	5	22	5	21	6	24	1	24	24
Prime working age (25-49)	106	41	97	38	107	38	78	40	196	39	51	42	635
Ethnicity													
Manobo	1	-	4	-	57	-	0	-	33	-	0	-	95
Higaonon	1	-	6	-	0	-	1	-	0	-	0	-	8
Mamanwa	0	-	0	-	0	-	1	-	0	-	0	-	1
Cebuano	79	-	73	-	50	-	12	-	62	-	40	-	316
Others	28	-	18	-	5	-	69	-	107	-	12	-	239
Area of Residence													
Rural	67	-	69	-	65	-	74	-	193	-	49	-	517
Urban	42	-	32	-	47	-	9	-	9	-	3	-	142
Marital Status	2.55	A	3.95	D	3.70	D	3.20	U	2.96	U	4.15	D	3.2
Solo parent	7	-	14	-	1	-	4	-	9	-	1	-	36
Married	90	-	63	-	81	-	65	-	139	-	43	-	481
Common-law	12	-	20	-	28	-	12	-	49	-	7	-	128
Separated	0	-	1	-	0	-	1	-	4	-	1	-	7
Widowed	0	-	3	-	2	-	1	-	1	-	0	-	7
Religion													
Christianity	101	-	91	-	111	-	62	-	193	-	50	-	608
Islam	1	-	1	-	1	-	9	-	0	-	0	-	12
Other religion	7	-	9	-	0	-	12	-	9	-	2	-	39
Type of Family													
Nuclear	88	-	71	-	85	-	56	-	152	-	42	-	494
Extended	18	-	24	-	26	-	23	-	41	-	9	-	141
Single Parent	3	-	6	-	1	-	4	-	9	-	1	-	24
Educational background													
No formal education	0	0	0	0	0	0	0	0	1	0	0	0	1
Some Elementary	13	4	9	4	8	4	6	4	29	4	0	0	65
Completed Elementary	12	6	15	6	13	6	4	6	21	6	1	6	66
Some High School	26	8	23	8	28	8	18	8	48	8	9	8	152
Completed High School	39	10	42	10	40	10	41	10	74	10	24	10	260
Some College	15	11	10	12	18	12	10	12	18	11	15	11	86
Completed College	4	14	2	14	5	14	4	14	11	14	3	14	29
Actual Income	-	7,855	-	6,083	-	7,379	-	6,542	-	6,886	-	8,856	-
Family Source of Income													
Farming	15	-	26	-	32	-	15	-	67	-	22	-	177
Fishing	1	-	2	-	2	-	13	-	46	-	25	-	89
Daily Wage Job	52	-	57	-	68	-	35	-	85	-	26	-	323
Small-scale Business	13	-	13	-	14	-	9	-	22	-	6	-	77
Others	24	-	11	-	7	-	23	-	11	-	8	-	84

Note: values in the FPM used and fertility intent section required multiple answers

Table 1. Socio-demographic and economic Profile of the respondents (continuation)

	Butuan		ADN		ADS		SDN		SDS		PDI		TOTAL
VARIABLES	Freq	Mean	Freq	Mean	Freq	Mean	Freq	Mean	Freq	Mean	Freq	Mean	
# of Working Members	-	2	-	2	-	1	-	1	-	1	-	2	-
# of Household Members	-	6	-	6	-	6	-	6	-	6	-	6	-
# of Desired Children	-	4	-	3	-	3	-	4	-	4	-	4	-
Actual # of Children	-	4	-	3	-	4	-	4	-	4	-	4	-
Gap of Children	-	3	-	3	-	3	-	3	-	3	-	3	-
Years of Usage of FPM	-	4	-	3	-	6	-	6	-	5	-	9	-
FPM used													
Tubal Ligation	-	10	-	5	-	11	-	3	-	11	-	3	-
IUD	-	12	-	17	-	19	-	6	-	24	-	3	-
Pills	-	49	-	34	-	49	-	51	-	102	-	31	-
Implants	-	15	-	6	-	7	-	0	-	11	-	11	-
Calendar Method	-	6	-	3	-	8	-	3	-	5	-	2	-
Condom	-	4	-	0	-	0	-	2	-	8	-	5	-
Injectables	-	7	-	8	-	10	-	8	-	21	-	7	-
Modern Natural	-	18	-	29	-	16	-	17	-	38	-	3	-
Distance of Health Center	-	2.3	-	3.1	-	0.8	-	0.7	-	0.7	-	0.8	-
Age of first pregnancy	-	21	-	19	-	22	-	21	-	21	-	21	-
Fertility Intent													
Limiting of # of children	-	65	-	76	-	88	-	65	-	113	-	49	456
Birth Spacing	-	58	-	26	-	56	-	54	-	123	-	45	362

Note: values in the FPM used and fertility intent section required multiple answers

they acquire information about RPFP. Enduring the underfinanced and understaffed health facilities, the Geographically Isolated and Disadvantaged Areas (GIDA) suffer the consequences on overall health due to limited movement and communication (Collado, 2019). The average age of first pregnancy among respondents is 20 years old. Interestingly, Agusan del Norte had 19 years old, indicating adolescent pregnancies compared to other areas. The current study corroborates the 2011 Family Health Survey report. The Caraga region has the country's highest teen pregnancy rate, with Agusan del Norte having the most significant number of teen mothers among the five provinces (Serrano, 2013).

Across the sampling area, the most practiced family planning method is the use of pills, followed by the modern natural methods and the IUD, respectively. The respondents were also asked about their reasons for fertility intent. Preis et al. (2020) defined fertility intent or fertility intention as the desire or intention to have a given number of children and the spacing between births. Based on this multiple-response question, 456 respondents said it was to limit the number of children. Moreover, 362 respondents claimed that birth spacing was their reason for the fertility plan.

II. Knowledge of the 4Ps Mothers on Responsible Parenthood and Family Planning (RPFP)

Concerning the level of knowledge on RPFP among the 4Ps respondents across the five provinces of the Caraga Region and in Butuan City, it is evident that they are highly knowledgeable on Responsible Parenthood and Family Planning (94.59%) and Family Planning Methods (83.44%) in general (Figure 2). The respondents have moderate knowledge (74.91%) of using Fertility Awareness Based or Modern Natural Family Planning Methods. Regarding the artificial planning methods, respondents are moderately knowledgeable (62.15%) on Progestin-Only Contraceptives while uninformed of the Long-Acting and Barrier Methods, respectively (Figure 2). Contrary to the study of Lee et al. (2009), the great majority of Filipinos (89%) approve of modern contraceptives. In the present study, respondents have heard about

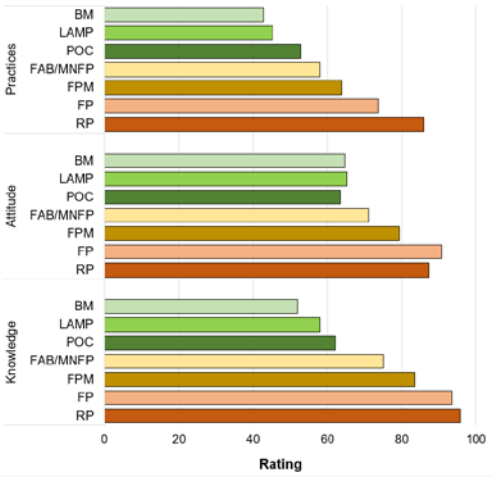

Figure 2. Knowledge, Attitude, and Practices of the Respondents on Reproductive Health and Family Planning and Family Planning Methods. Knowledge Rating: 81-100= Highly Knowledgeable (HK); 61-80= Moderately Knowledgeable (MK); 60-20= Uninformed; Attitude Rating: 61-100= Positive (P), 41-60= Undecided (U), 20-40= Negative (N); Practices Rating: 0.81-1= Always (A); 0.61-0.80= Very frequently (VF); 0.41-0.60= Occasionally (O); 0.21-0.40= Rarely (R); 0.0-0.20= Very Rarely (VR)

vasectomy and ligation. However, they do not have enough knowledge of how these methods work, especially since these require medical procedures. Although respondents are aware of condoms, they are uninformed that this barrier method can prevent acquiring HIV/AIDS. According to Eaton & Hoesley (2014) and Weller & Davis (2001), preventive measures such as consistent condom use were proven effective in reducing STI transmission and HIV infections by up to 90%. According to WHO (2020), only one contraceptive method, condoms, can prevent both pregnancy and the transmission of sexually transmitted infections, including HIV.

Learning the principles of modern family planning and the use of the methods may contribute to forming healthy communities (Sensoy et al., 2018; Cayan, 2009). In general, the respondents in all sampling areas are highly knowledgeable about Responsible Parenthood and Family Planning while moderately knowledgeable about Family Planning Methods, whether natural or artificial.

Furthermore, the socio-demographic and economic profiles of the respondents are associated with knowledge of the respondents on Responsible Parenthood and Family Planning (Table 2). Based on the results, whether one belongs to a nuclear or an extended family, knowledge still tends to increase; however, those coming from the nuclear family have contributed a more significant (P-value= 0.014) increase to their knowledge rating in general. Income and education are also associated with their knowledge. As income and education increase, the knowledge about RPFP also increases. Family planning can result in higher levels of education, better employment opportunities, higher socioeconomic status, and empowerment (Sensoy et al., 2018). However, as the number of working household members increases, the knowledge of RPFP decreases. This is probably due to most of the household members devoting their time to work and not acquiring the knowledge on RPFP anymore. Fertility intent, like limiting the number of children and birth spacing, is also significantly associated with understanding RPFP.

Moreover, the knowledge of FPM increases with every increase in the respondent's age and educational attainment; as most people grow and acquire higher formal education, their cognitive processes have become more stable, including knowledge acquisition. According to Saeed et al. (2021), knowledge is strongly associated with a socio-demographic profile such as age and education. Furthermore, as the number of children of the respondents increases, the understanding of FPM decreases. Also, as the age of the first pregnancy increases, the knowledge about FPM decreases. Somehow the respondents might be eager to conceive the first child, especially when they reach middle age, and therefore, they might ignore the idea of FPM at that stage. This

is probably one of the reasons for the inverse correlation of knowledge towards FPM and the age of the respondent's first pregnancy. Lastly, as the intent of limiting the number of children increases, the level of knowledge on FPM increases.

Moreover, as the age and educational attainment of the respondents increased, their knowledge of Fertility-Awareness Based/ Modern Natural Family Planning (FAB/MNFP) Methods also increased. A higher level of education is associated with more input by said women in terms of applying family planning and contraceptives (Memon & Jonker, 2018). Also, as the number of working household members increases, so does the level of knowledge. However, as the number of children and the respondent's first pregnancy age increase, the level of knowledge on FAB/ MNFP decreases. The result affirms the study of Gerler & Molyneaux (1994) and Allen (2007) that when a person has an improved level of education, it may result in a positive influence on income, in itself a determinant for smaller family sizes.

Additionally, as age increases, the knowledge of artificial FPM increases. The same trend can be observed regarding the number of household members. Furthermore, as the income and the number of working household members increase, the knowledge of Artificial FPM decreases (Table 2).

III. Attitude of the 4Ps Mothers on Responsible Parenthood and Family Planning (RPFP)

Across the sampling areas, respondents have a positive attitude toward Responsible Parenthood (87.30%), Family Planning (90.63%), and Family Planning Methods (79.44%). Regarding the respondent's perspective on how the natural and artificial family planning methods work, respondents in all sampling areas have a positive attitude (68.79%) (Figure 2). A positive attitude toward using the methods may increase their usage and contribute to forming a healthy community in general (Sensyo et al., 2018). Respondents across the sampling areas generally have a positive attitude toward Responsible Parenthood and Family Planning and Family Planning Methods.

Positive or negative attitudes intertwine an individual's knowledge, values, principles, and sentiments (Petty and Cacioppo, 1981). Results showed that as the number of nuclear families increases, the attitude towards RPFP also increases. Analysis shows a direct correlation between the respondent's educational attainment and attitude

Table 2. Association of Knowledge on Responsible Parenthood and Family Planning (RPFP), Family Planning Methods, Fertility Awareness Method (FAM)/Modern Natural Family Planning (MNFP), and Artificial Family Planning Methods on the socio-demographic and economic profile of the respondents

VARIABLES	Knowledge on RPFP		Knowledge on FPM		Knowledge on FAM/MNFP		Knowledge on Artificial FPM	
	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value
Age	0.001	0.634	0.018	0.000	0.012	0.039	0.009	0.088
Nuclear	0.133	0.014	0.153	0.101	0.008	0.933	-0.024	0.794
Extended Family	0.099	0.062	0.169	0.065	-0.076	0.422	-0.515	0.575
Single Parent	-0.078	0.139	-0.063	0.487	-0.003	0.972	-0.067	0.465
Income	0.000	0.046	0.000	0.552	-0.000	0.925	-0.000	0.029
Education	0.025	0.000	0.027	0.018	0.035	0.004	-0.001	0.902
Household Members	0.007	0.538	0.127	0.504	0.024	0.244	0.040	0.035
# of Desired Children	0.018	0.094	0.114	0.533	0.006	0.761	0.013	0.469
Actual # of Children	-0.018	0.230	-0.053	0.036	-0.053	0.054	-0.024	0.340
Gap Year of Children	-0.002	0.844	-0.008	0.539	-0.015	0.318	-0.006	0.644
Years of Usage of FPM	0.003	0.330	-0.001	0.804	0.002	0.676	-0.004	0.498
Distance of Health Center	0.004	0.469	0.004	0.686	0.014	0.238	0.005	0.662
# of Working Household Members	-0.044	0.046	-0.006	0.883	0.076	0.064	-0.085	0.025
Age of First Pregnancy	-0.009	0.112	-0.029	0.001	-0.021	0.042	-0.003	0.740
Limiting # of Children	0.155	0.000	0.149	0.036	0.045	0.559	-0.066	0.361
Birth spacing	0.101	0.008	0.062	0.348	0.036	0.611	-0.016	0.810
Constant	4.395	0.000	3.066	0.000	3.319	0.000	2.799	0.000

toward RPFP. The same results can be observed for the number of desired children. However, an inverse correlation between the distance of the health center, the number of working households, and the attitude towards RPFP are seen.

Furthermore, either of the reasons for the fertility intent increase, the attitude toward RPFP also increases. In predicting the behavior of communities, attitude is considered a critical variable (Garekae et al., 2016). Based on the results, as the income of the respondents increases, their attitude toward FPM decreases. The same pattern can be observed in how near the respondents' houses are to the health center. Moreover, as the respondent's years of usage of FPM increase, their attitude toward FPM decreases (Table 3). The same result in the study of Kiying et al. (2016) suggests that despite the high positive attitude toward FP methods, their utilization is still very low. Furthermore, women whose partners didn't get involved in FP and had negative attitudes were less likely to use long-term FP methods (Kiying et al., 2016).

The respondent's socio-demographic and economic profiles tested for correlation analysis toward Fertility-Awareness Based Method/Modern Natural Family Planning (FAM/MNFP) showed no significance (Table 3), which means that socio-demographic and economic profiles did not influence the attitude of the mother respondents on FAB/MNFP. This observation is contrary to the study of Sensoy et al. (2018) that women are usually on the front line of factors that affect socio-demographic and socio-economic outcomes. Furthermore, their attitude toward artificial FPM decreases as the respondent's income increases. The lower level of contraceptive use among low-income women is not due to a lack of knowledge or negative attitudes (Lee et al., 2009). Like the rest of Filipinos, low-income women favor family planning (Alcantara et al., 2006) and are highly knowledgeable about modern contraceptives (NSO and ORC Macro, 2003).

IV. Practices of the 4Ps Mothers on Responsible Parenthood and Family Planning (RPFP)

The respondents across sampling areas always practice the principles of Responsible Parenthood (86.00%) while very frequently on Family Planning (73.61%) and the practice of Family Planning Methods (63.88%; Figure 2). However, the occasional practice of the different methods, whether modern-natural or artificial, may be because most respondents are of prime working age (96.36%). Based on the empirical evidence, the assumption is being supported that as women get older, their need for contraception and the rate decreases (Sharma et al., 2012; Murarkar & Soundale, 2011). Some have difficulties bearing a child, so there is a high possibility for them not to practice FPM. Respondents frequently practice Responsible Parenthood and Family Planning principles while occasionally practicing Family Planning Methods (Figure 2).

Furthermore, results showed a positive correlation between the respondents' distance to the health center towards their practices on RPFP. As the distance of the health center increases, the level of practice of the respondents on RPFP increases. This may be because the respondents are well informed about the RPFP, especially since these topics are part of the various Demand Generation activities on RPFP (Table 4). Results revealed a negative association between the age of the first pregnancy and the level of practices of the respondents on RPFP. The level of awareness of RPFP is assumed to be low among the younger ages, particularly adolescents underscoring the need to strengthen the IEC campaigns on RPFP among these ages.

The age of the first pregnancy and the respondent's fertility intent showed a negative relationship towards the practices of FAB/MNFP. As the age of the first pregnancy increases, the level of practice on FAB/MNFP decreases. The same pattern can be observed in any of the categories of fertility intent which signifies that the level of maturity expected among older ages implies the respondents' preferences on FAB/MNFP. Women's intention to use family planning services/methods was influenced by socio-demographic characteristics (Parsekar, 2021). Our results show that the practice of artificial FPM increases with the respondents' age, and the distance of the health center from their residence increases. Contrarily, results convey that as the educational status of the respondents increases, the practices of artificial FPM decrease. The survey shows that many respondents were misinformed that artificial FPM could negatively affect their health and preferences. The same pattern can be observed in the birth spacing relative to the respondent's fertility intent (Table 4).

Table 3. Association of Attitude on Responsible Parenthood and Family Planning (RPFP), Family Planning Methods, Fertility Awareness Method (FAM)/Modern Natural Family Planning (MNFP), and Artificial Family Planning Methods on the socio-demographic and economic profile of the respondents

VARIABLES	Attitude on RPFP		Attitude on FPM		Attitude on FAM/MNFP		Attitude on Artificial FPM	
	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value
Age	-0.002	0.662	-0.002	0.708	0.004	0.411	0.005	0.254
Nuclear	0.213	0.009	0.111	0.248	0.036	0.715	-0.066	0.425
Extended Family	0.119	0.133	0.015	0.877	0.038	0.690	-0.045	0.582
Single Parent	-0.092	0.245	-0.034	0.718	0.036	0.709	0.003	0.973
Income	0.000	0.314	-0.000	0.027	-0.000	0.257	-0.000	0.052
Education	0.021	0.034	0.004	0.725	-0.016	0.187	-0.015	0.133
Household Members	0.008	0.621	0.012	0.529	-0.014	0.473	0.002	0.892
# of Desired Children	0.040	0.012	-0.007	0.721	-0.022	0.254	0.011	0.524
Actual # of Children	-0.006	0.785	-0.002	0.929	-0.003	0.917	-0.014	0.532
Gap Year of Children	0.014	0.245	0.023	0.102	-0.000	0.986	-0.022	0.071
Years of Usage of FPM	-0.003	0.578	0.010	0.051	0.001	0.795	-0.004	0.450
Distance of Health Center	-0.069	0.000	-0.052	0.00	0.006	0.602	0.004	0.659
# of Working Household Members	-0.082	0.014	-0.007	0.855	0.063	0.115	0.006	0.779
Age of First Pregnancy	0.001	0.914	0.012	0.210	0.001	0.915	-0.003	0.715
Limiting # of Children	0.128	0.041	0.069	0.347	-0.059	0.430	-0.052	0.424
Birth spacing	0.127	0.028	0.003	0.968	0.011	0.874	-0.008	0.892
Constant	4.129	0.000	3.612	0.000	3.649	0.000	3.482	0.000

Table 4. Association of Practices on Responsible Parenthood and Family Planning (RPFP), Family Planning Methods, Fertility Awareness Method (FAM)/Modern Natural Family Planning (MNFP), and Artificial Family Planning Methods on the socio-demographic and economic profile of the respondents

VARIABLES	Practices on RPFP		Practices on FPM		Practices on FAM/MNFP		Practices on Artificial FPM	
	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value
Age	0.000	0.990	0.009	0.194	0.009	0.251	0.017	0.026
Nuclear	0.039	0.663	0.113	0.419	-0.004	0.977	0.026	0.855
Extended Family	-0.022	0.805	0.098	0.475	0.076	0.602	0.054	0.699
Single Parent	-0.009	0.913	-0.245	0.073	-0.069	0.634	-0.053	0.704
Income	-0.000	0.574	-0.000	0.275	-0.000	0.530	-0.000	0.124
Education	0.116	0.299	-0.014	0.403	0.009	0.640	-0.054	0.002
Household Members	0.007	0.719	-0.016	0.586	-0.054	0.075	-0.016	0.592
# of Desired Children	0.016	0.376	0.014	0.619	0.267	0.361	0.009	0.723
Actual # of Children	0.018	0.465	0.025	0.502	0.067	0.101	-0.014	0.718
Gap Year of Children	0.009	0.491	0.015	0.454	0.009	0.681	-0.007	0.719
Years of Usage of FPM	0.006	0.208	-0.001	0.851	-0.004	0.597	-0.003	0.679
Distance of Health Center	0.020	0.052	0.024	0.126	0.032	0.063	0.049	0.003
# of Working Household Members	0.299	0.420	0.236	0.676	0.009	0.884	0.073	0.210
Age of First Pregnancy	-0.008	0.365	-0.041	0.003	-0.036	0.017	-0.014	0314
Limiting # of Children	-0.003	0.965	-0.014	0.898	-0.257	0.025	-0.241	0.027
Birth spacing	-0.072	0.268	-0.045	0.647	-0.275	0.009	-0.196	0.052
Constant	3.844	0.000	3.676	0.000	3.526	0.000	2.784	0.000

4 Conclusion and Recommendations

This survey found that the 4Ps beneficiaries are highly knowledgeable on RPFP while moderately knowledgeable on both the modern natural and artificial FPM. Nonetheless, beneficiaries have a positive attitude towards RPFP and FPM. On the other hand, respondents frequently practice the principles of RPFP while occasionally practicing FPM.

Whether their socio-demographic and economic status influences their KAP on RPFP, different government agencies whose mandate includes development for all should continue to address various population issues.

A multi-dimensional, integrated, and holistic approach is necessary to capacitate the various concerns which can contribute to an increased KAP of the 4Ps beneficiaries towards the RPFP. The complexity and interdependence of their socio-demographic and economic status and KAP of the 4Ps confronting the RPFP must be further recognized. Collaborative engagements of various involved stakeholders, communities, and institutions are indispensable in achieving cohesive decisions and actions towards a vigorous application of the principles behind the RPFP. Furthermore, the researchers recommend having more in-depth research on the low utilization of FPM for the 4Ps beneficiaries, the entire Caraga Region, and the Philippines in general. It is also important to elicit and capture the KAP of the spouse to provide another perspective on RPFP. In the future, this study could be a basis for other regions to conduct similar investigations.

5 Acknowledgement

This research is funded by the Commission on Population and Development, Caraga Region, and its partner institution, Caraga State University, Main Campus, as the project implementer. The researchers would like to thank the various LGUs, POPCOM, DSWD heads of office, and RDPFP project assistants for Butuan City, Agusan Del Sur, Surigao del Sur, Surigao del Norte and Dinagat Islands for supporting the project to its fruition.

Statement of Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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