

# Study Protocol

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

### **Abstract:**

Background: 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 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 unsuccessfulness to end the pregnancy (8-9). Female mortality is more and pregnancy is the foremost reason for same(10). 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 1<sup>st</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.

**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 and Conclusion:**

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).

### **Ethical Approval:**

As per international standard or university standard written ethical approval will be collected and preserved by the author(s).

### **Consent**

As per international standard or university standard, patients' written consent will be collected and preserved by the author(s).

## References:

1. Omolase CO, Faturoti SO, Omolase BO. Awareness of family planning amongst antenatal patients in a nigerian community: an exploratory study. *Ann Ib Postgrad Med*. 2009;7(1):36-39. doi:10.4314/aipm.v7i1.64076
2. Mani SB. Utilizing grassroots workers in family planning programs in India: prospects and problems. *Guru Nanak J Sociol*. 1991;12(1-2):89-102.
3. Kartikeyan S, Chaturvedi R M. Family planning: views of female non-acceptors in rural India. *J Postgrad Med [serial online]* 1995 [cited 2020 Jun 15];41:37. Available from: <http://www.jpgmonline.com/text.asp?1995/41/2/37/502>
4. Vlassoff C. Desire for sons and subsequent fertility in rural India. A 20-year longitudinal study. *J Biosoc Sci*. 2012;44(3):345-356. doi:10.1017/S0021932011000617
5. Hayat H, Khan PS, Imtiyaz B, Hayat G, Hayat R. Knowledge, attitude and practice of contraception in rural kashmir. *J Obstet Gynaecol India*. 2013;63(6):410-414. doi:10.1007/s13224-013-0447-6
6. Sharma, Vasundhara & Mohan, Uday & Das, Vinita & Awasthi, Shally. (2012). Socio Demographic Determinants and Knowledge, Attitude, Practice: Survey of Family Planning. *Journal of family medicine and primary care*. 1. 43-7. 10.4103/2249-4863.94451.
7. Paul, M., Iyengar, S.D., Essén, B. et al. Does mode of follow-up influence contraceptive use after medical abortion in a low-resource setting? Secondary outcome analysis of a non-inferiority randomized controlled trial. *BMC Public Health* 16, 1087 (2016). <https://doi.org/10.1186/s12889-016-3726-1>
8. Amo-Adjei J, Darteh EKM. Unmet/met need for contraception and self-reported abortion in Ghana. *Sex Reprod Healthc*. 2017;13:118-124. doi:10.1016/j.srhc.2017.02.002
9. Parks S, Hoffman MK, Goudar SS, et al. Maternal anaemia and maternal, fetal, and neonatal outcomes in a prospective cohort study in India and Pakistan. *BJOG*. 2019;126(6):737-743. doi:10.1111/1471-0528.15585
10. Choudhary, A., M. Nakade, and D. Shrivastava. "Family Planning Knowledge, Attitude and Practice among Women of Reproductive Age from Rural Area of Central India." *International Journal of Current Research and Review* 12, no. 14 Special Issue (2020): 2–7. <https://doi.org/10.31782/IJCRR.2020.0207>.
11. Damke, S., D. Chandi, and R. Fule. "Study of Bacterial Vaginosis among Women of Reproductive Age Using Contraceptive Methods in a Tertiary Care Hospital." *Journal of Krishna Institute of Medical Sciences University* 9, no. 2 (2020): 22–27.
12. Gawri, D.J., D.M. Agrawal, and R. Waigi. "A Comparative Study of Laparoscopic Assisted Vaginal Hysterectomy vs Nondescent Vaginal Hysterectomy for Benign Gynaecological Diseases." *International Journal of Pharmaceutical Research* 11, no. 4 (2019): 2018–21. <https://doi.org/10.31838/ijpr/2019.11.04.503>.

13. Lohchab, B., S. Phatak, and S. Deshpande. "Tubular Ectasia of Bilateral Epididymis in a Postvasectomy Patient: Sonography, Doppler, and Strain Elastography Appearance." *Journal of Datta Meghe Institute of Medical Sciences University* 14, no. 3 (2019): 258–60. [https://doi.org/10.4103/jdmimsu.idmimsu\\_36\\_19](https://doi.org/10.4103/jdmimsu.idmimsu_36_19).
14. James SL, Castle CD, Dingels ZV, Fox JT, Hamilton EB, Liu Z, Roberts NL, Sylte DO, Henry NJ, LeGrand KE, Abdelalim A. Global injury morbidity and mortality from 1990 to 2017: results from the Global Burden of Disease Study 2017. *Injury Prevention*. 2020 Oct 1;26(Suppl 1):i96-114.
15. Chole RH, Gondivkar SM, Gadail AR, Balsaraf S, Chaudhary S, Dhore SV, Ghonmode S, Balwani S, Mankar M, Tiwari M, Parikh RV. Review of drug treatment of oral submucous fibrosis. *Oral oncology*. 2012 May 1;48(5):393-8.
16. Korde SD, Basak A, Chaudhary M, Goyal M, Vagga A. Enhanced nitrosative and oxidative stress with decreased total antioxidant capacity in patients with oral precancer and oral squamous cell carcinoma. *Oncology*. 2011;80(5-6):382-9.
17. Kumar A, Chery L, Biswas C, Dubhashi N, Dutta P, Dua VK, Kacchap M, Kakati S, Khandeparkar A, Kour D, Mahajan SN. Malaria in South Asia: prevalence and control. *Acta tropica*. 2012 Mar 1;121(3):246-55.
18. Chole RH, Patil RN, Basak A, Palandurkar K, Bhowate R. Estimation of serum malondialdehyde in oral cancer and precancer and its association with healthy individuals, gender, alcohol, and tobacco abuse. *Journal of cancer research and therapeutics*. 2010 Oct 1;6(4):487.
19. Pradhan S, Madke B, Kabra P, Singh AL. Anti-inflammatory and immunomodulatory effects of antibiotics and their use in dermatology. *Indian journal of dermatology*. 2016 Sep;61(5):469.
20. Acharya S, Shukla S, Mahajan SN, Diwan SK. Acute dengue myositis with rhabdomyolysis and acute renal failure. *Annals of Indian Academy of Neurology*. 2010 Jul;13(3):221.
21. Gadail AR, Chaudhary M, Patil S, Gawande M. Actual Proliferating Index and p53 protein expression as prognostic marker in odontogenic cysts. *Oral Diseases*. 2009 Oct;15(7):490-8.