

# The relationship between demographic characteristics of reproductive age Filipino-Muslim women and their knowledge, attitude, and practices regarding family planning in Northern Mindanao: A cross-sectional\*

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## ABSTRACT

**Background:** Family planning is a critical component of maternal and child health. It ensures proper spacing of children as well as having a target desired number of children.

**Objective:** This study aimed to determine the knowledge, attitude and practices on Family Planning among reproductive age Filipino-Muslim Women. .

**Methodology:** It was conducted in tertiary hospital in Northern Mindanao at the Out-Patient Department. Demographic and study data were gathered through a validated questionnaire.

**Results:** Results showed that most Filipino-Muslim Women coming in for prenatal checkup were in their late twenties (28.3%), unemployed, and already with 2 to 4 pregnancies. Associations were tested using Chi Square and significant correlations between patients' demographic characteristics and their knowledge, attitude, and practices regarding family planning.

**Conclusion:** The study concludes that there is an association between patients' age and educational status, and their knowledge, attitudes, and practices regarding family planning. Further studies can be done to establish causation between risk factors and outcomes regarding family planning. A scoring system may be developed in the future classifying mothers as likely or unlikely to practice good family planning, which will allow for targeted family planning counseling.

*Keywords: Family Planning, Maternal Health, Religious Beliefs*

## INTRODUCTION

As of 2015, the population of the Philippines totaled 100,699,000. For every 100,000 live births in the Philippines, 162 women die during pregnancy and childbirth or shortly after childbirth, according to the 2006 Family Planning Survey (FPS). This ratio of maternal deaths to live births, estimated from interviews with about 45,000 women in April 2006, is lower than the last available estimate of 172 deaths from the 1998 National Demographic and Health Survey (NDHS).<sup>1</sup> Philippines is among the most populous countries in the world, ranking

12th globally, 7th in Asia, and 2nd in Southeast Asia. Its population continues to increase with an annual growth rate of 1.90 percent.<sup>2</sup>

In terms of household size, across the regions, ARMM (Autonomous Region in Muslim Mindanao) had the highest average household size: 6.0 persons. Other regions with average household sizes higher than the national figure was Region X (Northern Mindanao) in particular, with 4.7 persons.<sup>3</sup>

Family planning is a critical component of maternal and child health. Through proper family planning, a mother's physical health is ensured: proper spacing of pregnancies minimizes the negative impacts of repeated adaptation of the mother to childbearing. Proper family planning also benefits the health of the child by ensuring that the family can support the child's development needs with financial, time, and human resources.<sup>5</sup>

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The concept of family planning has raised some concerns regarding its acceptability within Muslim populations. Some Muslim states have invited religious leaders to present religiously sound interpretations (fatwa) on the subject. Alongside these deliberations are some alarming statistics on maternal health.<sup>5</sup>

Many Islamic governments, endorse Family Planning (FP) programmes to facilitate individuals and couples to decide for themselves the number and timing of their children. These programmes champion improving the health of women and children besides slowing down population growth in countries where an overwhelming population growth was considered a barrier to socio-economic development.<sup>6</sup>

Religion remains a central issue in the discourse on FP and contraception. The Qur'an does not disallow birth control, nor does it forbid a husband or wife from spacing pregnancies or limiting the number of children. Thus, the great majority of Islamic jurists believe that FP is permissible in Islam.<sup>6</sup>

### Significance of the Study.

This study addresses 6 of the 17 Sustainable Development Goals outlined in 2016: (1) Education, (2) Employment, decent work for all and social protection, (3) Food security and nutrition and sustainable agriculture, (4) Gender equality and women empowerment, (5) Health and population, and (6) Poverty eradication. This study will help in educating Muslim mothers to practice family planning. This will also add to current knowledge regarding maternal health and infant morbidity—two indicators in the Millenium Development Goals that the Philippines failed to achieve. This study also provides more information that will aid the local government, and its health governance unit in particular, to focus and improve on Family Planning in the study area, possibly beyond.

### Research Question.

Among Filipino-Muslim women of reproductive age, what demographic factors affect their knowledge, attitude and practices on family planning?

### OBJECTIVES

This study aimed to determine demographic characteristics of Filipino-Muslim Women of Reproductive Age (15-49 years old) that affected their knowledge, attitude and practices regarding Family Planning among. The specific objectives of this study were to:

- To identify the demographic characteristics of Filipino-Muslim Women of Reproductive Age (15-49 years old) who sought prenatal care at a tertiary Northern

Mindanao OPD from January 1 to December 31, 2017.

- To determine the knowledge, attitude, and practices regarding Family Planning among Filipino-Muslim Women married at 15-49 years of age
- To determine the relationship between demographic characteristics of Filipino-Muslim Women of Reproductive Age (15-49 years old) and their knowledge, attitude, and practices regarding Family Planning.
- The framework of this study basically revolves around family planning. It identifies the contributing factors of the constraints in practicing family planning and their knowledge about the benefits of it. Thru the study, it identifies the association of their knowledge, attitude and practices and its correlation with the demographic characteristics of the respondents. It may in turn be used to decrease the harmful outcome of having too many children, which is a current problem of our society.

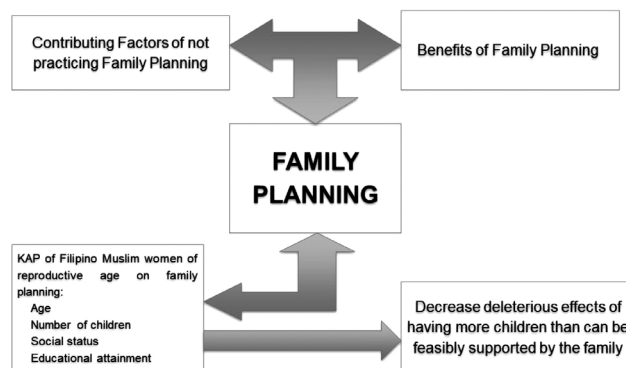


Figure 1. The Research Conceptual Framework

### METHODOLOGY

This study is a cross-sectional study. It targets married Filipino women who identify with the religion of Islam, ages 15-49 years, who have come to the tertiary hospital in Northern for prenatal checkup visits. Other inclusion criteria includes having had at least 1 pregnancy. Exclusion criteria include nulligravity and not identifying with the religion of Islam.

Setting. The study was done at a tertiary hospital in Northern Mindanao, an ISO and DOH accredited tertiary hospital in Region 10 (Northern Mindanao) with a 600 bed capacity. It is the referral center of Northern Mindanao, with patients of diverse culture and religion. It attends to both in- and out-patients, including Muslim women of reproductive age who go on prenatal care.

Definition of terms. Women of **Reproductive Age** refers

to women from the age of 15 to 49 years old who had their menarche. **Family Planning** in this study is defined as having a target number of children and wanting to have them by using a safe and effective method of acceptable medical standards. **Muslim women** refer to women who identify with the religion of Islam; these women believe in one God, Allah (SWT), who are between 15 to 49 years old and have experienced menarche. The term Muslim woman from hereon is used in the paper interchangeably with women who identify with the religion of Islam.

Sample Size Computation. Estimate the prevalence of Filipino-Muslim Women admitted in a tertiary hospital in Northern Mindanao who have given birth at least once, the interval of 11% +/-5% and with the confidence level and accounting for 20% non-respondents was used; it was then calculated that 234 respondents were needed.<sup>11</sup>

Data Gathering Procedure. The study commenced with the approval of the Ethics Review Board of the hospital. The study duration was from January 1 to December 31 2017.

Data Collection and Actual Survey. A letter of permission was given to the head of the Research Unit of the tertiary hospital in Northern Mindanao and the Chair of the Department of Obstetrics and Gynecology of the hospital. After permission was secured, respondents who fit the inclusion criteria and did not have any exclusion criteria were invited to participate in the study. Informed consent was secured, and the study was explained to the respondent. The researcher, along with trained nurses and an assistant, administered a questionnaire in either the English or Maranaw language, both validated in the study of Magdalena (2014) to obtain the information needed from the patients.<sup>14</sup> The researcher and the trained staff were present throughout the answering of the questionnaire in case there was difficulty in reading, but the researcher and staff of the study did not change the words nor advise the patient regarding the questionnaire. The participants maintained the right to refuse and withdraw from the study at any time. Answered questionnaires remained confidential. To ensure anonymity of respondents, specific I.D. numbers were given to each respondent. The needed number of respondents for the survey was 234. There were 251 actual respondents surveyed from January 2017 to December 2017.

Data Analysis. Data analysis was done using R Software SPSS Version 25, to include measures of central tendency, frequency and percentage distribution. Factors associated with knowledge, attitude and practice were done using Chi-square Test for Independence. The level of significance was set at 0.05.

## RESULTS

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Among the 251 respondents surveyed, Muslim mothers were most commonly found to belong to the 25-29 age bracket (28.3%). Most of the participants surveyed were unemployed, synonymous with housewife and housekeeper (80.8%). A majority of respondents (56.7%) had two to four pregnancies; most of these mothers were in their early twenties during their first pregnancy (46.19%), which parallels the age of the respondents surveyed.

Majority of the participants entered marriage at 18 to 35 years old (55.6 %), especially on their early twenties. More than half (58%), had two to four number of children alive. The most encountered educational attainment of the participants is college level (29.2%).

Knowledge. Among the participants surveyed, 85.7% of them believed that family planning has a deleterious effect on maternal health. This belief, however, was supported by 68.1 %, that family planning leads to an increased risk maternal death, according to a majority of respondents. However, 64.5% of respondents believed that family planning does not lead to a higher risk in developing sexually transmitted infections.

Attitude. A majority of the respondents had a negative attitude towards family planning (Mean = 0.90). On the other hand, a majority of the respondents think that family planning is acceptable for the religion of Islam (mean = 0.99).

Practices. Majority of the respondents have a negative response regarding their practices on family planning (mean = 1.40).

Correlations. There is a significant correlation between educational attainment and knowledge on family planning, using the Chi-Square Test ( $p=0.014$ ), detailed in Table 2. No significant associations were found between age, occupation, number of pregnancies, age at first pregnancy, age at marriage, or number of children, and knowledge on family planning.

A significant correlation was also found between age, number of children, and educational attainment, and positive attitude towards family planning, as shown in Table 3.

Age, occupation, number of pregnancies, age at 1st pregnancy, number of children, and educational attainment, were found to be significantly correlated with positive practices regarding family planning as shown in Table 4.

**Table 1.** Profile of Respondents

Profile of Respondents (N = 251)	
<b>Age Bracket</b>	
Teenagers (15-19)	36
Early Twenties (20-24)	61
Late Twenties (25-29)	71
Early Thirties (30-34)	49
Late Thirties (35-39)	26
Early Forties (40-44)	7
Late Forties	1
<b>By Occupation</b>	
Self-Employed	30
Employee	12
Unemployed	202
Student	6
<b>Number of Pregnancies</b>	
One	52
two to four	114
five and above	35
<b>Age at First Pregnancy</b>	
teenager (15-19)	71
twenties (20-29)	128
thirties (30-39)	9
Forties (40-49)	4
<b>Age at Marriage</b>	
Below 18	85
18-35	139
35 above	26

## DISCUSSION

Most of the Muslim women interviewed were in their early and late twenties, who had graduated from high school and reached college level. Although a large number had a degree, most of them were housewife and unemployed. Most were dependent on their husbands in terms of family income, which paralleled with their positive attitude of securing consent from their partners. This corresponds to the study of Nansseu et. al, (2015) in Cameroon, that the most encountered age group was 20-24 years, most had a secondary educational level, were of housewives, and nearly two thirds of respondents belonged to monogamous households<sup>16</sup>. Majority of the participants got married at early twenties and subsequently got pregnant at same age range. This also holds true in the study of Mustafa, et. al (2015), that most women in Muslim countries marry at a very early age, starting from 18 years old above<sup>4</sup>. This explains why a significant number of the respondents were multiparous, having 2 to 4 children. This is supported by the figures on Philippines national statistics of 2008 National Demographic and Health Survey (NDHS) conducted by NSO indicated a steady decline in fertility at 3.3 children per woman from 3.5 in 2003 and 6.0 in 1973.<sup>2</sup>

Most of the respondents were knowledgeable regarding different types of family planning methods, including the modern contraception. Majority of them, however, have a negative attitude and regarding family planning, and do not practice family planning. Most respondents (86%) surveyed reject the practice of female sterilization or ligation. The recorded number of pregnancies and children of most of the respondents supported by this former statement. In line with the findings of Sreytouch (2012) in Cambodia, the knowledge of modern methods is high regardless of education level and socioeconomic status. However, women in said study showed a positive attitude towards family planning, and adopts the practice of contraception offered by their primary health unit<sup>17</sup>, which was conflicting with the attitude and practices of the respondents in this study. It is important to note that every individual including health care providers have different moral/ cultural and religious beliefs, which go a long way in sharpening their attitude, and perception on issues especially family planning. This could be the one of the reason with the conflicting attitude shown by both studies, aside from Cambodia being a communist country.<sup>18</sup>

Educational attainment and knowledge on family planning had shown a significant correlation in this study: the higher the educational attainment the participants had, the better informed they were found to be about family planning. This is in line with the

**Table 2.** Correlation Analysis between Respondent's Profile and Knowledge on Family Planning

Profile	Chi-square	Significance Value	Interpretation	Decision
Age	12.079	0.060	Not Significant	Accept Ho
Occupation	3.654	0.161	Not Significant	Accept Ho
Number of Pregnancy	2.103	0.349	Not Significant	Accept Ho
Age at First Pregnancy	2.103	0.910	Not Significant	Accept Ho
Age When Got Married	4.313	0.116	Not Significant	Accept Ho
Number of Children	3.656	0.161	Not Significant	Accept Ho
<b>Educational Attainment</b>	<b>17.578</b>	<b>0.014</b>	<b>Significant</b>	<b>Reject Ho</b>

**Table 3.** Correlations between Respondent's Profile and Attitude regarding Family Planning

Profile	Chi-square	Significance Value	Interpretation	Decision
<b>Age</b>	<b>24.560</b>	<b>0.017</b>	<b>Significant</b>	<b>Reject Ho</b>
Occupation	2.903	0.574	Not Significant	Accept Ho
Number of Pregnancy	8.971	0.062	Not Significant	Accept Ho
Age at First Pregnancy	20.874	0.052	Not Significant	Accept Ho
Age When Got Married	3.060	0.548	Not Significant	Accept Ho
<b>Number of Children</b>	<b>14.905</b>	<b>0.005</b>	<b>Significant</b>	<b>Reject Ho</b>
<b>Educational Attainment</b>	<b>44.831</b>	<b>0.000</b>	<b>Significant</b>	<b>Reject Ho</b>

**Table 4.** Correlations between Respondent's Profile and Family Planning Practices

Profile	Chi-square	Significance Value	Interpretation	Decision
<b>Age</b>	<b>82.891</b>	<b>0.000</b>	<b>Significant</b>	<b>Reject Ho</b>
<b>Occupation</b>	<b>11.486</b>	<b>0.022</b>	<b>Significant</b>	<b>Reject Ho</b>
<b>Number of Pregnancy</b>	<b>34.970</b>	<b>0.000</b>	<b>Significant</b>	<b>Reject Ho</b>
<b>Age at First Pregnancy</b>	<b>35.268</b>	<b>0.000</b>	<b>Significant</b>	<b>Reject Ho</b>
Age When Got Married	8.006	0.091	Not Significant	Accept Ho
<b>Number of Children</b>	<b>34.269</b>	<b>0.000</b>	<b>Significant</b>	<b>Reject Ho</b>
<b>Educational Attainment</b>	<b>101.302</b>	<b>0.000</b>	<b>Significant</b>	<b>Reject Ho</b>

findings of Telahun, et. al (2013). in their study: formal education was associated with more knowledge about contraceptive methods.<sup>19</sup>

Despite the negative response on the attitude that was found in the majority of respondents in the present study, it showed that the advanced the age, the more number of children, and higher the educational attainment there is a significant correlation with the positive attitude towards family planning. It can be justified by the higher the age, the more children and the higher the degree they have; the more they accept the idea of family planning. In the study of Shumayla et. al, (2016), in the Muslim community in North India, showed that the higher the educational level of women and their spouses, found to be significantly associated with increase in the use of family planning

methods. Such findings has also been previously reported. Better education leads to delayed age of marriage further delaying the age of first pregnancy leading to better understanding or women's own reproductive health issues including better likelihood of contraception use.<sup>20</sup>

In this study found that there is a significant correlation between the factors: age, occupation, number of pregnancy, age when 1<sup>st</sup> pregnant, number of children and educational attainment; with practices in family planning. Compared to the study of Sailem et. al, (2017) between Thai Muslim women living in Bangkok and those living in the southernmost provinces of Thailand; neither high knowledge nor high attitude scores in this study were significantly associated with contraceptive practices. The variables independently associated with contraceptive

practices were fewer children and lower income level. This is consistent with the hypothesis that women with lower income will want to restrict the number of children they have in their family to maintain and sustain a good quality of life, thus having to use contraception. Economic constraints and perception of a small family may improve awareness of contraception.<sup>21</sup>

## **CONCLUSION**

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Among the respondents who participated in the study, while a majority knew about family planning, there was a pervading negative attitude towards family planning, as well as a lack of understanding regarding the practices of family planning. As expected, Muslim women who were more educated knew more about family planning; and older, more educated Muslim women who had more children had better attitudes towards family planning and were more likely to know better about family planning practices.

## **LIMITATION**

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This study is descriptive; while correlations were found between the respondents' demographic profile

and the data gathered through the questionnaires, no causation can be established. The findings of this study applies to the population of Northern Mindanao; it may or may not reflect the knowledge, attitudes, and practices of Muslim women in Mindanao as a whole.

## **RECOMMENDATION**

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This study is foundational to the fund of knowledge regarding reproductive health among Muslim women in Northern Mindanao. Through this, further studies can be done; to wit, a cohort study can be done following these respondents throughout the years, documenting whether women with baseline good attitudes towards family planning will avail of family planning medications, devices, or procedures in the future. A study can also be done to explore the relationship between family planning attitude and practice. Further down the research pipeline, with this study as a starting point, a tool can be used to classify Muslim women at the start of pregnancy as to whether or not they will be amenable to family planning practices in the future or not, and if so what interventions can be done to improve the likelihood that they will utilize currently available family planning methods. ■

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