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Knowledge Regarding Family Planning Among Pregnant Mothers in Selected Areas of Aizawl, Mizoram

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Abstract: Introduction: Family planning is an essential component of reproductive health that helps couples determine the number and spacing of their children, thereby improving maternal and child health outcomes.
Title of the Study: A Study to Assess the Knowledge Regarding Family Planning Among Pregnant Mothers in Selected Areas of Aizawl, Mizoram.
Objectives: To assess the knowledge regarding family planning among pregnant mothers and to determine their association with selected socio-demographic variables.
Methodology: A non-experimental descriptive research design was adopted. A total of 60 pregnant mothers were selected through purposive sampling from selected areas of Aizawl, Mizoram. Data were collected using a self-structured knowledge questionnaire.
Results: The findings showed that 68.3% of pregnant mothers had moderately adequate knowledge, 23.3% had adequate knowledge, and 8.3% had inadequate knowledge regarding family planning. No significant association was found between knowledge and selected socio-demographic variables.
Conclusion: The study concluded that most pregnant mothers had moderately adequate knowledge regarding family planning. Continuous health education is needed to improve awareness of family planning.
Keywords: Knowledge, Family Planning, Pregnant Mothers.

I. INTRODUCTION

According to the World Health Organisation (WHO), Family Planning enables individuals and couples to anticipate and achieve their desired number of children, as well as the spacing and timing of their births. It is achieved through the use of contraceptive methods and the treatment of involuntary infertility.

A woman's ability to space and limit her pregnancies has a direct impact on her health and well-being, as well as on the outcome of each pregnancy.

Despite being the first country in the world to adopt a National Population Control Program in 1952, we still lag and have failed to control the population. To control population growth and promote the country's economy, it is important to promote small-family norms, which can be achieved by ensuring that all pregnancies are wanted. The Government of India has undertaken many initiatives to reduce maternal mortality, such as Child Survival and Safe (Medhi A.H et al 2019).

II. OBJECTIVES OF THE STUDY

1) To assess the level of knowledge regarding family planning among pregnant mothers in selected areas of Aizawl.
2) To determine the association between the level of knowledge regarding family planning and selected socio-demographic variables among pregnant mothers.

III. HYPOTHESIS OF THE STUDY

1) H1: There is a significant association between the level of knowledge regarding family planning and selected socio-demographic variables among pregnant mothers.

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IV. REVIEW OF LITERATURE

A. *Section I: Knowledge on Family Planning*

Gupta, M. K., et al. (2025) conducted a study to assess the knowledge regarding family planning strategies among eligible couples living in a selected community area by using a qualitative research approach at Amethiya, Lucknow. In the present study, a descriptive research design was used to achieve the objectives of the study. The total sample size was 100, as calculated statistically. Before conducting the study, informed consent was obtained from the sample. Purposive sampling techniques were used. Data collection was done by using a self-structured knowledge questionnaire. The result is that the data obtained are tabulated and analysed by using descriptive and inferential statistics. The statistical analysis of 100 samples shows that 46 (46.0%) samples had adequate knowledge, 40 (40.0%) samples had moderate knowledge, and 14 (14.0%) samples had inadequate knowledge.

Goel P. et al. (2020) conducted a study to assess Knowledge and barriers towards the use of family planning methods among women at Village Dhawa, Jodhpur, Rajasthan. Data were collected from 380 married women selected by a convenience sampling technique. The data collection tool included a self-structured knowledge questionnaire and a barrier rating scale. Analysis was done by using descriptive and inferential statistics. The most commonly used method of family planning was Sterilization. More than half of women (58.4%) had fair knowledge regarding family planning methods. Mean knowledge score was 15.48±3.14. Unawareness about the existing method was the most reported barrier, and " costs too much was the least reported barrier. The knowledge level of women had a significant association with religion and occupation (p level <0.05).

Yadav S. (2019) has conducted a Descriptive Study to assess the Knowledge Regarding Family Planning Method among eligible couples in the selected area of Greater Noida. Data was collected from 100 eligible individuals in Bhangel, Greater Noida. Data was obtained through the developed and validated form of the questionnaire. The analysis showed that the knowledge level of Eligible couples, in which the majority of 65% respondent had poor knowledge, 32% respondent had average knowledge, and only 3% of respondents had good knowledge.

B. *Section II: Knowledge and Attitude on Family Planning*

Kumar et al. (2025). This cross-sectional study was conducted in the Upgraded Primary Health Centre, Kanniseripudhur, in Virudhunagar District, for a period of 6 months (February 2024- July 2024). A total of 100 married women were enrolled in this study. All married women in the reproductive age group of 15-49 years who were willing to give consent were included in the study. The data were collected and analysed following rigorous scientific standards. Result: Among the 100 married women, the majority (46%) are in the 15-24 years age group. The majority, around 49%, have single children, 30% of mothers have two children, and 16% of the women have had one abortion. Around 51% have average knowledge about family planning. 33% have good knowledge about family planning, and around 16% have poor knowledge. 74% of respondents have a good attitude about family planning, and only 3% of the study population has a poor attitude toward family planning. A significant association was seen between educational status and contraceptive usage, with a p-value <0.05.

V. RESEARCH METHODOLOGY

1) *Research Approach*: In the present study, a non-experimental quantitative research approach was adopted to assess the knowledge and attitude regarding family planning among pregnant mothers in selected areas of Aizawl, Mizoram.
2) *Research Design*: A non-experimental descriptive research design was used to assess the knowledge regarding family planning among pregnant mothers in selected areas of Aizawl, Mizoram.
3) *Research Variables:* The research variables in the study were knowledge regarding family planning among pregnant mothers.
4) *Demographic Variables*: The demographic variables included age, religion, educational status, occupation, monthly income, marital status, and number of children.

a) *Setting of the Study*: The study was conducted in selected AAM Sub-Centres of Aizawl North, namely Thuampui, Bawngkawn, Chaltlang, and Ramhlun North.
b) *Population*: The population of the study comprised all pregnant mothers residing in selected areas of Aizawl North, Mizoram.
c) *Target Population*: The target population consisted of pregnant mothers residing in selected areas of Aizawl North, Mizoram.
d) *Accessible Population*: The accessible population included pregnant mothers residing in Thuampui, Bawngkawn, Chaltlang, and Ramhlun North areas of Aizawl North who met the inclusion criteria.
e) *Sample and Sample Size*: The sample consisted of pregnant mothers residing in selected areas of Aizawl North. The sample size was 60, calculated using Yamane's Formula with a 5% margin of error and an additional 10% non-response rate.

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f) Sampling Criteria:

- Inclusion Criteria: Pregnant mothers residing in selected community areas, available during data collection, willing to participate, and both primigravida and multigravida mothers.
- Exclusion Criteria: Pregnant mothers who were unable to read and write, and those who were mentally disturbed.

g) Description of the Tool: Data were collected using:

- Section A: Socio-demographic variables.
- Section B: A self-structured knowledge questionnaire consisting of 20 multiple-choice questions regarding family planning.

h) Content Validity of the Tool: The content validity of the tool was established by seven experts, including three doctors from the Obstetrics and Gynaecology Department and four Associate Professors from the Obstetrics and Gynaecological Nursing Department. Necessary modifications were made based on their suggestions.

i) Reliability of the Tool: Reliability was established through a pilot study using Cronbach's Alpha Coefficient. The knowledge questionnaire yielded an 'r' value of 7.02 tool was reliable for the study.

j) Ethical Consideration

- Ethical approval was obtained from the Institutional Ethics Committee (IEC), RIPANS.
- Permission was obtained from the Chief Medical Officer, Aizawl North District.
- Written informed consent was obtained from all participants.
- Confidentiality and anonymity of the participants were maintained.

k) K. Pilot Study: The pilot study was conducted among 6 pregnant mothers at Zemabawk AAM Sub-Centre, Aizawl North, from 31/03/2026 to 01/04/2026. The study assessed the feasibility and reliability of the tools and found them to be feasible.

l) Main Study: The main study was conducted among 60 pregnant mothers residing in selected areas of Aizawl North, Mizoram. Data were collected from 06/04/2026 to 12/05/2026 using a purposive sampling technique after obtaining informed consent from the participants.

VI. RESULTS

Table 1: Frequency and percentage distribution of Pregnant mothers according to demographic variables.

Demographic Variables	Frequency (f)	Percentage (%)
Age in years		
18-20	4	6.7
21-25	14	23.3
26-30	20	33.3
>30	22	36.7
Religion		
Hindu	0	0
Islam	0	0
Christian	60	100
Others	0	0
Education		
No formal Education	4	6.7
Primary	8	13.3
Secondary	29	48.3
Graduate and above	19	31.7
Occupation		
Home maker	35	58.3
Govt. Employee	10	16.7
Private Employee	6	10
Self Employed	9	15
Income per month		
<10000/month	28	46.7
10000-20000	17	28.3
21000-30000	8	13.3
>30000	7	11.7
Marital Status		
Married	55	91.7
Unmarried	5	8.3
Divorce	0	0
Widow	0	0
No. of Children		
No children	16	26.7
1Child	16	26.7
2 Children	19	31.7
More than 2 children	9	15

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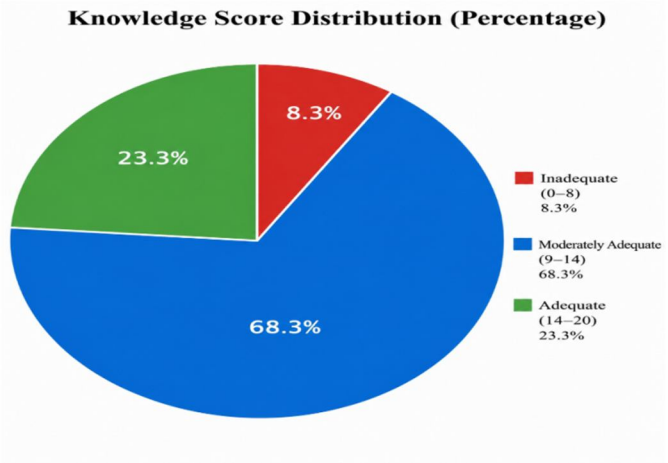
Figure I Frequency and Percentage Distribution of the Level of Knowledge of pregnant mothers regarding family planning



The data presented in the figure show that, out of 60 pregnant mothers, the majority, 41 (68.3%), had moderately adequate knowledge, followed by 14(23.3%) with adequate knowledge, and 5 (8.3%) with inadequate knowledge.

Table IV: Association between knowledge level and Demographic Variables.

Demographic Variables	Knowledge Score Adequate	Moderate	Inadequate	Fisher's Exact (P-value)
Age				
18 – 20 Years	0	3	1	
21 – 25 Years	1	12	1	
26 – 30 Years	5	14	1	0.277
> 30 Years	8	12	2	
Religion				
Hindu	0	0	0	
Islam	0	0	0	
Christian	14	41	5	**
Others	0	0	0	
Education				
No formal education	2	2	0	
Primary	2	6	0	
Secondary	4	24	1	
Graduate and above	6	9	4	0.91
Occupation				
Home maker	9	23	3	
Govt. Employee	1	9	0	
Private Employee	1	5	0	
Self-Employee	3	4	2	0.448
Income (Per month)				
< 10000	8	19	1	
10000 – 20000	3	13	1	0.482
21000 – 30000	2	4	2	
> 30000	1	5	1	
Marital Status				
Married	13	37	5	
Unmarried	1	4	0	
Divorce	0	0	0	1.000
Widow	0	0	0	
Number of children				
No children	4	12	0	
1 child	3	12	1	
2 children	5	13	1	0.284
> 2 children	2	4	3	

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It shows that there was no statistically significant association between knowledge level and the selected socio-demographic variables, including age, educational status, occupation, monthly income, marital status, and number of children ($p > 0.05$). Religion could not be tested statistically due to a lack of variability among respondents. Although variations in knowledge levels were observed across different categories, these differences were not statistically significant. Therefore, the null hypothesis (H_0) was accepted, and the research hypothesis (H_1) was rejected, indicating no significant association between knowledge level and selected socio-demographic variables.

VII. DISCUSSION

The present study aimed to assess the knowledge pregnant mothers regarding family planning in selected areas of Aizawl, Mizoram. The present study revealed that the majority of respondents were above 30 years of age (36.7%) and most had at least secondary education (48.3%), with 31.7% being graduates and above. Similar findings were reported by Sharma and Kaur (2019), who found that most antenatal mothers belonged to the mature reproductive age group and had secondary or higher education. Likewise, Gupta et al. (2018) reported that educational status plays an important role in awareness of family planning, with more educated women demonstrating better understanding.

A. Knowledge Regarding Family Planning

The study found that the majority of respondents (68.3%) had moderately adequate knowledge, while 23.3% had adequate knowledge. These findings are consistent with Imtishal et al. (2023), who reported that most pregnant women had a moderate level of knowledge regarding family planning.

However, John and George (2020) reported contrasting findings, finding that most pregnant women in Kerala had good knowledge of family planning. This difference may be due to higher literacy rates and better healthcare services in that region. Likewise, Gupta et al. (2018) found higher knowledge levels among urban women compared to rural women, suggesting the influence of accessibility and socio-economic factors.

B. Association Between Knowledge and Demographic Variables

The findings of the study found there is no statistically significant association between knowledge and socio-demographic variables such as age, education, occupation, income, marital status, and number of children ($p > 0.05$). This finding is consistent with Muralidhar et al. (2024), who reported that demographic variables were not always significant predictors of knowledge.

Similarly, Begum et al. (2017) found no significant association between knowledge and variables such as age and education. These findings suggest that knowledge regarding family planning may be influenced more by external factors such as healthcare services and awareness programs rather than demographic characteristics alone.

VIII. CONCLUSION

The study concluded that most pregnant mothers had adequate knowledge towards family planning. The findings indicate that respondents were generally aware of the importance of family planning in promoting maternal and child health and in ensuring proper spacing of pregnancies. No significant association was found between knowledge levels and selected demographic variables. The study highlights the need for continued health education and counselling to further strengthen knowledge towards family planning among pregnant mothers.

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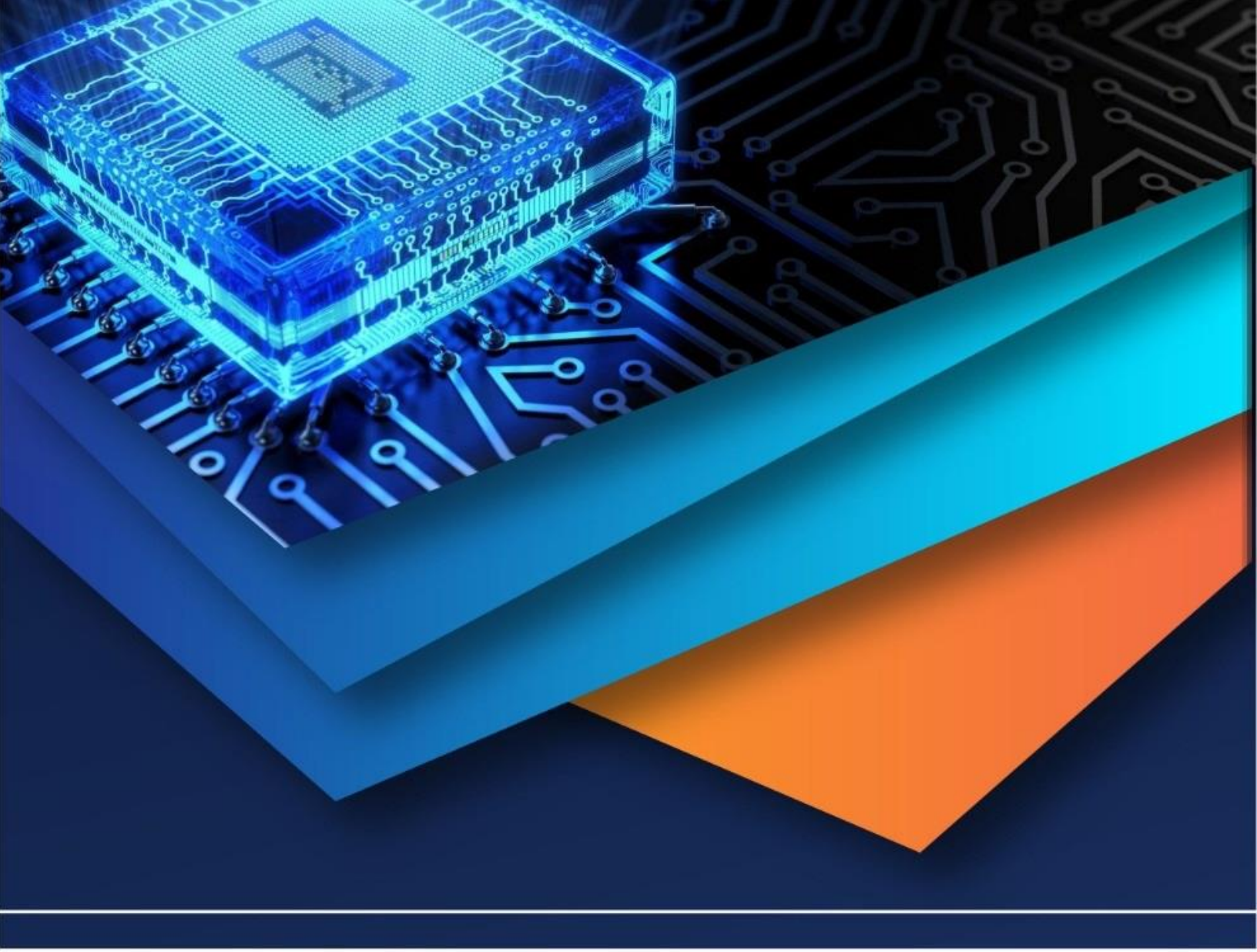

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