

# Social Advertising for the Family Planning: An Analysis of Issues Which are Affecting Family Planning in Rural Area

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## Abstract

India is the second largest country in the world, of this 70% (Census, 2011) population is living in the rural area. India is supporting 16 % of the world's population. India's population is increasing in an exponential manner. It has been found that the advertisement plays a key role to make people aware of family planning. To study the use of family planning practices/methods among the married women of reproductive age (15- 40yrs) was selected. Community-based study was conducted to find the awareness towards family planning advertisement among rural women. Determinants of demand for family planning are analyzed to find the impact of family planning advertising on changing attitude and awareness level among consumers.

**Keywords:** Family Planning, Social Advertising, Awareness, Rural Area

## Introduction

India is the second most populous nation in the world. The population of India increased by almost 181 million during 2001–11. Although around 70% (census, 2011) of the population lives in rural areas, rapid urbanization is expected to cause socioeconomic problems in the country. Males have always dominated the sex ratio in India. The country has regularly introduced policies to control its growing population. Government of India is expensing lots of money on advertising to aware about the family planning program to rural people. Advertising represents an important means by which organizations communicate with their customers, both current and potential. The specific objectives of an advertising campaign may adopt many forms-

- Create awareness of a new service, product or brand.
- Inform customers the features and benefits of the services, product or brand.
- Create a preference for the service, product or brand.
- Persuade customers to purchase the service, product or brand.

These objectives enhance awareness about the services, product or brand and profit to the end customer through advertisings. In 1951, India became the first country in the world to launch a family planning program in an attempt to control population growth. Since then, the program has undergone a variety of reforms. Different medium of advertising was introduced to promote family planning program (Sharma V, 1991). Nukar natak, Radio and print media was main source of advertising in early days but now a day different sources of advertising is introduce but still Nukar natak, radio, print and television are main source of advertising in rural India. The most Popular advertising slogan for family planning was

“Chhota parivar sukhi parivar”. (Small family happy family)

During 1951 to 1975, the nation's population policy developments were primarily conducted through the successive five year plans initiated by the government. The first five year plan (1951–56) recognized the need for a population policy. This was followed up over a series of five year plans (until the fifth five year plan of 1974–79) advocating stabilizing population growth over a period of time. India is the second most populous nation in the world. The population of India increased by almost 181 million during 2001–2011(census). Although around 70% of the population lives in rural areas. Males

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have always dominated the sex ratio in India. The Health Education department the Ministry of Health conducted the Family Planning Communication Project from January 2001 through December 2010. The project was funded by the U.S. Agency for International Development (USAID), with technical assistance provided by the Johns Hopkins Center for Communication Programs for Population Communication Services (Banerjee, 2012). This project was designed to provide knowledge and educate rural women and men of reproductive age about the health benefits of modern contraception (Chapel, 2006). According to national family health survey (1999) it generating universal knowledge of family planning methods among the masses, but the program was not as successful as expected. Supporting messages encouraged to visit family planning service promoting sites, to discuss family planning with their spouse, to space their children and to have only the number of children they could afford to care for adequately (Malhi P, 2011). In addition, the communicated messages provided information on available contraceptive methods (Becker S, 2001) attributed to increased, (Timothy C, *et al.* 2011), emphasizing that modern methods are safe and have health and economic benefits for the entire family. The government regularly introduced policies to control its growing population. Hinduism is the largest religion, and is practiced by 80.5% of the total population. This is followed by Islamism (13.4%), Christianity (2.3%), Aadiwasi (1.9%), others (1.8%), and unspecified (0.1%). Hinduism, Islamism and Christianity, religions are the main origin of rural area of Ranchi district. This paper aims to study the effectiveness of advertising on family planning program in rural areas of Ranchi district of Jharkhand.

#### Proposition 1

- (a) services which have a high consumer involvement in the purchase decision will be characterised by current advertising effects.
- (b) services and products which have an intermediate consumer involvement in the purchase decision, will be characterized by carryover advertising effects.
- (c) services and product which have a low consumer involvement in the purchase decision, will be characterized by brand loyalty effects.

#### Proposition 2

- (a) The creative devices and content of an advertisement determine whether or not that advertisement will be effective but not the magnitude of effect.
- (b) The magnitude of the effect of an advertisement is dictated by the extent to which the medium in which it is placed is used. The greater the extent of usage of medium, the less the effectiveness of that medium.

### Literature Review

Many studies have been conducted with regard to the attitude, awareness and knowledge of demand for health services in general and contraceptives in particular. (Bongaarts, 1991) evaluate knowledge, attitude, and behavior among people regarding the family planning methods. Most of the researcher in his research use econometric tools to find the relationship between service providers of family planning. (Stan Becker, 1999) find the new dimension of unmet need for family planning incorporating the variables like, Husbands or Couples. Even there are a few studies that developed a theoretical model for developing family planning all of them were concerned with the demand for health care and not for family planning services (Cleland, 1987). Similarly, none of the studies targeted respondents directly in the rural area of Jharkhand state of India. This compares to the current study where respondents from the rural area were targeted (Son. S 1995). At district level for demographic health surveys mostly secondary data was used to find the effects of contraceptive use. Evaluated and investigated the current economic, socio-cultural, and service-related barriers faced by women in using reproductive health services (De Barrios *et al.*, 1997) This study, however, went beyond by incorporating policy as well as demographic and socio-economic variable studies in order to examine how family planning advertising influence the demand for family planning services in rural area. (Kulkarni MS, 2003) in his study find awareness of contraception exists a large gap between the knowledge and Practice. In his study focus on the education level of male and female, understanding of partners, age of marriage, marital status (Clements and Nyovani, 2004). Econometric model was not applied to find significant factors which affect family planning service demand. Additionally, in the study

Clement and Nyovani did not undertake any statistical tests to identify key variables. This makes the study inadequate especially in the world of academic rigor. Like the case of Clements and Nyovani a study by (Bertrand *et al.* 1995) considered many factors, some of which were incorporated in the current study. The current study only considered the attitude, awareness and effectiveness of advertising and changing demand of variables to avoid the economic problem of causality. According to literature reviewed, many variables were affecting awareness and demand for family planning services. This study finds that some of the variables affect the demand for the services amongst the rural people.

The health policy affects the result of family planning strategy. Meeting was held on 2015, 2016 and 2017 to provide policies for family planning. In meeting design was developed for family planning strategy and a priority of program was planned. The purpose behind health program in Jharkhand is to achieve national goal to control population.

There are four key points in the promotional strategy of family planning:

- Identifying those districts which has low access of family planning.
- Focus on the fund required for this program with proper flow.
- Strengthening the health system.
- Priorities setting for family planning program.

Six more issues need to focus to strengthen this program

- Age of marriage.
- Health of man and women (at the time of marriage).
- Family planning program adoption.
- Family planning service delivery to the poor.
- Involvement of private sector.
- Promotion of permanent methods.

The new family planning strategy was adopted from august 2010, this strategy was made for 2010-2020. According to the prediction for 2020 total fertility rate will decrease by 1.1 percent now the fertility rate is 3.2, and the use of contraceptive methods increase up to 25 percent now the use of contraceptive method is 30 percent.

Research find the gap between two children and “unmet need” for contraception method is effective way to control, (Bongaart, 1991). The unmet need for spacing

among poor people access family planning/RH services (Becker Stan, 1999).

To strengthening family planning program there are three strategies:

- Family Planning program development
- Supporting service providing health department
- Selected district based operational program

During analysis it is find that family planning needs for poor people in urban and rural area is different (Banerjee S, 2012). Under the second categories of strategies there are nine strategic intervention and in strategy 6, rural and urban poor people is targeted.

Strategy 1: Advertising focused to increase marriage age and delay in first pregnancy.

Strategy 2: Promote gap between two children (Daniel EE, 2008).

Strategy 3: Promote LAPMs to meet the demand for limiting births.

Strategy 4: Integrate FP services with NRHM services.

Strategy 5: Foster male engagement in the concept of Planned Parenthood.

Strategy 6: Reach rural and urban poor and other marginalized populations through various strategies, including (1) identifying and mapping urban slums and poor populations (2) identifying public-private partnership (PPP) mechanisms to reach rural and urban poor populations (3) creating mobile medical units (4) deploying female link volunteers and registered medical practitioners to provide intrauterine contraceptive devices (IUCDs) and (5) identifying and training poor women as auxiliary nurse-midwives

Strategy 7: Increase the involvement of nongovernmental organization, private sector and public sector undertakings through PPPs

Strategy 8: Integrate family planning promotion in other departments (where possible).

Strategy 9: Improve communication by establishing an FP Cell to lead strategy operationalisation.

The Operational Plan for the districts targets first priority (poor-performing) areas based on FP performance indicators and uses a phased approach for program

implementation. Different stages are divided by the government in first stage government focus on five worst districts in Jharkhand state. In these areas large scale training programs and camp was organised to address unmet needs (Barrios, 1997).

## Methodology

The survey design was selected for this study; the selection of the design was attributed to various reasons. First, it provides the original data to realize the research objectives. Secondly, it represents the real situation.

## Sample Implementation

Women (15-40 years) were selected from three districts (Ranchi, Bokaro, Jamsedpur) of Jharkhand (India) using two-stage stratified random sampling. In the first phase of research, 23 villages from each of the intervention and comparison areas were selected using probability proportional to size (PPS) sampling (n=46). In the second stage, a detailed household listing was carried out in each selected village to generate two separate universes of households with eligible married and unmarried young women. Seventeen households with at least one married young woman and another 17 households with unmarried young woman were selected using systematic random sampling in each sampled village. Only one eligible respondent was selected per household, and in households with more than one eligible respondent, the Kish table was used to select a study participant. A total of 625 women were successfully interviewed. To protect the participants' privacy, interviewers requested privacy from other household members. If privacy could not be ensured, the interview was postponed and rescheduled. The overall response rate for the study was 80% for both married and unmarried young women. A code book was prepared for the various responses obtained. Various tests including two-step regression analysis was done using STATA. The result was based on consumer behavior, and the characteristics of rural women who intend to take the service of family planning.

$$V_{ij} = V(P_{ij}, Y_i, S_i, F_{ij}, P_o) \quad i$$

where  $V_{ij}$  was indirect utility that consumer  $i$  derived from consuming family planning services  $j$ , where  $j = 1, 2, 3, 4, \dots$ . The family planning services implied by the maximization of the indirect utility in equation.

(1). On the basis of this equation, a binomial logit model was estimated using a two-step regression technique. The binomial model estimated was of the form:

$$\ln \{P/1-P\} = X_{ij}\beta \quad ii$$

where  $P$  was the probability of using any method of contraception. In this case, a consumer might be using or not using contraceptives;  $\ln$  the natural logarithmic function,  $\beta$  is a vector of regression coefficients to be estimated; while  $X_{ij}$  is a vector of explanatory variables which affect utilization of family planning services  $j$  by household  $i$ . Based on the theoretical framework a functional equation was developed. The functional equation was of the form:

$$USfp = f(HHcrt, Pfcrt, Govp) \quad iii$$

The dependent variable was the use of family planning services (USfp). These variables were chosen to find the factors that might be associated with family planning use in rural areas of Ranchi district of Jharkhand (India).

## Result and Discussion

It is very clearly with the data of table 2, all the variables shown negative influence except rural women education. There are seven different variables, namely marital status of the woman, partner's approval, number of living children, friendliness of family planning services providers, quality of family planning services, proximity to the provider and income of the woman and knowledge of woman on family planning services had coefficients with positive signs, they increase the likelihood of the respondent using family planning services. The coefficient of women education was not statically significant at 1 percent, 5 percent. Result also shows that religious background, service provider attitude women education level had negative coefficient. Partner's consent for women using this service is critical. Otherwise if found using without the consent of his partner it could be misinterpreted, thereby causing misunderstanding in a marriage. Religion is one of the most important factors which influence to take this service. The significance of this determinant could be explained by the fact that provision of certain types of family planning services performance of some procedures by the service provider, with regard to quality of family planning services received, the marginal effect was 0.17. Research show that the probability of taking family planning service is 17% higher among rural



women. Finally planning service provider has a negative 0.03 marginal effects likelihood of taking service is 3.3 percent. Distance of service provider is a negative impact, because travelling time and transportation cost discourage the people to take this service. Income has marginal effect of 0.02, that increase the average income of rural family Rs. 1,000 increased the likelihood of using family planning services by 2 percent. The marital status and living children both has marginal effect about 0.02, but the statically insignificant at 1 percent and 5 percent. Through research it is clear that marital status influence to use family planning service. The result show that number of living children show positive influence about taking the family planning service.

## Contribution

There is a need to educate about the family planning program by proper departments and through N.G.Os at household and community level. This could be undertaken through Nukar natak, print and electronic media as well as newsletters and posters. Government should focus on advertising of family planning and distribution of free condoms through proper departments. This study will help government to make policies for family planning and use effective medium of advertising for promotion of this program.

## Implications

- Improve quality of family planning services.
- Use effective medium of advertising.

## Regression Results

**Table 1: Logistic Regression Analysis Results**

| Dependent Variable : Use of Family Planning Services |             |       |       |        |                |
|------------------------------------------------------|-------------|-------|-------|--------|----------------|
| No. of Observations : 500                            |             |       |       |        |                |
| Explanatory Variable                                 | Coefficient | Z     | p> z  | 95 per | Conf. Interval |
| Marital status                                       | 0.107       | 0.29  | 0.775 | -0.628 | 0.843          |
| Religion                                             | -1.955*     | -5.24 | 0.000 | -2.685 | -1.224         |
| Partners Approval                                    | 7.362*      | 6.61  | 0.000 | 5.177  | 9.545          |
| No. of children (living)                             | 0.119       | 0.97  | 0.332 | -0.122 | 0.361          |
| Quality                                              | 1.023*      | 2.58  | 0.010 | 0.245  | 1.801          |
| Proximity                                            | -0.221*     | -2.73 | 0.006 | -0.380 | -0.062         |
| Friendly                                             | 1.125*      | 2.56  | 0.010 | 0.264  | 1.985          |
| Income                                               | 0.011**     | 2.01  | 0.045 | 0.000  | 0.023          |
| Woman Education                                      | -0.003      | -0.05 | 0.958 | -0.130 | 0.125          |
| Knowledge of FP                                      | 1.369**     | 0.22  | 0.026 | 0.162  | 2.575          |
| C                                                    | -2.945      | -2.83 | 0.005 | -4.984 | -0.906, -2.945 |
| Pseudo R2                                            | 0.6843      |       |       |        |                |
| LR chi2(10)                                          | 468.56      |       |       |        |                |

- Involve Friendliness of staffs in family planning.
- Identifying program priorities and challenges as well as potential strategies for FP interventions.

## Conclusion

The state government should educate rural population about the family planning at community and personal level. This could be undertaken through proper advertising campaigns. Additionally, government should focus on the promotion of family planning program through proper department by providing free condoms. This could be supported by health workers (Briscoe, 1990). The infrastructure of service provider of family planning also attracts to take the benefit of this program. Community based support also required to promote family planning. Good support cares provides by the government to client built confidence and motivate to take this service. Moreover, for this programme to be effective, donor support is critical. Creation of supportive groups which advocate at community level is highly recommended in rural area. In the end, this is expected to contribute positively towards population growth rate. NGOs, and other governments departments involved in family planning need to initiate and promote targeting programmers and promote advertisement for the uptake of family planning services in the rural areas.

- Imply significance at 1 percent level and
- Imply significance at 5 percent level of significance

**Table 2: Results of Logistic Regression Analysis for Marginal Effects**

| Dependent Variable      |          | : Use of Family Planning Services |       |       |        |                |        |
|-------------------------|----------|-----------------------------------|-------|-------|--------|----------------|--------|
| No. of Observations     |          | : 500                             |       |       |        |                |        |
| Explanatory Variable    | dy/dx    | Std. error                        | Z     | p> z  | 95per  | Conf. Interval | X      |
| Marital status          | 0.016    | 0.057                             | 0.28  | 0.776 | -0.095 | 0.128          | 0.640  |
| Religion                | -0.278*  | 0.086                             | -3.25 | 0.001 | -0.446 | -0.110         | 0.556  |
| Partners Approval       | 0.829*   | 0.028                             | 29.04 | 0.000 | 0.773  | 0.885          | 0.420  |
| No. of children(living) | 0.018    | 0.019                             | 0.95  | 0.343 | -0.019 | 0.054          | 2.364  |
| Quality                 | 0.166**  | 0.079                             | 2.08  | 0.037 | 0.009  | 0.322          | 0.622  |
| Proximity               | -0.033** | 0.016                             | -2.14 | 0.033 | -0.063 | -0.003         | 3.158  |
| Friendly                | 0.193*   | 0.093                             | 2.09  | 0.037 | 0.012  | 0.373          | 0.701  |
| Income                  | 0.002*** | 0.001                             | 1.74  | 0.081 | -0.001 | 0.004          | 24.824 |
| Woman Education         | -0.001   | 0.009                             | -0.05 | 0.958 | -0.019 | 0.019          | 10.123 |
| Knowledge of FP         | 0.257*** | 0.139                             | 1.85  | 0.064 | -0.015 | 0.529          | 0.806  |

- Imply significant at 1 percent level and
- Imply significant at 5 and 10 percent level of significance respectively

**Table 3: Pairwise Correlation Matrix for Explanatory Variable**

|           | Mstat  | Price  | Pappr  | Age    | I.child | Qual-ity | Know   | Proximity | Dchild | Peduc | Relign | Weduc | Frind  | Incm  |
|-----------|--------|--------|--------|--------|---------|----------|--------|-----------|--------|-------|--------|-------|--------|-------|
| M stat    | 1      |        |        |        |         |          |        |           |        |       |        |       |        |       |
| Price     | 0.058  | 1.000  |        |        |         |          |        |           |        |       |        |       |        |       |
| Pappr     | 0.248  | 0.482  | 1.000  |        |         |          |        |           |        |       |        |       |        |       |
| Age       | 0.354  | 0.077  | 0.060  | 1.000  |         |          |        |           |        |       |        |       |        |       |
| I.child   | 0.449  | 0.045  | 0.120  | 0.639  | 1.000   |          |        |           |        |       |        |       |        |       |
| Quality   | -0.044 | 0.102  | 0.153  | -0.050 | -0.073  | 1.000    |        |           |        |       |        |       |        |       |
| Know      | -0.057 | 0.051  | -0.599 | -0.060 | -0.114  | 0.186    | 1.000  |           |        |       |        |       |        |       |
| Proximity | -0.041 | -0.601 | -0.205 | 0.102  | 0.139   | -0.052   | -0.091 | 1.000     |        |       |        |       |        |       |
| Dchild    | -0.045 | -0.060 | -0.130 | -0.162 | -0.109  | -0.021   | 0.038  | -0.050    | 1.000  |       |        |       |        |       |
| Peduc     | 0.498  | 0.079  | 0.831  | 0.178  | 0.301   | -0.036   | -0.012 | -0.025    | -0.095 | 1.000 |        |       |        |       |
| Relign    | 0.019  | 0.063  | 0.057  | -0.034 | -0.043  | -0.015   | 0.001  | -0.137    | 0.028  | 0.071 | 1.000  |       |        |       |
| Weduc     | 0.005  | -0.002 | 0.059  | 0.034  | -0.037  | 0.015    | -0.008 | 0.063     | -0.041 | 0.198 | -0.013 | 1.000 |        |       |
| Frind     | 0.041  | 0.220  | 0.248  | -0.021 | -0.040  | 0.200    | 0.223  | -0.241    | 0.066  | 0.027 | 0.074  | 0.044 | 1.000  |       |
| Incm      | 0.231  | 0.117  | 0.780  | 0.247  | 0.215   | -0.007   | -0.054 | -0.002    | 0.610  | 0.613 | -0.052 | 0.097 | -0.051 | 1.000 |

## References

- Barrios, A. D., Rodas, M. D., & Yinger, N. V. (1997). Unmet need for family planning in a peri-urban community of Guatemala City. *International Centre for research on women*, pp.1-10.
- Banerjee, S. K., Andersen, K. L., Buchanan, R. M., & Warvadekar, J. (2012). Women entered research on access to safe abortion services and implications for behavioral change communication interventions: A cross-sectional study of women in Bihar and Jharkhand, India. *BMC Public Health*, pp. 175-181.
- Banerjee, S. K., Andersen, K. L., Buchanan, R. M., Warvadekar, J., Batra, S., & Khan, D. U. (2012). *Sharing messages about safe abortion services:*

*Evaluating the ipas behavior change communication intervention in Bihar and Jharkhand, India.* New Delhi, Ipas India.

- Becker, S., & Costenbader, E. (2001). Husbands' and wives' reports of contraceptive use. Stud Family Planning Orientation Programme on Adolescent Health for Health-care Providers. Geneva: *World Health Organization*, 32, 111-129.
- Becker, S. (1999). Measuring unmet need: Wives, husbands or couples? *International Family Planning Perspectives*, 25(4), 172-180.
- Bongaarts, J. (1991). The KAP-gap and the unmet need for contraception. *Population and Development Review*, 17, 293-313.
- Briscoe, J., Akin, J., & Guilkey, D. (1990). People are not passive acceptors of threats to health: Endogeneity and its consequences. *International Journal of Epidemiology*, 19(1), 147-153.
- Census (2011). Government of India.
- Chapel Hill, N. C. (2006). *Young women and abortion: A situation assessment guide.* Ipas.
- World Health Organization: *Commonwealth Medical Association Trust and UNICEF.*
- Cleland, J., & Wilson, C. (1987). Demand theories of fertility transition: An iconoclastic view. *Population Studies*, 41(1), 5-30.
- Daniel, E. E., Masilamani, R., & Rahman, M. (2008). The effect of community-based reproductive health communication interventions on contraceptive use among young married couples in Bihar, India. *Int Fam Plan Perspect*, 34, 189-197.
- International Institute for Population Science (IIPS) 1998-1999 and Macro International. National Family Health Survey (NFHS-2), Mumbai, India.
- Kulkarni, M. S. (2003). Exposure to mass media and its impact on the use of family planning methods by women in Goa. *Health Popul Perspect*, 26, 87-93.
- Malhi, P., & Singhi, P. (2011). Follow up of children with autism spectrum disorders: Stability and change in diagnosis. *Indian Journal of Pediatrics*, 78(8), 941-945.
- NRHM web site of Jharkhand
- Son, S. (1995). Preference and reproductive behaviour in rural Punjab. *Guru Nanak J Socio.*, 16(2), 31-40.
- Sharma, V., & Sharma, A. (1991) Family planning practices among tribal of Rajasthan. *India. J Res Edu Indian Med.*, 10(4), 59-61.
- Timothy, C., Nelson, W., & Tom, K. (2011). empirical analysis of determinants of demand for family planning services in Kenya's city slums. *Global Journal of Health Science*, 3(2), 109-117.
- Wathen, C. N., & Harris, R. M. (2007). I try to take care of it myself. How rural women search for health information. *Qual Health Res*, 1(17), 39-51.