

## Study Protocol

### A Cross Sectional Study on Awareness Level of Family Planning Methods in Primigravida in Rural India.

#### Abstract:

Background: ~~Family planning is a crucial in enhancing maternal and child health.~~ Family planning suggests the capacity of population to envision and accomplish their ideal number of children by spacing and timing their births which can be accomplished using distinctive contraceptive techniques. The accessibility of family planning limits the family size as well as protects individual well being and rights. Family planning is the most significant determinant of fertility. This study aimed to study the level of awareness of family planning methods among Primigravida in central rural India.

Methodology: The study investigator will collect all the required details on a structured pretested questionnaire - demographic details (hospital number, age, education level, occupation, place of residence (urban or rural), socio economic status (Modified Kuppuswamy scale)etc. As per modified Kuppuswamy scale, the socio economic status will be defined as Upper Class (26-29), Upper middle (16-25), Lower Middle (11-15), Upper lower (5-10), Lower(Below 5) for present study. The study investigator will also collect data regarding knowledge of primigravida towards population problems, their attitude towards population problems and practice of family planning methods by them.

Results-We expect lack of awareness about family planning methods in Primigravida in central rural India.

Conclusion- This study is likely to highlight the awareness levels of family planning methods amongst primigravida presenting to our tertiary care teaching hospital in central rural India.

Keywords-Family planning, Primigravida

#### Introduction:

**Background/rationale:** Family planning is a crucial in enhancing maternal and child health(1). Family planning suggests the capacity of population to envision and accomplish their ideal number of children by spacing and timing their births which can be accomplished using

**Comment [JTD1]:** I think the "is" for the "can be"

**Comment [JTD2]:** I suggest that this line be removed as it is an affirmative and is not as crucial to improving maternal and child health. However, if you want to keep it, I suggest replacing "is" with "can be".

**Comment [JTD3]:** I suggest that the authors review this paragraph because family planning is indeed important, however it does not limit, it may limit it or not depending on the planning that is done and other biases that are taken into account when planning. On the other hand, in addition to the fact that the statement of "protects the well-being and individual rights", it may or may not.

**Comment [JTD4]:** I suggest that the authors improve this methodology, for example, (the study design was defined with data collection through a pre-tested structured questionnaire.....)

**Comment [JTD5]:** I suggest that the authors take a closer look at the expected research result because, if this result is already expected, they could change the study design to improve the population's level of knowledge regarding family planning and the applicability of the report could come later.

**Comment [JTD6]:** I suggest to the authors not to conclude because, as described, the author carried out observational studies and systematic reviews, therefore, a later study may mark a conclusion. Thus, the conclusion could be, for example, "this article was prepared as a preliminary study to follow up on a study design, etc...."

**Comment [JTD7]:** Usually keywords are at least 3

**Comment [JTD8]:** I suggest that this line be removed as it is an affirmative and is not as crucial to improving maternal and child health. However, if you want to keep it, I suggest replacing "is" with "can be".

distinctive contraceptive techniques. The accessibility of family planning limits the family size as well as protects individual well being and rights. Family planning is the most significant determinant of fertility(2). According to previous data available deferring child bearing will establish reduction in fertility and growth rate of population even if there is no effect on family size. Absence of sufficient data with respect to contraceptive strategies, myths and ignorance are the key elements influencing against the family planning practice in rural India (3-6). Awareness related to methods available, it's supplies and how these methods can be used should be provided to women and they should be given freedom to choose from methods available (7). Serious complications related to unwanted conception are criminal abortions and unsuccessful to end the pregnancy (8-9). Female mortality is more and pregnancy is the foremost reason for same(10). In the light of the above, the present study was designed to assess the awareness of family planning and its methods amongst antenatal (Primigravida) patients at a teaching tertiary care hospital in rural central India.

#### Objectives:

- 1) To study the level of awareness of family planning methods among Primigravida in central rural India.
- 2) To compare the level of awareness of family planning methods among Primigravida in central rural India according to socioeconomic status.
- 3) To compare the level of awareness of family planning methods among Primigravida in central rural India according to education.

#### Methods:

Study design: Cross Sectional Study

Setting: Obstetrics and Gynaecology OPD , JNMC, A.V.B.R.H, DMIMS (Du), Wardha

Participants: All consecutive primigravida admitted to Obstetrics wards during study period will constitute study population after applying exclusion criteria.

Variables: Case study will be done on all consecutive primigravida admitted in obstetrics ward during study period after applying exclusion criteria.

Data sources/ measurement : Obstetrics OPD, Department Of Obstetrics And Gynaecology, DMIMS (DU), JNMC, Sawangi (M), Wardha, Maharashtra

Size of Sample: The sample size calculation requires some prior knowledge about the fact and with fixed confidence level at a minimal margin of error we can calculate the desired sample size for the study. This being the short term study with the fixed duration of the study time and this will include the all cases admitted at department of Obstetrics and Gynaecology during the study period<sup>1<sup>st</sup></sup>May 2019 to 30<sup>th</sup> June 2019 who are willing to participate in the study and give written consent for the same.

**Comment [JTD9]:** I suggest that the authors review this paragraph because family planning is indeed important, however it does not limit , it may limit it or not depending on the planning that is done and other biases that are taken into account when planning. On the other hand , in addition to the fact that the statement of "protects the well-being and individual rights", it may or may not.

**Comment [JTD10]:** I suggest removing

**Comment [JTD11]:** I suggest that the authors review this paragraph because family planning is indeed important, however it does not limit , it may limit it or not depending on the planning that is done and other biases that are taken into account when planning. On the other hand , in addition to the fact that the statement of "protects the well-being and individual rights", it may or may not.

**Comment [JTD12]:**

**Comment [JTD13]:** This can be used as a concluding part

**Comment [JTD14]:** I suggest to the authors to turn these objectives into a single objective because the variables indicated are part of a single context in the study, as an example, "the objective of this study will be to know the level of knowledge about family planning methods according to the level of education , socioeconomic level, etc."

**Comment [JTD15]:** Does this study not must to go through an Ethics Committee?

**Comment [JTD16]:** Does this study not must to go through an Ethics Committee?

Statistical methods: All data will be collected on structured Performa by the study investigator and transferred to Microsoft excel. This data will then be transferred electronically to statistical software STATA (version 13 , Stata Corporation, College Station, Texas) which will be used for analysis. We will describe continuous, normally distributed data by mean and standard deviation, continuous data with skewed distribution by median and interquartile range, and categorical data by percentages. We will assess normality by generating histograms of the continuous variables and also by using skewness and kurtosis. We will use student's two-tailed t test to compare means, Mann Whitney test to compare medians and  $\chi^2$  or Fisher's exact test to compare proportions. All tests will be two-sided with a 5% significance level.

Univariate and multivariate analysis using a binary logistic regression will be used to identify factors (socioeconomic status and education) associated with the dependent variables (awareness of family planning).

#### Expected Outcomes/Results:

Participants: All consecutive primigravida admitted to Obstetrics wards during study period will constitute study population after applying exclusion criteria.

Descriptive data: Family planning method and primigravida

Outcome data: level of awareness of family planning in primigravida.

Main results: We expect lack of awareness about family planning methods in Primigravida in central rural India.

#### Discussion:

We expect lack of awareness about family planning methods in Primigravida in central rural India. Due to increasing trend of home deliveries we are unable to spread awareness about contraception's and proper counseling of adolescent regarding various methods of contraception's and advantage of family planning. This study is likely to highlight the awareness levels of family planning methods amongst primigravida presenting to our tertiary care teaching hospital in central rural India. It is likely to change Obstetricians approach towards educating the primigravida. Choudhary et al assessed Family Planning Knowledge, Attitude and Practice among Women of Reproductive Age from Rural Area of Central India(10). Studies related to different family planning methods and related aspects were reported by Damke et al (11), Gawri et al (12) and Lohchab et al (13-21).

#### References:

**Comment [JTD17]:** I suggest that the authors take a closer look at the expected research result because, if this result is already expected, they could change the study design to improve the population's level of knowledge regarding family planning and the applicability of the report could come later.

**Comment [JTD18]:** I suggest that the authors take a closer look at these results to take advantage of the data obtained for a somewhat broader discussion on educational issues and the interface with health and education policy mechanisms to take advantage of the data obtained and direct local actions.

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