

SOCIO-ECONOMIC AND DEMOGRAPHIC FACTORS AFFECTING ADOPTION OF POPULATION CONTROL METHODS IN PAKISTAN

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Abstract

The present study investigated the household's socio-economic and demographic factors affecting the adoption of Population Control Methods (PCM) in Pakistan. Data of 39049 married women of reproductive age (15 to 45 years) taken from Pakistan demographic household survey (2006-07) were analyzed by SPSS through multinomial logistic regression. Only 34.54 per cent respondents practiced PCM and from various socioeconomic and demographic factors work status of both wife and husband, wealth index and urbanization were found most profound in affecting adoption of PCM in Pakistan. Women from professional and hard labour group were 38 and 17 per cent more likely to adopt traditional PCM and 0.99 and 1.21 times to adopt efficient PCM as compared to non-working women. Mothers from sales, clerk occupations were 20 per cent more likely to adopt efficient PCM than non-working mothers. Husbands from professional category were 28 and 55 per cent more likely to adopt traditional and efficient PCM respectively. Husband with sales and clerical occupation had 2.8 and 98 per cent more chances to adopt traditional and efficient PCM respectively compared to husbands with no job. Husbands having hard labour job were also more inclined to adopt traditional and efficient PCM by 18 percent and 64 per cent. The probability to adopt PCM decreased with the decrease in wealth index. The odds of using traditional and efficient methods were 0.178 and 0.271 for poorest family as compared to the richest ones. Similarly, respondents from wealth index of poor, middle and rich were 0.388, 0.539 and 0.726 times likely to adopt efficient methods. Improvement in education and employment opportunities in all areas generally and especially in rural areas will help to reduce non-adoption ratio among the population of Pakistan.

Key Words: Population control methods, Traditional, Efficient, Pakistan

INTRODUCTION

The population growth and economic development are two most cherished phenomena all over the world. In the view of population economist the main reason behind poverty is the rapid population growth that in turn gives way to negative economic penalty, a real fear for developing countries (Klasen et al. 2007). The rapid population growth turns down the opportunities of better life for the already born children by decreasing the investment at the domestic and national levels and

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increasing poverty (Hakim, 2002). The economic repercussion of this fast population growth is enormous and translates into poor quality of life and health of an average Pakistani (Afzal, 2009; Ali & Rozi, 2004).

Pakistan is the sixth most populous country of the world and the third highest contributor to the global population after India and China (GOP, 2013). According to UN Projections, Pakistan with a population growth rate of 2.05% will become third most populated country by the year 2050. Among south Asian countries Pakistan is having the highest total fertility rate (TFR) and at the same time lowest contraceptive prevalence rate (CPR). Many authors believe that Pakistan is still experiencing “Natural” fertility and the stage of intentionally controlled fertility has not yet begun, in spite of being the first developing country to initiate an official public family planning program in 1951 (But & Jamal, 1993). Population growth rates began to turn down after gaining peak during two decades i.e. from 1961 to 1981 owing to high fertility (Sathar and Casterline, 1998). Even Iran and Indonesia have TFR about 2 and 2.5 while CPR is 74 and 60 respectively (Population Reference Bureau, 2009). Despite all the efforts through various programmes and campaigns by government and many NGOs, adoption of Population control Methods (PCM) is very low. Various human, household and institutional characters play their role in decision making of adoption of PCM. The present study is an effort to investigate the factors affecting the adoption of population control methods and suggest some policy recommendations to encourage the adoption of population control methods.

Review of Literature

Education was found as the prime factor in determining the use of modern population control methods. A lot of studies have affirmed that education level especially of woman improves the likelihood of approving the population planning for her family (see Mehmood, 1998; Banerjee, 2004; Okezie et. al, 2010; Islam and Nesa, 2009). Not only women but men with formal education were more inclined to use modern methods of contraceptives (Agha, 2010). Men were found to be the prime decision-makers relating to fertility issues (Dinh, 1997) and (Omos, 2007) their awareness and approval of the population control increased the contraception use by women (Casterline, et al 2001; Khan & Ejaz, 2010). Majority of men wanted more children to carry on family

name and support economically in future (Parakoyi et al. 2005). This is not particular with men; even women with strong son preference had the lesser adoption of birth control practice (Kumari, 2005). Therefore, use of family planning techniques increased with the increase in number of living children and sons, (Mehmood & Ringheim, 1996; Nayab, 1999; Agha, 2010; Khan & Ejaz, 2010; Zaidi *et al.*, 2010; Ali et al., 2004; Hakim, 2000).

A negative relationship was found between women's age at marriage and the number of children born (Islam and Nesa, 2009). Women of age 25-30 years were most likely to adopt population control methods (Kamal, 2011 and Hakim, 2000, Agha, 2010) and the men below the age of 45 years (Agha, 2010). The relatively young mothers of fewer children were more likely to use injectables and IUD's, whereas the traditional methods were more common among the older women with more children (Banerjee, 2004).

Residence in rural areas had a positive influence on fertility (Dinh, 1997). Total fertility rate (TFR) was higher for rural area than for urban area (Islam and Nesa, 2009). Women living in urban areas used birth control methods (Durr-E-Nayab, 1999 and Kamal, 2011) owing to better access to family planning services (Khan & Ejaz, 2010). Extended family system proved to be an impediment to measures for lowering fertility (Okezie et al. 2010). On the contrary a couple from nuclear family had more children than a couple from a joint family before adopting sterilization (Jain, 2004).

A stable source of income and employment status of husband had significant negative effect on fertility (Dinh, 1997) and positive link with use of PCM (Khan & Ejaz, 2010). Woman's position herself also played a role in her decision of family planning. Contraceptive prevalence was higher among working women, women of high income groups or possessing property rights (see Kumari, 2005; Arshad & Manzoor, 2002; Hakim, 2000; Mehmood & Ringheim, 1996). The high cost of raising number of children played an important role in the decision of urban woman to adopt contraception (Hakim, 2000).

A couple's joint support and discussion about family planning also showed a strong effect on the use of PCM (Mehmood, 1998; Ali & Sultan, 1999). Mostly women do not use any fertility directive owing to the lack of communication with husband (Nayab, 1999). In addition to

these facts use of PCM was found positively related with home visitation of family planning field workers who distributed pills and condoms (Khan & Rehman, 1996; Mehmood & Ringheim, 1996). Use of injectables and IUD's was higher among those women who visited fixed site service centers.

MATERIALS AND METHODS

Data Description

Pakistan Demographic and Health Survey, PDHS (2006-07), represents the population of Pakistan over all the urban and rural areas of four provinces excluding Federally Administered Tribal Areas (FATA), Northern Areas (FANA) and restricted military and protected areas. From the total 102060 households, data collected from 39049 currently married women of active reproductive age i.e. 15 to 45 years were utilized for the present study.

Description of Variables

In this study the dependent variable was classified into three categories. These three categories are following: 0= Non Adoption

1= Adoption of traditional method

3= Adoption of efficient method

The respondent is considered non-adopter if she or her husband has not adopted any population control method and the respondent is considered an adopter of traditional methods if she or her husband has used any one from the withdrawal, rhythm and other. Respondent is considered the adopter of efficient method if she or her husband has used any one or more than one from the female sterilization, male sterilization, condoms, injectables, and Inter Uterine Devices (IUDs).

Independent variables are divided into two parts i.e. socio-economic variables and demographic variables. Socio-economic variables include the women education and husband education, wealth index of the household, occupational status of the female and husband. Wealth index, first time introduced in PDHS (2006-07) in place of household income, was constructed on the basis of the assets owned by the household. These assets included type of flooring, water supply, sanitation facilities, type of vehicle, persons per sleeping room, ownership of agriculture land, domestic servant and availability of electricity, radio, television, telephone, refrigerator etc. Each household was assigned scores on the basis of these assets. Then these standardized scores were used to create

the break points that defined different quintiles as lowest, low, and middle, high and highest. The demographic variables included in the model are women age, husband's age, family size, region, total number of living children and living sons.

METHODOLOGY

SPSS 17 was used for the data analysis. Multinomial logistic regression (MLR) analysis was used to estimate the probability of the adoption status of the population control methods. Logistic regression analysis is used when dependent variable is not continuous rather a discrete categorical or binary in nature. In this study MLR model was used to estimate the categorical outcome for the individuals using the appropriate economic mode. For N categories model estimated the N-1 equations and all categories are explained with the context of that reference category. The basic equation of multinomial logit model is as follows:

$$\ln \frac{\Pr(Y = a, b)}{\Pr(Y = c)} = \ln \frac{\Pr(Y = a, b)}{\Pr(Y = a, b) + \Pr(Y = b, c) + \Pr(Y = c, a)} \quad (3.1)$$

Where

Y= dependent variable with N= a, b, c (i.e. categories)

The basic equation with reference to category no adoption taken as 0 is as follows

$$\ln \frac{\Pr(\text{method_type} = 1, 2)}{\Pr(\text{method_type} = 0)} = \beta_{(1,2)} + \sum_{j=1}^J \beta_{(1,2)j} X_j \quad (3.2)$$

Where

Adoption status (Y).....J = 0, 1, 2

Where X1, X2, Xn are all independent variables included in the model.

β = is the constant term

β = the coefficient of the predictor variables.

Method-type= Adoption status of population control method

The coefficients of logistic regression showed, for a unit change ($\beta_i > 0$ increase and $\beta_i < 0$ decrease) in independent variable, change in the log

odds of dependent variable holding all other variables constant.

RESULTS & DISCUSSION

Table 1. Frequency Distribution of Adoption of Population Control Methods in Pakistan (PDHS-2006-07)

Adoption Status of Population Control Methods	Frequency	Percent
No Adoption	25561	65.46
Adopters of Traditional Method	3221	8.25
Adopters of Efficient Method	10267	26.29
Total	39049	100

Frequency distribution of adoption of population control methods showed that from the total 39049 respondent women two third majority was non adopter, 8 percent were the adopters of traditional methods and the remaining one fourth were adopters of efficient methods.

Table 2 Socio Economic Factors Affecting Probability of Adoption of Traditional and efficient PCM in Pakistan

		Traditional		Efficient	
Independent Variables		Coefficients	Odd Ratio	Coefficients	Odd Ratio
Intercept		-1.340		-0.471	
Woman Education	illiterate	-0.476	0.622	-0.335	0.715
	Primary but less than secondary	-0.153	0.858	-0.021	0.979
	less than secondary but				
	higher	-0.089	0.915	-0.136	0.873
	Higher education	Ref Category			
Husband Education	illiterate	-0.066	0.936	-0.001	0.999
	Primary but less than secondary	-0.039	0.962	-0.010	0.990
	less than secondary but				
	higher	0.142	1.152	-0.076	0.927
	Higher education	Ref Category			
Woman Occupation	Professional	0.323	1.381	-0.009	0.991

	Services	0.007	1.007	0.085	1.089
	Sales, clerk	-0.334	0.716	0.187	1.206
	Hard labour	0.146	1.158	0.193	1.212
	Not working	Ref Category			
Husband Occupation	Professional	0.251	1.285	0.440	1.552
	Services	-0.011	0.989	0.447	1.563
	Sales, clerk	0.237	1.268	0.654	1.923
	Hard labour	0.166	1.181	0.494	1.639
	Not working	Ref Category			
Wealth-index	Poorest	-1.726	0.178	-1.307	0.271
	Poor	-1.064	0.345	-0.946	0.388
	Middle	-0.589	0.555	-0.618	0.539
	High	-0.151	0.860	-0.320	0.726
	Highest	Ref category			

The reference category is : No

Adoption

The results showed that probability of the adoption of PCM is positively dependent on wealth index of the household, husband's education, female occupation and husband's occupation. Women who had no education were 38 and 29 percent less likely to adopt traditional and efficient PCM respectively than women with higher education. While women with primary and secondary education were 0.858 times and 0.95 times likely to adopt traditional and efficient methods as compared to highly educated women. It was evident from the results that husband with higher education was positively related with the adoption of population control methods. Husbands from all education categories except secondary but less than higher education were less likely to adopt PCM than with highly educated ones.

Women's occupation status showed more profound results in PCM adoption. Women from professional group followed by hard labour group were 38 and 17 per cent more likely to adopt traditional PCM and 0.99 and 1.21 times to adopt efficient PCM as compared to non-working women. While women from sales, clerk occupational category were 29 per cent less likely to adopt traditional PCM but 20 per cent more likely to adopt efficient PCM. Husband's occupational status showed a maximum contribution in decision about PCM adoption. Husbands from

professional category were more likely to adopt traditional and efficient PCM by 28 and 55 per cent respectively. From services category 1 per cent were less likely to adopt traditional PCM but 56.3 per cent more likely to adopt efficient PCM. Husband from sales and clerical occupation group had 2.8 percent more chances to adopt traditional PCM and 92 percent more for efficient PCM compared to husbands with no job. Husbands having hard labour job were also more inclined to adopt traditional and efficient PCM by 18 percent and 64 percent.

The probability to adopt PCM decreased with the decrease in wealth index. The results showed that log-odds of using traditional and efficient methods were 0.178 and 0.271 when the respondents belonged to a poor family as compared to those who were rich. Similarly, the poor were 0.388 times, middle wealth index group were 0.539 times and the rich 0.726 times more likely to adopt efficient methods than the richest families.

Table 3: Demographic Factors Affecting Probability of Adoption of Population Control in Pakistan (2006-07)

		Traditional		Efficient	
Independent Variables		Coefficients	Odd Ratios	Coefficients	Odd Ratios
Intercept		-2.615		-0.806	
Woman age,	15-25 years				
	26-35 years	-0.583	0.56	-0.431	0.650
	36-49 years	-0.120	0.88	-0.029	0.972
	Above than 49 years	Ref category			
Husband age,	15-25 years				
	26-35 years	-0.013	0.987	-0.280	0.756
	36-49 years	0.185	1.203	0.142	1.152
	Above than 49 years	0.408	1.504	0.407	1.502
Family size up to 10 members		Ref category			
From 11 to 20 members		0.329	1.389	0.043	1.044
More than 20 members		0.135	1.144	-0.138	0.871
Alive Children		Ref category			
No		-1.962	0.141	-2.101	0.122

	1 to 4	-0.351	0.704	-0.240	0.787
	5 to 9	-0.517	0.597	-0.268	0.765
	Above than 9	Ref category			
Alive Son	No	-0.140	0.870	-1.138	0.321
	1 to 2	0.219	1.245	-0.390	0.677
	3 to 5	0.389	1.476	-0.149	0.861
	Above 5	Ref category			
Region	Urban	0.804	2.234	0.783	2.188
	Rural	Ref category			

The reference category is No Adoption.

Results given in Table 3 explained that for women odds of adoption of traditional PCM increased with increase in age as women from 15-25 years category were less likely to adopt traditional and efficient PCM by 34 and 45 per cent respectively than women above 36 years. Odds of adoption decreased by 0.22 and 0.3 times of traditional and efficient PCM respectively for women aged 26 to 35 years, as compared to women aged 36 to 49 years. The husbands with the age of 15 to 25 years were 0.1 and 0.25 times less likely to adopt traditional and efficient methods as compared to husbands more than 49 years of age. Where the husband aged 26 to 35 years and the husband with the age of 36 to 50 years were 1.203 times and 1.504 times respectively likely to adopt traditional methods and 0.15 times and 0.5 times more likely to adopt efficient PCM as compared to those aged above 49 years.

Results explained that larger family size was positively and significantly related with the adoption of efficient PCM. Respondents from family up to 10 members were 0.389 times and of 11 to 20 members were 0.144 times more likely to adopt traditional PCM as compared to those who had family size above 20 members. The odds of adoption of PCM were strongly associated with more number of living children. The odds of the use of traditional and efficient PCM were about 0.86 and 0.88 times lower respectively for women having no living child, compared to those having above 9. Situation improved for women with 1 to 4 living children as odds of adoption of traditional and efficient PCM was 0.70 and 0.78 times respectively. The odd ratios were again slightly lower for women with 5 to 9 living children.

Findings indicate that presence of living son is an important and determining factor in adoption process of PCM. A family without son was less inclined to adopt traditional and efficient PCM by 13 and 68 percent respectively than those having above 5 living sons. Similarly, a family with 1 to 2 and 3 to 5 living sons was 1.245 and 1.476 times likely to adopt traditional PCM. While probability of adoption of efficient PCM was 33 and 14 percent lower for both these categories. Respondents living in urban areas were more likely to adopt traditional PCM by 1.234 times and efficient PCM by 1.188 times as compared to rural families.

ANALYSIS AT PROVINCE LEVEL

Table 4 Distribution of Adoption of Population Control Methods in Provinces (2006-07)

	Punjab		Sindh		NWFP(KPK)		Baluchistan	
Adoption status	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No Adoption	9739	60	7284	69	5035	66	3503	77
Traditional Method	1891	12	466	4	732	10	85	2
Efficient Method	4673	29	2847	27	1849	24	945	21
Total	16303	100	10597	100	7616	100	4533	100

Adoption rate of efficient PCM was highest in Province Punjab followed by Sindh and KPK ; while Baluchistan stood on last ladder. In adoption of traditional PCM Punjab and KPK showed significant performance. Maximum non-adoption was witnessed in Baluchistan.

Table 5 Socio Economic Factors Affecting Probability of Adoption of Traditional Methods in Provinces of Pakistan (2006-07)

	Punjab		Sindh		NWFP		Baluchistan	
Variables	Coeffi	Odd Ratio	Coeffi	Odd Ratio	Coeff.	Ratio	Coeff.	Ratio
Intercept	-1.409		-1.59		1.126		19.32	
Woman Education illiterate	-0.42	0.65	-0.95	0.38	0.328	1.38	-0.50	0.60

<i>Primary but less than secondary</i>	-0.28	0.75	-0.40	0.67	0.532	1.70	1.19	3.31
<i>secondary but less than higher</i>	-0.25	0.78	-0.14	0.87	0.76	2.14	1.03	2.79
<i>Higher education</i>	Ref category							
\Husband Education								
<i>Illiterate</i>	-0.12	0.89	0.45	1.56	-0.73	0.48	0.19	1.22
<i>Primary but less than secondary</i>	-0.16	0.85	0.07	1.07	-0.15	0.86	-5.55	0.025
<i>second ary less than but higher</i>	-0.07	0.93	0.35	1.42	-0.38	0.68	1.17	3.2 3
<i>Higher education</i>	Ref category							

Woman	occupation		0.2				-	
		0.26	1.300	6	1.29	-0.17	0.85	0.626
Working								0.535

Not Working Ref category

Husband	occupation	1.66						
		0.507	1	0.39	1.49	-0.15	0.86	6.09
Working								4.52

Not Working Ref category

Wealth-Index		0.35						
	-1.042	3	-3.039	0.048	-1.524	0.218	-0.910	0.403
Poorest								
		0.54						
	Poor-0.603	7	-2.961	0.052	-0.982	0.375	-0.389	0.678
		0.70						
	Middle-0.353	2	-1.306	0.271	-0.526	0.591	-1.613	0.199

High]-0.122	0.88	5	-0.317	0.729	-0.223	0.800	0.128	1.137
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Highest

Ref category

The reference category is: No Adoption

Results explained that women without any education were not likely to adopt PCM. Adoption of PCM was highly associated with higher education. Women having primary and secondary education showed high tendency towards traditional PCM only in Baluchistan. Husband education also explained its significance in adoption of PCM in both Punjab and KPK but in Sindh and Baluchistan contrary results were witnessed as illiterate husbands were 0.56 and 0.22 times respectively more inclined to adopt traditional PCM than highly educated husbands. Husbands with secondary education were 3.3 times likely to adopt traditional PCM in Baluchistan. Women having certain occupation were more probable to adopt PCM in Punjab and Sindh but not in KPK and Baluchistan. Employment status of men showed stronger results and except KPK in all provinces employed husbands have more tendency to adopt PCM. Increasing Wealth index showed a very solid association with adoption of PCM in all provinces.

Table 6: Socio Economic Factors Affecting Probability of Adoption of Efficient Methods in Provinces of Pakistan (2006-07)

Efficient Methods in Provinces of Pakistan (2000-07)									
		Punjab		Sindh		NWFP(KPK)		Baluchistan	
Variables		β	Odd Ratio	β	Odd Ratio	β	Odd Ratio	β	Odd Ratio
Intercept		-0.517		0.161		-0.13		-	
Woman's Education illiterate		-0.307	0.74	-0.61	0.54	-0.64	0.53	0.68	1.97
Primary but less than secondary		-0.06	0.94	-0.21	0.81	-0.34	0.72	1.02	2.76
secondary but less than higher		-0.19	0.83	-0.20	0.81	-0.21	0.81	0.55	1.75
Higher education		Ref category							

Husband's Education								
illiterate	-0.03	0.97	0.06	1.06	-0.30	0.74	0.16	1.17
Primary but less than secondary	-0.116	0.89	0.10	1.11	-0.27	0.76	0.09	1.10
secondary but less than higher	-0.10	0.90	-0.12	0.89	-0.23	0.79	0.22	1.25
Higher education	Ref category							
Woman's Occupation								
Working	0.036	1.04	0.15	1.16	-0.35	0.70	0.06	1.06
Not Working	Ref category							
Husband's Occupation								
Working	0.556	1.74	0.15	1.16	0.701	2.016	0.16	1.17
Not Working	Ref category							
Wealth-index								
Poorest	-0.95	0.385	-1.83	0.16	-1.06	0.35	-	1.75
Poor	-0.73	0.48	-1.31	0.27	-1.015	0.36	-	1.02
Middle	-0.47	0.63	-0.63	0.53	-0.84	0.43	-	0.98
High	-0.36	0.69	-0.27	0.76	-0.45	0.64	-	0.14
Highest	Ref category							

The reference category is: No Adoption.

It is evident from the results that adoption efficient PCM increased with increase in education in all provinces except Baluchistan. In Baluchistan women with no education, up to secondary and less than higher education were 0.97, 1.76 and 0.75 times respectively more likely to adopt efficient PCM. In Punjab and KPK efficient PCM were more adopted by highly educated husbands but in Sindh and Baluchistan this trend was reverse and

Table 7: Demographic Factors Affecting the Probability of Adoption of Traditional Methods in Provinces of Pakistan

		Punjab		Sindh		NWFP(KPK)		Baluchistan	
		β	Odd	β	Odd	β	Odd	β	Odd
Independent Variables		β	Ratio	β	Ratio	β	Ratio	β	Ratio
Intercept		-4.00		-4.69		-2.014		-4.00	
Woman's									
Age	15-25 years	-1.52	0.22	-1.24	0.28	0.29	1.34	-1.52	0.22
	26-35 years	0.78	2.18	-0.66	0.52	0.06	1.06	0.38	0.78
	36-49 years	Ref category							
Husband's									
Age	15-25 years	-0.37	0.68	-0.03	0.97	-0.51	0.59	-0.37	0.68
	26-35 years	-0.96	0.38	0.73	2.08	-0.47	0.63	-0.96	0.38
	36-49 years	-0.26	0.77	0.78	2.18	0.09	1.09	-0.08	1.06
	Above than 49 years	Ref category							
Family Size	Up to 10 members	-0.18	0.83	0.05	1.06	-0.06	0.94	-0.18	0.83
	From 11 to 20 members	0.14	1.15	-0.13	0.88	0.04	1.04	-0.14	0.85
	More than 20 members	Ref category							
Alive Children	No	-0.93	0.39	-0.43	0.65	-1.04	0.35	-0.93	0.19
	1 to 5	0.92	2.50	0.29	1.34	-0.21	0.81	-0.72	0.30
	Above than 5	Ref category							
Alive Sons	No	0.21	1.23	0.67	1.96	-0.42	0.65	0.21	1.23
	1 to 3	-0.32	0.72	0.79	2.21	0.02	1.02	-0.32	0.72
	more than 3	Ref category							

Region	Urban	0.51	1.66	1.77	5.91	0.87	2.38	0.51	1.66
	Rural	Ref category							

The reference category is: No Adoption

Results showed (Table 7) that women in age group of 26 to 35 years were 1.18 times more likely to adopt traditional methods as compared to women above 36 years in Punjab. Adoption of traditional PCM was lower in women up to 35 years in women of all provinces except Punjab. Husbands above 49 years were more likely to adopt traditional PCM in Punjab but in Sindh adoption was high among couples with husband aged from 26 to 35 years. In Punjab and KPK family of 11 to 20 members revealed its preference for traditional PCM adoption. In Sindh small family size exhibited only .06 times more preference than large sized family but Baluchistan showed 0.15 times less likelihood for adoption of traditional PCM.

Table 8: Demographic Factors Affecting the Probability of Adoption of Efficient Methods in Provinces of Pakistan

		Punjab		Sindh		NWFP		Baluchistan	
		β	Odd Ratio	B	Odd Ratio	B	Odd Ratio	β	Odd Ratio
Intercept		-0.496		-1.188		-1.447		-0.49	
Woman's age	15-25 years	-0.615	0.54	-0.29	0.74	-0.27	3	-0.32	0.71
	26-35 years	-0.508	0.60	0.02	1.02	0.10	5	0.708	0.34
	36-49 years	Ref category							
	Above than 49 years	Ref category							
Husband's age		0.774	2.17	-0.43	5	0.497	8	-0.57	3
15-25 years		-			0.9		0.95		0.8
26-35 years		0.160	0.85	-0.09	1	-0.04	9	-0.16	5
36-49 years					1.3		1.15		1.1
Above than 49 years		0.248	1.28	0.27	0	0.146	7	0.15	8
Ref category		Ref category							

Family Size	Up to 10 members	-	0.933	0.21	-	0.036	0.9	6	0.389	1.47	5	0.41	1.5	8
	From 11 to 20 members	-	0.749	0.37	-0.47		0.6	2	-0.46	0.59	-0.74		0.3	5
	More than 20 members	Ref category												
Alive Children	No	-	1.587	0.20	4	-1.64	0.1	9	-0.77	0.46	-0.88		0.4	0
	1 to 5	-	0.163	0.82	-0.22		0.8	0	-0.14	0.85	-0.17		0.8	2
	Above than 5	Ref category												
Alive Son	No	-	1.098	0.34	-0.47		0.6	2	-0.56	0.47	-0.65		0.4	4
	1 to 3	-	-0.11	0.98	-0.16		0.8	4	-0.07	0.92	-0.11		0.9	0
	Above than 3	Ref category												
Region	Urban	-	0.751	2.12	0	1.026	2.7	9	0.78	2.18	0.75		2.1	2
	Rural	Ref category												

Results showed (table 8) that women aged from 26 to 35 years were less likely to adopt efficient methods as compared to women in the age group of 36 to 49 years in all provinces but women from 26 to 35 years were more inclined to assume efficient PCM than other age group women. While husband of age from 15-25 years and 36 to 49 years respectively were having 1.17 and 0.28 times more odds to adopt efficient PCM than other age group husbands in Punjab. In all other three provinces husbands of age from 36 to 49 were more likely to adopt efficient PCM. Respondents with the family size of up to 10 members were 0.21 times and of 11 to 20 members were 0.37 times likely to adopt efficient methods as compared to family of above 20 members in Punjab. In KPK and Baluchistan couples from family up to 10 members have more preference for efficient PCM by 0.47 and 0.58 times as compared to large families. Parents having more than 5 alive children were more inclined to practice efficient PCM than all the other parents over all. In the same way parents of more than 3 alive sons had more odds of adopting Efficient PCM. Number of living sons is a

very important factor that determines the adoption or non-adoption of population control methods. Women having no living son were 0.66 times and women having 1 to 3 living sons 0.06 times less likely to adopt efficient methods as compared to those who had more than 3 living sons. Urban women usually have better access to adopt population control methods as compared to rural ones. Urban women were 2.79 times likely to adopt efficient methods as compared to rural women in Sindh followed by 2.18 in KPK and 2-12 in Punjab and Baluchistan.

Conclusions and Recommendations

Over all it was found that from socioeconomic factors occupational status of both man and woman and its wealth index strongly decides the attitude towards population planning. Urbanization is the strongest demographic factor. Here it is important to explain that occupational status more or less depends upon educational attainment and both jointly have correlation with wealth index. Urban locality further explains better access to education, health centers, awareness and job opportunities. Thus education as well as involvement in earning process will ensure the improvement in adoption process of PCM in all areas of Pakistan. Therefore broadening the education opportunities and employment activities in all areas generally and especially in rural areas for both men and women will help reduce non-adoption ratio among the population of Pakistan.

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