Socio-economic Determinants of Current use of Contraception in a Rural Area of J&K

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ABSTRACT

Objective: To identify the socio-economic factors which determine contraceptive use among current users of contraception.

Method: Cross-sectional design. Interview schedule of entire eligible couple population of 19 Angwanwari Centres of Block R.S.Pura, Jammu by House to House Survey.

Analysis: Besides test of significance, unadjusted Odd's Ratio, adjusted Odd's Ratio were used using Multiple Logistic Regression Analysis technique by SPSS-WIN Version 7.5 Software.

Results: Contraceptive use increased with age of women and number of conceptions. Compared to illiterate women, formally educated women were 2.2 times more likely to use contraception. Also, lower income, wives of unskilled workers and Scheduled Caste (SC) woman were more likely to be current users of contraception. Husband's age & literacy, religion and type of family did not show significant relationship with current contraceptive use. *J Med Sci. 2010; 13(1):30-32*

Key-Words: Current users, socio-economic determinants, rural area.

Introduction

An increasing population is biggest impediment to a nation's effective progress. The problem is indeed basic as it is the root of almost all our miseries and it also makes their solution practically impossible. Although there has been a global recognition of the importance of reproduction health as a major component of women's health and well being, information on reproductive health status, including contraceptive use, needs and services and associated socio-cultural and economic factors are lacking in many countries. Lack of reliable information has been a major handicap in addressing reproductive health needs particularly in developing countries. Women's ability to exercise reproductive choices in developing countries are limited by lack of autonomy and unequal gender relations, however data is wanting on these issues. Although contraceptive prevalence among currently married women of

reproductive age is increasing rapidly in many developing countries, the rates have not yet reached those of developed countries. The level of contraceptive use in most developing countries is higher among women in their thirties and typically lowest among teenage women and women in their forties.¹ Such considerations as desired family size & child spacing influence contraceptive prevalence among married women at individual level, while at macro-level, laws, regulations and cultural mores are important factors that determine contraceptive use.

Material & Methods

This study was a part of cross-sectional survey done in rural population of R.S. Pura Block which is a field practice area of Govt. Medical College, Jammu (Jammu District, J&K). A sampling frame of 191 Anganwari Centres (AWCs) was prepared where from a sample of 19

AWCs (10%) was drawn by simple random sampling. A house-to-house (HtH) survey was conducted to cover entire eligible couple population of selected AWCs and 1357 females (15-45 years) including pregnant women were contacted and information was taken using interview schedule using pre-designed, pretested performance. The variables such as age, caste, religion, occupation, income, literacy, type of family, number of family members, age at marriage, age at first conception, last child birth, number of conceptions were recorded on performance in accordance with specific descriptions. For purpose of identifying socio-economic determinants bearing relationship to the current use of contraception, besides tests of significance, unadjusted and adjusted odds ratios were also reported. For purpose of calculation of adjusted Odds Ratio (OR), multiple logistic regression analysis technique was used. For entire analysis, SPSS-WIN version 7.5 software was used.

Results

On the basis of results of univariate analysis, age of the wife and the husband, their literacy, husband's occupation, religion, type of family, income and number of conceptions were the factors which were slightly associated to the current use of contraception. All these potential predictor variables (socio-economic characteristics) were forced into logistic regression model equation.

The estimate of logistic co-efficient B corresponding to each predictor variable in the model, their associated standard error, adjusted OR and their corresponding 95% confidence intervals are presented in table 1. When all the variables were examined together for their association with current use of contraception, husband's age, his educational status and religion didn't show statistically significant association with the dependant variables. The remaining factors namely women's age, caste, income, husband's occupation and number of times a women conceived significantly correlated to current contraceptive status. After exercising control on other socio-economic characteristics, wife's educational status was one of the factors which showed independent association with current contraceptive use. Compared to illiterate women, formally educated women were 2.2 times more likely to practice contraception. The women in age group 25-34 had 0.89% lower chance of using a contraceptive compared to women in younger age group.

Likewise, compared to scheduled caste women, higher caste women were less likely to be current users of contraceptives. Women in higher income group were less likely to adopt contra-ception. Also wives of skilled and service persons were less likely to adopt contra-ception than the wives of agriculturists. Every time a women conceived, she was 1.5 times more likely to adopt contra-ception as evidenced in table 2.

Table 1: Logistic regression of current contraceptive use among rural women (15-45 yrs.) on selected socioeconomic characteristics

Variable	Co-efficient B	S.E. of B	Adjusted OR	95% CI OR(adjusted)
Husband's age				
£24	-	-	1.00	-
25-34	-0.636	0.708	0.529	0.132 to 2.122
35-44	-0.483	0.318	0.617	0.330 to 1.151
45+	0.0007	0.260	1.000	0.600 to 1.667
Wife's age				
£24	-	-	1.00	-
25-34	-2.241***	0.374	0.106	0.051 to 0.221
35-44	-0.376	0.224	0.687	0.442 to 1.066
Caste				
SC	-	-	1.00	-
ST	0.088	0.341	1.092	0.559 to 2.132
Higher caste	-2.270*	0.893	0.103	0.018 to 0.594
Backward	0.246	0.378	1.279	0.610 to 2.682
Income				
<2500	-	-	1.00	-
2500-5000	-1.402	.771	0.246	0.05 to 1.114
5000-7500	-1.224	0.747	0.294	0.068 to 1.270
7500-10,000	-1.911*	0.769	0.148	0.033 to 0.667
>10,000	-2.123*	0.868	0.119	0.022 to 0.656
Husband's literacy				
Illiterate	-	-	1.00	-
Just literate	-0.314	0.284	0.733	0.418 to 1.274
Formal education	0.032	0.367	1.033	0.503 to 2.120
Wife's literacy				
Illiterate	-	-	1.00	-
Just literate	-0.188	0.244	0.828	0.513 to 1.336
Formal education	0.791*	0.370	2.207	1.067 to 4.557
Husband's occupation				
Agriculture	-	-	1.00	-
Unskilled	0.109	0.316	1.115	0.600 to 2.071
Skilled	-0.815**	0.252	0.443	0.270 to 0.726
Business	-0.108	0.217	0.898	0.587 to 1.373
Service	0.705***	0.223	0.494	0.319 to 0.765
Religion				
Hindu	-	-	1.00	-
Muslim +	0.177	0.188	1.194	0.825 to 1.728
Christian				
Sikh	5.607	8.297	?	?
Type of family				
Joint	-	-	1.00	-
Nuclear	-0.136	0.193	0.873	0.598 to 1.275
No. of conceptions	-0.429***	0.063	1.536	1.359 to 1.737
Constant	1.508	0.873	-	-

? : failed to converge, could not be estimated

*p<.05

**p<0.01

***P<.001

Table-2: Predictive Logistic Regression B estimates and their standard errors

Variable	B Estimate	S.E.
Wife's age		
25-34	-2.7101	0.3008
35+	-0.6088	0.1741
Caste		
ST	-0.0175	0.3330
Higher Caste	-2.5142	0.9080
Others	0.1055	0.3673
Income		
2500-5000	-1.2619	0.7255
5000-7500	-1.1450	0.7041
7500-10000	-1.9024	0.7224
>10000	-2.1536	0.8296
Wife's Literacy		
Just Literate	-0.2699	0.2059
Formal Education	0.9204	0.2632
Husband's Occupation		
Unskilled	-0.0187	0.3102
Skilled	-0.9129	0.2427
Business	-0.1662	0.2087
Service	-0.6997	0.2182
No. of conceptions	-0.4566	0.0605
Constant	1.5744	0.8109

Discussion

The population growth in India continues to be high on account of large size of population in reproductive age group (estimated contribution 58%), higher fertility due to unmet need for contraception (estimated contribution 20%), high wanted fertility due to high IMR contributing towards 20% and over 50% of girls still marrying below age of 18.² There are gross differences in acceptance of the family planning practices in various regions of the country. A study in Pakistan also cited the desire for a male children and husband's disapproval as the main reasons for non-acceptance of contraceptive methods.³ From the multivariate analysis, it is evident that increase in age of female and the number of conceptions are the two most important factors affecting current use of contraception. The use of contraceptive methods increase 1.5 times with the increase in number of conceptions which is directly proportional. Compared to illiterate women, formally educated women are likely to practice contraception. Likewise compared to higher caste, higher income group and wives of skilled and service persons; SC women, lower income group and wives of unskilled workers respectively are more likely to currently use one of the methods of contraception. This is attributable to the fact that in terms of absolute number i.e. out of 875 current users, 720 (82.2%) belong to SC caste and also the average number of conceptions were higher in SC women, women in lower income group and wives of unskilled workers. Higher prevalence of contraceptive use in SC women was also seen in NFHS-2 (J&K).⁴ However another study

showed that with increasing socio-economic status, there was an increasing trend within the family.⁵

When all the variables were examined together for their association with the current use of contraception in multivariate analysis, the age of women, caste, income, husband's occupation and number of conceptions showed independent association with current use while husband's age and literacy, religion and type of family did not show significant relationship. In a study conducted in Wardha among eligible women, it was observed that income and education were not associated with contraceptive use but it was higher in nuclear families.⁶ However another study conducted in the slum dwellers in Delhi reported that only 25% of eligible couples are currently using any contraceptive method, the commonest method was tubectomy. It can be concluded that there is scope for improvement in qualitative and quantitative family planning services. The trend has shown in this study that the acceptance of sterilization procedure was common after completion of large family size which was nearly 4. The young couples need to accept more of spacing methods before their completion of family size. There is need for generating the demand through the involvement of agencies like PRIs, Mahila Mandals, Mahila Swasthya Sanghs and Voluntary agencies. There is also the need for a change in their health-seeking behaviour and the IEC activities need to be strengthened. The active participation particularly of the women is to be emphasized in the IEC activities.

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