# Prevalence and Factors associated with practice of modern Contraceptive Methods among currently Married Women in District Naushahro Feroze

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## Introduction

Pakistan is the seventh most populous country in the world and fourth in Asia with a population 130.6 million in 1998. With a growth rate of 2.4%, the population of Pakistan will double to 260 million by the year 2035. The economic implications of this rapid growth is enormous and translates into poor quality of life and health for an average Pakistani.1,2

Family planning can improve womens' health in childbearing years. Regulating fertility is as important as controlling mortality and morbidity and is an essential component of personal, social and economic development.3 The international conference on population and development (ICPD) estimated that 350 million couples worldwide lack access to the full range of modern family planning methods.4 In 1950s, Pakistan was a pioneer among developing countries in supporting family planning activities5,6 but Pakistani families have been slower to adopt family planning practices than their south Asian neighbors.7,8 More than one third of the Pakistani women wish to space next birth or limit family to its current size but are not using any contraceptive method.9

Total fertility rate in Pakistan has declined slowly, from about 6.0 lifetime births per women in 1984-85 to 5.4 in 1990-91.10 The maternal mortality ratio (MMR) officially quoted for Pakistan is 340 per 100,000 live births.11 Only 20% of women are assisted by a trained provider during delivery.9 About 200,000 maternal deaths per year can be attributed to the lack or failure of contraceptive services.12 A recent survey in Pakistan indicates that pregnancy related conditions constitute 13% of the total disease burden.9

The status of women is considerably worse in South Asia compared to the rest of the world. Pakistan has one of the worst records in female health and education within South Asia. Database in Pakistan regarding womens' health is deficient; biomedical, epidemiological and socio-economic data are needed to assess women's health status and to evaluate related interventions. There is a particular need for research on womens' health, in order to design programs and provide services effectively to reduce the burden of disease and its economic implication. The objective of this study was to assess the prevalence of modern contraceptive methods and evaluate factors that influence the practice of family planning methods.

## Methods

This community based cross-sectional study was conducted from May to June 2000 in District Naushahro Feroze. District Naushahro Feroze is situated along the south bank of River Indus that separates it from Larkana and Dadu District. Geographically it is one of the smallest administrative District of Sindh province with the total population of 1,065,000.13

Two-stage cluster sampling was employed for selection of households and recruitment of women of reproductive age (15-49) living in District Naushahro

Table 1. Socio-denographic characteristics of carrently married women of reporductive aged (15-49) years in District Nausbahro Freoze.

| Characteristics | Frequency | Percentage (% |
|---|---|---|
| Age of the respondent: | | |
| 15-22 | 32 | 7.6 |
| 23-30 | 165 | 39.0 |
| 31-38 | 136 | 32.4 |
| 39 or more | 88 | 21.0 |
| Neab age of the respondent (+SD) | 32. (0.3 | |
| Education of the women | | |
| No schooling | 296 | 70.5 |
| Primary | 65 | 15.5 |
| Secondary | 32 | 7.6 |
| Intermediate or above | 27 | 6.4 |
| Average education of the women (+SD) | 32.(0.3) | 21.0 |
| Education of the husband: | | |
| No Schooling | 118 | 28.1 |
| Primary | 80 | 19.0 |
| Secondary | 100 | 23.8 |
| Intermediate or above | 27 | 6.4 |
| Average education of the women (+SD) | 2.3 (0.1) | |
| Total number of the persons living in the household: | | |
| 2-5 | 92 | 21.9 |
| 6-10 | 234 | 55.7 |
| 11-15 | 72 | 17.2 |
| 16 or more | 22 | 5.2 |
| Average family size (+SD) | 8.3 (0.2) | |
| Own cultivated land: | | |
| Yes | 106 | 25.2 |
| No | 314 | 74.8 |
| Women's occupation: | | |
| Housewives | 380 | 90.5 |
| Employed | 40 | 9.5 |

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| | | | | |
|---|---|---|---|---|
| Husband's occupation: | | | | |
| Professional | | 50 | 12.0 | |
| Office work | | 74 | 17.6 | |
| Business | | 109 | 25.9 | |
| Agriculture | | 79 | 18.9 | |
| Production related | | | | |
| Transport | | 59 | 14.0 | |
| Not working/related | | 27 | 6.4 | |
| Exposur of family planning message on TV: | | | | |
| Yes | | 307 | 73.1 | |
| No | | 113 | 26.9 | |
| Women's approval of family planning | | | | |
| Approve | | 374 | 89.1 | |
| Disapprove | | 46 | 10.9 | |
| Currently using contraceptive | | | | |
| Yes | | 117 | 27.9 | |
| No | | 303 | 72.1 | |

Table 2. Univaritate analysis of associated with use of family planing methods among currently married women of reproductive aged (15-49 Years) in District Nausbabro Feroze.

| | | | | |
|---|---|---|---|---|
| Age of the respondent: | | | | |
| 15-22 | 5(4.3 | 27(8.9 | 1 | - |
| 23-30 | 39(33.3) | 125(41.3) | 1.7 | (0.3-4.6 |
| 31-38 | 41(35.0) | 95(31.3) | 2.3 | (0.8-6.5) |
| 39or more | 32(27.4) | 56(18.5) | 3.1 | (1.1-8.8) |
| Education of the women | | | | |
| No schooling | 80(68.4) | 216(71.3) | 1 | - |
| Primary | 17(14.6) | 48(15.8) | 11 | (0.6-19) |
| Secondary | 13(11.1) | 19(6.2) | 0.5 | (0.3-1.2) |
| Intermediate or above | 7(5.9) | 20(6.6) | 1.1 | 0.4-2.6) |
| Education of the husband: | | | | |
| No Schooling | 23(19.6) | 95(31.3) | 1 | - |
| Primary | 22(18.9) | 58(19.1) | 1.5 | (0.8-3.1 |
| Secondary | 34(29.0) | 66(21.9) | 2.1 | (1.2-3.9) |
| Intermediate or above | 38(32.5) | 84(27.7) | 1.8 | (1.1-3.4) |
| Women's occupation: | | | | |
| House wiver | 100(85.5) | 280(92.4) | 1 | - |
| Employed | 17(14.5) | 23(7.6) | 2.1 | (1.2-4.0) |
| Women can go to a local health provider alone: | | | | |
| No | 71(60.7) | 217(71.6) | 1 | - |
| Yes | 46(39.3) | 86(28.4) | 1.6 | (1.2-2.5) |
| Exposure to family planning message on radio: | | | | |
| No | 64(54.7) | 152(50.2) | 1 | - |
| Yes | 53(45.3) | 151(49.8) | 0.9 | (0.5-1.3) |
| Exposure to family planning message on TV: | | | | |
| No | 25(21.4) | 88(29.1) | 1 | - |
| Yes | 92(78.6) | 215(70.9) | 1.5 | (0.9-2.5) |
| Husband's approval of family planning: | | | | |
| Disapprove | 6(5.1) | 71(23.4) | 1 | - |
| Approve | 111(94.9) | 232(76.6) | 5.6 | (2.4-13.4) |
| Living children: | | | | |
| 0-2 | 24(20.5) | 110(39.0) | 1 | - |
| 3-4 | 29(24.7) | 73(25.8) | 1.8 | (0.9-3.4) |
| 5 or more | 64(54.7) | 120(42.5) | 2.4 | (1.4-4.2) |

Feroze. A sample of 420 women was estimated for achieving both the objectives of the study. At first, we divided the district into clusters according to geographical boundaries from which, 60 clusters were selected randomly with an average of 50 houses in each cluster. Within each cluster every 7th household was selected systematically. If more than one eligible respondent was present in the house, the first woman contacted was selected.

After obtaining a verbal consent from subjects, trained interviewers administered a structured questionnaire. Data were collected regarding socio-demographic characteristics (age, ethnicity, religion,

number of children, education), economic (total income, employment status) and husband approval for family planning practice. Additionally, information regarding previous abortions or miscarriages and exposure to family planning messages on electronic media were also gathered.

Weekly meeting was arranged regarding the update of the project and to discuss the current issues and problems. A field supervisor assisted the principal investigator in planning, and implementation phase of the research protocol.

Descriptive analysis was done by calculating mean and standard deviation for continuous and proportion for categorical variables. To identify factors associated with modern contraceptive use, association between outcome variable (family planning user & non-user) and independent variables (age, education of respondent, education of the husband, employment status, exposure to family planning messages, husband approval) were sought. Crude odds ratio (OR) and their 95% confidence intervals (CI) were calculated by applying univariate logistic regression analysis. Variables with p-value <0.25 or which were biologically meaningful were selected for multiple logistic regression analysis.

The final multiple logistic regression was performed to assess the independent effects of individual factors by controlling potential confounders, and adjusted OR (AOR) with their 95% CI were computed. After obtaining main effect model, all plausible interactions were evaluated. Pearson's chi-square test was performed for the model goodness of fit. Epi-info version 6 was used to enter the data and analysis was performed using statistical package for social sciences version 10.

# Results

The demographic characteristics of the respondent are shown in Table 1. We interviewed 420 married women of reproductive age (15-49 years) resident of Naushahro Feroze. Mean (and standard deviation) age of the respondent was 32.4+0.3. Seventy percent of the women had no formal education, while 15.5% had primary, 7.6% secondary and 6.4% intermediate or above education. Only 9.5% women were doing any paid job. A large percentage of women (70%) in Naushahro Feroze lived in houses which had facilities, which are counted as proxy indicators of economic well-being. At the time of survey about 18% of women in Naushahro Feroze were pregnant. Fifty two percent women had 4 or more pregnancies. About 26% women reported experience of abortion and miscarriage. Of 420 women 117(27.9%) (95% C.I 23.6-32.4) were currently using different methods of contraception (Figure).

Result of univariate analysis (Table 2) shows that

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Table 3. Multivartiate analysis of factors associated with use of family planning methods among currently married women of reporductive aged (15-49 years) in District Nausbahro Feroze.

| Variable | Adjusted OR | 95 % C.I. |
|---|---|---|
| Education of the husband: | | |
| No Schooling | 1 | - |
| Primary | 1.3 | (0.6-2.5) |
| Seconfary | 2.4 | (1.2-4.6) |
| Intermediate or above | 1.6 | (0.8-3.0) |
| Women's occupation | | |
| house wives | 1 | - |
| Employed | 2.5 | (1.2-5.2) |
| Women can go to local | | |
| Health provider alone: | | |
| No | 1 | - |
| Yes | 1.4 | (1.1-2.4) |
| Husband's approval of family | | |
| Planning | | |
| Disapprove | 1 | - |
| Approve | 15.4 | (2.2-13.2) |
| Living children: | | |
| 0-2 | 1 | - |
| 3-4 | 2.2 | (1.2-4.3) |
| 5 or more | 3.0 | (1.7-5.3) |

family planning practice of women in the district studied was significantly associated with socio-demographic and economic characteristics of respondent women's mobility, exposure to family planning message on media, husband approval and number of living children (P <0.025).

Final multiple logistic regression analysis (Table 3) shows that with husband agreement [OR, 5.4 95% CI 2.2-13.2], women can go alone to health care

provider [OR, 1.4 95% CI 1.1-2.4] and women employee status [OR 2.5 95% CI 1.2-5.2] were found significantly associated with the practice of family planning methods. Similarly, those women who had 3 or more children were more likely to use family planning methods compared to those who had 2 or less children. Husband's education was also found to be significantly associated with the practice of family planning.

## Discussion

Family planning is acknowledged in most developing countries to be an effective way of improving the health of mothers and children and has important implication in population issues. But use of contraceptive method is still very low in Pakistan.

The prevalence of modern contraceptive method use among women of reproductive age (15-49 years) in District Naushahro Feroze was found to be 27.9%. Previous studies showed higher level of contraceptive use among educated than among uneducated women.14,15 The literacy rate of Pakistan is very low when compared to international standards. Recent analysis of Demographic Health Survey (DHS) for 25 developing countries confirm previous findings from the World Fertility Survey (WFS) that the better educated women are more likely to practice contraception.16 However, in our study we did not find any significant association with level of women education and practice of contraceptive method. The low status of women is possibly a factor in the limited use of family planning methods in Pakistan.

The results of the analysis confirm the importance of women's economic empowerment. Working women are presumed to have greater control over household decisions and consequently more control over family planning practice .Our result is consistent with a study conducted in Togo. Their finding indicates that, after controlling for other factors, women who were employed were using contraception method more than those who were not employed.16 Women's mobility is an important variable which shows the extent of independence of women in decision making. A striking feature of Pakistani women is their limited mobility even for health care.

Formal education of the husband is also viewed as fundamental to individual understanding and to adopt method of contraceptive use. Husband's approval of family planning was found to be an important predictor of contraceptive use. This is consistent with a study conducted in Sri Lanka, where the female literacy is high; women whose husband's disapprove of family planning had four times higher risk of unwanted pregnancy compared to those who had husband's approval.17

Majority of women were illiterate, so age could not be assessed accurately. Questions were asked retrospectively about previous abortions and miscarriages so the chances of recall bias cannot be eliminated.

The actual use of modern contraceptive method is low in district Naushahro Feroze. Certain socio-demographic factors such as husband's education, women's occupation, women's mobility, number of living children and husband approval have a considerable impact on the practice of modern family planning methods.

In this study, husband's education and approval were found important for the practice of contraceptive methods. Therefore, male and female schooling should be an essential strategy in our country. In district Naushahro Feroze and other similar localities, group discussion on various issues related to family planning and reproductive health, which may be helpful in creating awareness.

## Acknowledgements

We are grateful to the respondents of the community-based survey and to the community and health care providers key informants. We wish to thank Dr. Rahim Bux Bhatti and other volunteers and staff of the patients welfare society, Gambat for their tremendous support to conduct the research in District Naushahro Feroze. We are greatly indebted to Mr.Iqbal Azam (Assistant Professor, CHS, AKU) for his valuable guidance in statistical analysis. We are thankful to Dr. Zahid Ahmed Butt, for his valuable help.

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## Abstract

Objective: To estimate the prevalence and factors associated with practice of modern contraceptive methods among currently married women of reproductive age group (15-49 years) in District Naushahro Feroze.

Methods: A community based cross-sectional survey was conducted from May to June 2000. We interviewed 420 currently married women of reproductive age group (15-49) years. Information regarding socio-demographic factors, economic condition, their source of information for the message of family planning and reason of using any modern contraceptive method.

Results: The prevalence of modern contraceptive method was 27.9%. Final multiple logistic regression analysis showed that with husband agreement (OR, 5.4; 95% CI 2.2-13.2), women could go alone to a health care provider (OR, 1.4; 95% CI 1.1-2.4) and women employment status (OR, 2.5 95% CI 1.2-5.2) were significantly associated with practice of modern contraceptive methods. Similarly, those women who had 3 or more children were more likely to use any modern contraceptive methods compared to those who have 2 or less children. In addition, husband's education was also found significantly associated with family planning practice.

Conclusion: The practice of modern contraceptive method is low. Socio demographic factors of women were significantly associated with use of modern contraceptive methods. Male and female education and small group discussions of various issues related to family planning and reproductive health may be helpful in creating awareness in the district (JPMA 54:461;2004).