

## Determinants of Fertility Intentions in Pakistan

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### Abstract

*In 1951 Pakistan ranked at 14th position in the world's populous countries but with 2.1 percent growth rate it has now become the 5th most high populated country in the world. The rise in growth rate of population of Pakistan is due to two factors which are slow fall of crude birth rate which was 45 per thousand in 1960 to only 28.2 per thousand in 2018 and second factor is low mortality rate. Logistic regression was used to find out determinants of fertility intentions of ever married women at national and regional level where dependent variable was a dummy (would you like to give birth to another child or not) while lot of socio- economic variables like place of residence, education, employment status & age at marriage were dependent variables. Result indicated that number of surviving children, age at marriage, contraceptive use of women were found to be major factors limiting fertility intentions (i-e) desire to have more children in Pakistan so increasing age at marriage, providing more health and contraception facilities can reduce fertility levels in Pakistan.*

**Keywords:** Fertility intentions, Dummy variable, Logistic regression, Contraception

### Introduction

In 1951 Pakistan ranked at 14<sup>th</sup> position in the world's populous countries. In 2015-16 its population jumped to 195.4 million approximately five times higher and in 2018-19 its population is exceeding 212.2 million. With this high population it has become the 5<sup>th</sup> most high populated country in the world. The current population growth rate is around 2.1 percent in 2018, one of the highest in the world, and with this growth rate of 2.1 percent it reached to 5<sup>th</sup> most densely populated country in the world. The rise in growth rate of population of Pakistan is due to two factors which are slow fall of crude birth rate which was 45 per thousand in 1960 to only 28.2 per thousand in 2018 and second factor is low mortality rate. Although there has been a fall in both birth rates as well as death rates in the past 6 decades but fall in death rates is faster as compare to fall of birth rates in Pakistan. The increase in population was slow in decades of 1960's and 1970's at about less than 2 percent due to overall high mortality rates for all age groups of people but because of declining death rates from 24 per thousand in 1950's to around 6.89 per thousand in 2018 made through advancement in medical sector increased population

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growth rate but there is no change in birth rates (prior to 1990's). Decline in Infant mortality rate from around 150 in 1947 to 24 in 2012-13 according to Pakistan Demographic & Health Survey ( PDHS) is a remarkable progress .The quick decline in overall mortality rates expanded life expectancy and huge gap was created between waning mortality and high fertility thus resulting in high growth rate of population, with bulk of 'youthful' also. Low mortality and high fertility if continue for extended time period will affect the structure, allocation and division of population and thus the population growth rates of any country.

Another reason for high population is high fertility rate. Fertility rates in Pakistan are extremely high. Usually fertility rate is taken as a proxy for presenting human population. Pakistan's total fertility rate (TFR) was estimated at 3.5 in 2017-18 marginally down from 7.0 in 1965. In India, the total fertility rate is 2.2 in 2018 an outstanding drop of almost 37 percent from 6.2 in 1965. In China, the total fertility rate fell to 1.6 in 2018 as compared to 6.4 in 1965 a drop of over 160 percent. The general fertility rate, which is defined as "the number of births per 1000 women in a year of age between 15 to 49" was 131 in Pakistan in 2012-13(PDHS).

Various reasons account for the slow progress in reducing the fertility rates i.e. illiteracy, disorganized and uneven allocation of family planning facilities, inclination towards sons and fear of safety and security in old age, etc.

High fertility, low mortality rates and massive rural- urban migration are the main causes of over population in Pakistan. The share of urban population which was approximately estimated to be 20 percent in 1955 is now 37 percent in 2018. The increase in urban population since 1955 is more than double due to modernization in agriculture sector which displaced rural labors as well as rapid industrial development in urban areas. A large number of jobless rural labors tend to seek jobs in urban informal sectors and live in poor physical and economic conditions. There has also been addition of several new cities and towns since 1951 with major cities bearing the most burden of population. For example, Karachi alone accounts for 21 percent of the urban population. Lahore,

Faisalabad, Rawalpindi, Gujranwala, Peshawar, Hyderabad, and Multan contain another 30 percent of the urban population. Thus, these major cities are accommodating large part of the urban population.

Crude birth rate exceeding 30 per thousand is measured as high while below 18 per thousand is measured as low. In 2011 the universal crude birth rate was 20 per thousand and in Pakistan it was 27.2 per thousand much higher than universal rate. In 1950 Pakistan's ranked 14<sup>th</sup> country in the world in terms of high population but in 2017-18 it has moved up to the 5<sup>th</sup> position.

The allocation of rural and urban population especially in developing countries is vital for the development planners. With the expansion of economic development massive rural-urban migration take place within the countries due to the availabilities of more job opportunities caused by expanding industrial and commercial zones in urban areas but a country like Pakistan, whose 70 percent population directly or indirectly depends upon agriculture sector, massive rural urban migration will be harmful for the economy due to the neglect of agriculture sector which is not affordable in present circumstances and urban areas are already overpopulated and congested. Therefore, to reduce rural-urban migration in Pakistan there should be more construction of roads connecting villages to cities. The small-scale industries should be encouraged and properly organized in rural areas. The industrial and technical knowhow, more schooling and expansion of medical services should also be made available in rural areas. The rural population should also share the fruits of development.

### **Aim of the Study**

To examine level and determinants of desired fertility intentions at national and provincial level in Pakistan.

### **Literature review**

After Malthus essay on "Principles of Population", much debate has been done on human fertility and fertility transition. The primarily thoughts of fertility transition started off

with Thompson (1929) book. According to him, decline in high fertility and high mortality is caused by migration of large number of rural surplus individuals from rural to urban cities where mode of living is completely changed because society transform from agrarian, ignorant society to industrial, cultured and contemporary society. Davis & Blake (1956) elaborated 11 intermediate factors which effect fertility. These 11 factors were grouped into three categories the first category is intercourse variables which includes age of entrance into sexual relations, stable celibacy, and duration of reproduction time between unions or after unions (i.e.) when divorce, separation or death of husband causes the unions to break, voluntary abstinence, involuntary abstinence, coital frequency. The second category includes conception variables which include fecundity or infecundity, use and non-use of contraception and fecundity or infecundity by voluntarily reasons (sterilization or health treatment etc.).The third category is gestation factor which includes fetal mortality, from involuntary causes and voluntary causes.

Butzig et.al, (1988) took time series data on total fertility rate for USA

$$TFR = f (PPR, Y_m, W_f, B_w, B_n \text{ and } U_i)$$

where PPR is female participation rate,  $Y_m$  is male earning,  $W_f$  is female wage,  $B_w$  and  $B_n$  is birth possibilities between working and non- earning women. He used simple regression and found that relation between fertility and women participation has changed from negative to positive and after a certain stage, high level of income effect overcomes substitution effect according to his result. Bongaarts & Potter (1983) came out with the result that 96% of variations in TFR (Total Fertility Rate) is due to 4 “Principal Proximate Determinants” out of 7 determinants. The remaining three variables explain very little variation in TFR. Because of this result, it seemed reasonable to ignore these “redundant” intermediate variables from subsequent analysis. The determinants are calculated by following 4 indexes which take value from 0 (complete inhibition of fertility) to 1(no inhibition). The framework of 4 proximate determinants has been used extensively by researchers for the past 20 years. Ahn et.al, (1998) studied panel data of

European countries from 1970-1997 to see the effect of female labour force participation rate on fertility. Till 1980 relation was negative and significant but after 1980 relation between fertility and female participation rate become significant and positive due to flexible working hours, childcare facilities and unemployment. Khraif (2001) studied fertility levels in Saudi Arabia and examined the effect of important demographic, social and economic variables on fertility behaviors of Saudi women by considering data from demographic survey by utilizing statistical techniques and regression and found that age at marriage, women's education, child demise, son preferences and geographic regions are major fertility's determinants. While there is no relationship between female employment & fertility and also women living in extended family has low fertility. Bongaartsshrinked 11 intermediate variables of fertility given by Davis and Black to only 8 intermediate variables which were "proportion married, contraception, induced abortion, lactationinfecundability, frequency of intercourse, sterility, duration of fertile period and intrauterine mortality" but according to him the first 4 variables are more important as compare to others so 4 intermediate variables given by him is presented in this equation. The total fertility rate according to Bongaarts model is 15.3, an average estimate of TF (Total fertility)

$$TFR = TF \times C_m \times C_c \times C_a \times C_i$$

"C<sub>m</sub> is index of Non-marriage, C<sub>c</sub> in index of contraception, C<sub>a</sub> is index of induced abortion and C<sub>i</sub> is index of lactational infecundability". Each index value ranges among 0-1, if the value of index is lesser than it will have larger effect on fertility variable. We can calculate each index from data available to see the influence of each index on fertility. Bongaarts (2003) summarized the pattern of educational differential in wanted and unwanted fertility at different stages of fertility transition by using data from demographic and health Surveys of 57 LDC (low developing countries). As transition precedes education differences in wanted fertility decline and differences in unwanted fertility increases. If fertility patterns are compared between developed and underdeveloped countries it is concluded that these differentials are likely to remain

stable when less developed countries reach the end of their transition. So, it implied that education composition of the population remains key indicators of all fertility in late transitional countries and low levels of schooling can be a cause of stalling fertility. Noland et.al, (2013) used cross-sectional analysis of 4 regions of United States of America using OLS regression on 2010 United States Census Integrated Public Use Micro Data serves, sample included 343,962 women between 18-36 years. Dependent variable was child ever born & independent variables included education level, region etc. Personal level data for women using variety of characteristic i.e., financial, location, educational attainment, employment status, marital status, age, metropolitan status, income & region were used. Education was found to be negatively related with fertility and strong positive relation between fertility & non-participation in labour market for women was found. Sanjay et. al, (2015) used data from National Census & Population Surveys (1991-2011) for 640 districts of India. Result suggested that female literacy, declining under five mortality were significant factor of decreasing fertility by using bivariate & multivariate regressions but poverty showed no relation with decreasing fertility. Kushum et. al, (2016) used national survey data from 1976 to 2011 to find fertility trends, levels & differentials by using decomposition analysis and Bongaarts model of 1978 in Nepal using some socio-economic determinants & found that fertility had a sustained decline from 5.1 per women in 1991 to 2.6 in 2011. This fertility decline is more in urban areas as compare to rural and this was due to contraception use, rising age at marriage, increase in male migration & induced abortion.

Sathar (1984) explained positive relationship between mean marriage age for women and educational achievement. Illiterate women marry 4 years prior usually than women who achieved secondary or higher education. Many others also reported that rising trend in age at marriage does affect fertility but in close association with other socio-economic factors e.g. education, urban residence, women's decision and marriage outside blood relations. Aziz (1994) by using data from PFS (Pakistan Fertility Survey) (1974-75), PCPS (Pakistan Contraceptive Prevalence Survey) (1984-88), PDHS (Pakistan Demographic and Health Survey) (1990-91) & Population & Family Planning Indicators

survey (1993) on Bongaarts model (1978) to decompose total fertility rate from 1974-1993 by formula

$$TFR = C_m \times C_c \times C_a \times C_i \times TF$$

where “ $C_m$  is non-index of marriage,  $C_c$  is index of contraception,  $C_a$  is index of induced abortion &  $C_i$  is index of post-partum infecundability”. Among four proximate determinants index of lactation infecundability ( $C_i$ ) had the strongest effect 0.68 during period 1974-1993 following by marriage index ( $C_m$ ) = 0.69 from 1974-199-91. Soomro, (2000) re-examined data from different Demographic and Health Surveys and other relevant surveys to observe the causes of human fertility transition in Pakistan. His objective was to analyze proximate determinants mainly responsible for 15 percent decline in fertility during more than one generation long period and he revealed that the effect of contraception was the lowest in fertility decline in Pakistan as reported by Sathar and Casterline earlier in 1998 but other proximate determinants like rise in age at marriages and breast feeding had also played significant role in fertility decline as indicated by statistics. Further the structural adjustment program in 1980’s increased poverty due to which labour force participation rate and age at marriage increased in Pakistan. Abbasi, et. al,(2008) collected random sample of 1051 married women from district Faisalabad to study the effect of women control on household expenditure on their fertility and contraceptive behaviors. The study concluded the women’s control on household monthly expenditure was directly associated with contraceptive use and inversely with fertility or family size because low participation of women’s control on household expenditure adversely affected their participation in decision making, decreased contraceptive use and compelled women to perform high fertility. Lakhan (2015) took data from “Statistical Year Book of Pakistan & Federal Bureau of Statistics of Pakistan” from 1975-2013. Auto Regressive Distributive Lag (ARDL) approach was used & certain variables like TFR as dependent variable while child mortality, labour force participation rate, real growth rate, female secondary ratio & contraception were selected as independent variables. He wanted to see short & long run relationship between female education and fertility rate and result indicated strong short run as well as

long run negative relation between education & female fertility rate in Pakistan. Abstract Objectives: Javariaet,al (2019) attempted to discover the behaviour of fertility differentials across the districts of Punjab, Pakistan. Data were gathered from Multiple Indicator Cluster Survey 2013-2014. The regression analysis was employed to evaluate the relationship of fertility determinants, followed by plotting two-way scatter plots and confidence intervals. For the empirical analysis, the total fertility rate (TFR) was taken as an outcome variable while the employment rate, under-five mortality, and contraceptive use were considered as determinants. The results indicated that child mortality is a very significant variable in determining the level of fertility and it had the coefficient value of 0.0096. It was further found that child mortality has a positive relationship with fertility rates. Thus, child mortality must be reduced to overcome the issue of high fertility rates at the district level of Punjab. Contraceptive use was also a very effective variable regarding determining the level of fertility and had a negative coefficient value of -0.033. Finally, the employment rate was a very useful variable for the determination of fertility level so that child mortality should be reduced in order to decrease the level of fertility in Punjab, and contraceptive use should develop through family planning programs.

### **Data and Methods**

To explore fertility intentions determinants of ever- married women in Pakistan at national and regional level, survey data PDHS (Pakistan Demography and Health Survey) 2012-2013 is employed. It's the third survey so far conducted in Pakistan as a part of Global Demographic and Health Survey (DHS) by NIPS (National Institute of Population Studies) in collaboration with Pakistan Planning and Development Division (Islamabad). A sample of 13,558 aged between 15-49 ever-married women was initially identified, but finally 10,095 women were selected because of no response from women on fertility intentions from Gilgit Biltistan region. This analysis focuses only on women. To find fertility intention (i.e. intention to have additional children) on multivariate and bivariate analysis, logistic regression models were used.

## Modeling

Now we shall check the determinants of desired fertility intentions, either the selected sample of ever- married would like to give birth to more children? The answer to this question was obtained from the data of PDHS.

“Result of such type of study can show the extent of family planning demand and its potential impact on the level of reproduction” Bongaarts and Potter, (1983). We consider dependent variable (i-e) “The desire for additional children”. In 2012-2013 PDHS asked questions were like “would you like to have (a/another) child, or would you prefer not to have any (more) children?”. A dummy variable was created based on responses of married women. Those who like to have more children is kept equal to 0 and those who want to limit their family is equal to 1. Women who were sterilized and declared in fecund and those who did not respond to questions were undecided so sterilized and undecided women were excluded from the analysis to avoid biased results.

Here dependent variable is classified as dummy variable, therefore we use binary logistic regression model to explore determinants of desired fertility.

$$\frac{P_i}{1-P_i} = e^{B_0 + B_1 X_1 + B_P X_P}$$

Where  $P_i$  is the fraction of individuals with a optimistic event.  $B$  ‘s explain model’s parameters while  $X$ ’s represent explanatory variables. We use Logistic regression model in a situation when we want to forecast the incidence or non-existence of result based on predictors variable’s values, Plus, logistic model also explains magnitude of relationships among the variables.

In current research, “women’s education, region, place of residence , wealth index, access to media, a woman’s occupation and decision making autonomy at the survey time are both social and economic determinants” while “age of woman , child loss experience, number of surviving children, current and ever contraceptive use and age at first marriage (Rukhsati) “In Pakistan the process of sexual intercourse is strictly related to departure of bride from family home to husband’s home)” at survey time are considered as biological

factors. Furthermore, some variables were recoded from their original codes as contained in the PDHS data to form that is relevant to the objectives of the present study

### **Determinants of Fertility Intentions at National Level:**

The present study measures the determinants related to fertility intentions of women. This study uses cross-sectional analysis of Pakistan divided into 6 regions Punjab, Sindh, Khyber Pukhtoonkawah, Baluchistan, Islamabad and Gilgit Biltistan. Cross-section analysis allows for a more accurate investigation of a wider range of characteristics than does time series.

In order to fit the model for different reproductive age partners (i-e) here women at national and regional level are divided into three age cohorts 1”early (15-24), middle (25-34) and late (35-49)” because homogeneity is increased where women are grouped to their time of birth, the advantage is that each group of women will experience similar cultural and related conditions and will be exposed to similar changes in national tastes, values, economic and social conditions.

According to the results of logistic regression model, number of surviving children, age at marriage, contraceptive use of women is found to be major factors limiting fertility intentions (i-e) desire to have more children.

Information on fertility preference is very important to family planning programs, policies and future reproductive behaviors.

As indicated in table 3, women of middle age group (25-34) is 8 percent more indented to limit their fertility while in late reproductive age women (35-49) don’t have intentions to limit their fertility by 24 percent because they want to complete their desired family size before their child bearing capacity finishes (usually at the age of 49 majority of women’s menstrual cycle is completed in Pakistan). Research has found that desired family size has positive connection with parity & period. Thus, older women plus women having more children generally expressed a higher desire for large family compare with younger women and women with fever children found by Light bourne and

MacDonald(1982), and UN Report (1989). “Increasing age of mother is associated with increasing fertility preferences” according to Aye bale Lillian (2012).

When Punjab is taken as reference region because major sample is drawn from Punjab (3800). All regions of Pakistan once again follow same patterns of “no intention to limit children” apart from Islamabad where the intention to limit fertility is significantly higher i.e. 28 percent. Women living in almost all regions of Pakistan except Islamabad wish and plan to bear more children because large family is considered to be blessing and prestige and they can celebrate and enjoy every event (weddings and funeral) in Pakistani society.

Urban women are 3 percent more likely to limit their fertility compared to their rural fellow being, if this prediction holds, we can expect decline in future urban fertility “No intention to limit additional fertility” is predicted among women with secondary or more schooling by 16 percent and 14 percent respectively. Women with one child desire to reduce fertility by 24 percent but women with two or more surviving children have no intentions to limit family by 9 percent and 7 percent as compare to those with no child.

Although we found no vital relation between decision making autonomy and fertility rates of women but negative correlation exists between “fertility intentions and women decision’s making autonomy” to some extent in current study, women’s don’t intend to limit their fertility even if their decision making autonomy is quiet high because in country like Pakistan children are considered as assets, pride and security for mother. Women with more kids are considered to be safe in their in-laws specially, in rural set-up. Current contraceptive users are also found to limit their fertility by 25 percent than those who are not using. Those who got married late they also intend to limit fertility by 9 percent due to high opportunity cost associated with child raising because educated women get married late and in case of doing job they have to forgone either full or half of the income incase of leaving job to raise up child or moving from full time job to part time job. “Increasing age at first birth is also associated with declining fertility

preference” Ayebale Lillian (2012). Similarly women having access or no access to media tend to reduce fertility by 10 percent.same result found for them.

Examination of regional level fertility intentions is same as national level. Both biological and factors of socio-economic have nearly identical consequences among all regions in Pakistan(Table 2).

**Table-1 Logistic regression multivariate results predicting determinants of intentions to limit additional children among currently married women: PDHS (2012-13).**

Variables	2012-2013		
	B	SE	Exp ( $\beta$ )
<b>WOMEN's AGE</b>			
15-24(ref)			1.00
25-34	0.083	0.077	1.08
35-49	-0.262	0.374	0.76
<b>REGIONS</b>			
Punjab (ref)			1.00
Sindh	-0.354	0.059	0.70
KPK	-0.035	0.063	0.96
Baluchistan	-0.105	0.068	0.90
Islamabad	0.248	0.136	1.28
GilgitBiltistan	VM	VM	VM
<b>PLACE OF RESIDENCE</b>			
Rural (Ref)			1.00
Urban	0.037	0.056	1.03
<b>WOMEN'S EDUCATION</b>			
Illiterate (Ref)			1.00
Primary	0.050	0.067	1.05
Secondary	-0.158	0.067	0.85

Higher	-0.140	0.085	0.86
<b>NUMBER OF SURVIVING CHILDREN</b>			
No child(ref)			1.00
One child	-0.041	0.084	1.24
Two children	-0.085	0.082	0.91
Four and more children	-0.065	0.069	0.93
<b>ACCESS TO MEDIA</b>			
No Access (Ref)			1.00
Infrequent	0.097	0.063	1.10
Frequent	0.097	0.061	1.10
<b>WEALTH INDEX</b>			
Poorest(ref)			1.00
Poor	0.097	0.073	1.10
Medium	0.089	0.078	1.09
Rich	0.135	0.086	1.14
Richest	0.029	0.098	1.02
<b>CONTRACEPTIVE USE</b>			
Never use			1.00
Ever use	0.002	0.047	1.25
<b>AGE AT FIRST MARRIAGE(Rukhsati)</b>			
Before 18 years			1.00
18 and more	- 0.092	0.047	1.09
<b>WOMEN'S DECISION-MAKING AUTONOMY</b>			
Low (ref)			1.00
Medium	-0.062	0.046	0.93
High	-0.078	0.077	0.92
Intercept	-0.112	0.114	0.89
Number of cases	10,095		

**VM= (VALUES MISSING) DATA ON CHILD PREFERENCES NOT AVAILABLE FROM GB REGION**

**Table-2 Logistic regression multivariate results predicting determinants of intention to limit additional children among currently married women by regions: PDHS (2012-13)**

Variables	Punjab(Ref)	Sindh	KPK	Baluchistan	Islamabad	Gilgit Baltistan
<b>WOMEN'S AGE</b>						
15-24 (Ref)	1.00	1.00	1.00	1.00	1.00	VM
25-34	0.99	1.12	0.99	0.71	1.18	VM
35-49	0.98	0.37	0.25	0.85	2.5	VM
<b>PLACE OF RESIDENCE</b>						
Rural (Ref)	1.00	1.00	1.00	1.00	1.00	
Urban	1.03	0.97	1.16	1.01	1.14	VM
<b>WOMEN'S EDUCATION</b>						
Illiterate (Ref)	1.00	1.00	1.00	1.00	1.00	
Primary	0.99	0.95	1.29	1.01	0.51	VM
Secondary	0.79	0.86	0.92	0.82	0.61	VM
Higher	0.92	0.72	1.13	0.94	0.91	VM
<b>NUMBER OF SURVIVING CHILDREN</b>						
No child (Ref)	1.00	1.00	1.00	1.00	1.00	1.00
One child	1.24	0.69	0.98	0.93	1.52	VM
Two children	1.34	0.82	0.82	0.76	0.25	VM
Three children	1.36	0.78	0.89	0.75	0.48	VM
Four and more children	1.44	0.90	0.83	0.73	1.34	VM
<b>ACCESS TO MEDIA</b>						
N/o Access (Ref)	1.00	1.00	1.00	1.00	1.00	
Infrequent	0.99	1.22	1.10	1.06	0.73	VM
Frequent	1.04	1.13	1.10	1.14	1.03	VM

<b>WEALTH INDEX</b>						
Poorest(ref)	1.00	1.00	1.00	1.00	1.00	
Poor	1.23	0.85	1.13	1.21	0.75	VM
Medium	1.17	1.00	1.08	1.31	1.85	VM
Rich	1.28	0.97	1.09	1.33	1.38	VM
Richest	1.08	0.86	1.38	1.12	0.34	VM
<b>CONTRACEPTIVE USE</b>						
Never use(Ref)	1.00	1.00	1.00	1.00	1.00	
Ever use	1.25	1.18	1.08	0.98	1.16	VM
<b>AGE AT FIRST MARRIAGE(Rukhsati)</b>						
Before 18 years(Ref)	1.00	1.00	1.00	1.00	1.00	
18 and more	1.20	1.05	1.02	1.14	1.49	VM
<b>WOMEN'S DECISION-MAKING AUTONOMY</b>						
Low (ref)	1.00	1.00	1.00	1.00	1.00	
Medium	0.88	0.83	1.006	1.20	1.86	VM
High	0.91	0.99	1.02	0.85	3.0	VM
Intercept	0.36	0.1	0.2	0.27	0.74	VM
No of cases	3,360	2,668	2,115	1,615	337	VM

VM= (VALUES MISSING) DATA ON CHILD PREFERENCES NOT AVAIABLE FROM GB REGION

## **Conclusion**

Population growth is motivated by fertility which is very private choice but lead to social and economic costs, so it may consider as very responsive concern for policy makers. Decline in Pakistan's fertility rate is still confined to small pocket of people while there is stall in fertility after 2000s. Thus, careful consideration of determinants of fertility intentions would help to design policy makers to undertake uncontrolled fertility and uplift Pakistani women's position. Fertility is declining for particular cluster of women,

i.e well-read, engaged in gainfully employment and wedded after age 18. The decline in fertility is not uniform. Fertility is high for middle age and late age group as compare to early age group. Actual fertility of urban women is high as compare to their rural counterparts but “desire to limit family” is more among urban women as compare to rural. If more services of family planning is provided in high fertility region no doubt fertility would have definitely reduced. Simulation model developed by Sinding et.al (1998) also revealed that “Increasing family planning services by about 15 percent reduce a total fertility rate by about one child”. By careful examination of national and regional data, it is concluded that fertility transition depends on numerous determinants. The demographic, social and economic system should function together to bring far reaching transformation in declining fertility rates in Pakistan. Still if economic development takes place, there will be less than of fertility decline as long as the social structure is not changed.

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