

Background

Population stabilization is an essential instrument for promoting sustainable development with more equitable distribution of resources that makes reproductive health care accessible and affordable for all. And for achieving this goal, the National Population Policy was several times revised by the Government of India in 2000, with the objective to address the unmet needs for contraception, and to provide integrated service delivery for basic reproductive and child care. Thus the key elements of health care to women and children and provision of contraceptive services have been the focus of India's family planning services right from its independence. A variety of different methods of contraception are available, which are generally safe compared with the risks associated with pregnancy and childbirth. Desired family size and timing of births are two basic objectives that are fulfilled by the Family planning through contraception and thus are needed to be addressed with at the most concern. Although the family planning programme was not as successful as was expected, it has succeeded in generating universal knowledge of family planning methods among the masses (IIPS and ORC MACRO, 2000). But, even with this high awareness of family planning methods, there exists a wide gap between the knowledge and practice of these methods (Kulkarni, 2003) due to the existing variations in the socioeconomic and geographical characteristics within its territory. People of India being multilinguistic, multireligious and multiethnic have different levels of awareness and acceptance of methods of family planning methods. A WHO expert committee has suggested for five methods in 1975 to evaluate the success of Family Planning Programmes. One of them is through the evaluation of knowledge, attitude, motivation and behavior among people regarding the family planning methods. The knowledge and attitude of people towards Family Planning methods is an important determinant in the adoption of Family Planning methods.

The objective of this study is to investigate the impact of interventions on the use and non use of contraception. The general research question of this chapter is to answer which factor have contributed to the recent decrease in KAP GAP for contraception, whether it was due to the change in the socioeconomic and demographic changes or it occurred due to interventions. In other word, the key theme of this chapter is to analyzed the relative contribution of UHI program to the decreased in KAP GAP of family planning in UP between 2010 to 2014. We also utilized

the panel data for understanding the behaviour of women according to their need and use of contraception by gazing the transition stages occurred between KAP GAP to use and vice-versa in the four year interval.

Data & Methods

A hybrid mechanism of study constituting the combination of both longitudinal and cross section has been implemented in the MLE survey, where the intervention regarding the family planning was introduced by URHI for the selected countries. Samples in India were taken from six major cities in Uttar Pradesh (UP) namely Agra, Aligarh, Allahabad, Gorakhpur, Moradabad, and Varanasi. The baseline survey was conducted in the concerned cities in 2010 where 17,643 currently married of reproductive age 15-49 years were considered for the interview. This was followed by the midterm assessment in 2012 and end line of the survey was performed during December 2013 to July 2014. The endline sample is a combination of two groups of observation one is gathered from four core cities of UP which were Agra, Aligarh, Allahabad & Gorakhpur and the second group comprise the observation from the remaining two control cities.

Difference in difference (DD) model is the common strategy for evaluating the effect of programs that are instituted at a particular point of time (Stuart, et al, 2014). It is used to compares the change over time in the group affected by the treatment to the changes over time in the group unaffected by the treatment. But in the current scenario two type of selection bias arise in the study: One is arises due to heterogeneity exist across groups i.e. treatment and control groups were not identical in the pre treatment period in terms of some covariates and Second are arises due to the heterogeneity exist in the same group over time. So we first calculate the propensity scores for all four groups and on the basis of these score we assign some weight to all four groups. Further these weights make all groups similar to the background characteristics. Further these weights are merged with the difference in difference model by using a “weighted regression model”. Though our outcome variable is binary in nature we used a weighted logistic regression model for estimating the treatment effect on the sample.

Results

The research clearly brings out the reason according to the region (divided into two parts treatment and control groups) specific primary correlates for KAP GAP. Therefore, in designing effective family planning programmes, policy makers must understand the various factors which

influence the practice of family planning methods according to regions. It comes from the study that thought of women regarding childbearing practice have changed in the four year period, previously women accept children as a gift of god and did not wanted to restrict their fertility also some religious beliefs had acted as catalyst in increasing KAP GAP. But in year 2014 the amount of this reason for KAP GAP decreased, health concern issues emerged as a major cause for not using the contraceptive. Utility of panel data holds for understanding the relation between the KAP GAP and abortions occurred in the inter survey period. In both the groups, a substantially higher percentage of abortions either induced or accidental were reported in the KAP GAP group compared to the using group. This finding clearly one of the high spot of the study and it has been found in the previous study as well. After controlling all the covariates we found that these introduced interventions presented significant negative impact on KAP GAP, but the amount of variation offered by these policies is very small. In comparison of the treatments the share of covariates changes was high in reducing KAP GAP. This can help urban health initiatives to make more precise policies to the targeted population, also there is a need to start some new schemes for tackling the socioeconomic and demographics disparities exist in the population because improvement in these covariates will indirectly increase the use of FP services.

Table- KAP GAP percentages in Treatment and control group in pre and post intervention periods with and without weights

Unweighted			
Group/Time	Treatment group	Control group	Change
Pre	18.61	17.83	0.78
Post	14.59	10.44	4.15
Change	4.02	7.39	3.37
Weighted			
Group/Time	Treatment group	Control group	Change
Pre	18.61	17.13	1.48
Post	16.25	13.74	2.51
Change	2.36	3.39	1.03

Table- Weighted logistic regression results of KAP GAP by socioeconomic and demographic characteristics of women

Characteristics	Adjusted Odds ratio	Confidence Interval (95%)	
Age of respondent			
Less than 25	Ref		
25-35	0.384	0.345	0.429
More than 35	0.290	0.258	0.326
Religion			
Non Muslim	Ref		
Muslim	1.600	1.461	1.751
Caste			
Sc/St	Ref		
OBC	1.025	0.927	1.134
Others	1.079	0.957	1.164
Educational level			
No education	Ref		
Primary	0.703	0.617	0.801
Secondary	0.724	0.656	0.800
Higher than secondary	0.730	0.629	0.846
Place of Residence			
Slum	Ref		
Non-slum	1.102	1.020	1.190
Sex composition			
2+ children: equal child	Ref		
No child	5.500	3.385	8.938
1 son	2.136	1.792	2.545
1 daughter	2.194	1.816	2.649
2+ children: more daughters	1.408	1.273	1.558
2+ children: more sons	0.882	0.796	0.976
Educational difference			
Both un-educated	Ref		
Same level of education	1.031	0.957	1.144
Male more educated	0.982	0.901	1.210
Female more educated	1.021	0.937	1.134
Age difference			
Male is younger than female OR male is equal to female	Ref		
Male is 1-5 years older than female	0.885	0.753	1.039
Male is 5+ years older than female	0.840	0.710	1.014

Table 5.2 Continued...

Characteristics	Adjusted Odds ratio	Confidence Interval (95%)	
Media exposure			
Exposure	Ref		
No exposure	1.303	1.200	1.415
Society influence			
Negative	Ref		
Positive	0.795	0.688	0.918
Neutral	1.247	1.093	1.423
Wealth Index			
Poor	Ref		
Middle	0.707	0.630	0.794
Rich	0.586	0.504	0.681
Group			
Control	Ref		
Treatment	1.110	1.003	1.227
Time			
Baseline	Ref		
Endline	0.737	0.662	0.820
Exposure of interventions			
No	Ref		
Yes	0.792	0.718	0.938
Unweighted			
Exposure of interventions			
No	Ref		
Yes	0.891	0.816	0.986