

## Abstract

In Pakistan rapid population growth is a great hindrance in the economic growth of country. Many policies were implemented in the past to control rapid population growth. Pakistan has entered into the early transitional period of fertility. To get immediate results and for the formulation of future population policy, it is essential to understand the dynamics of fertility behavior. Fertility level of any population varies due to variability in the number of children ever born to women and birth interval length. Individual fertility can be assessed by these two methods. The identification of magnitude and direction of effect of socio-economic and demographic factors on children ever born and birth interval analysis helps in population policy implications. The results will entail to control those factors which effect stopping behavior of fertility (children ever born) and spacing behavior of fertility (birth interval).

Following the family planning policy of Pakistan that women should have two children, children ever born is dichotomized at two. The effect of socio-economic and demographical factors is investigated which motivate couple to have more than two children (above replacement level of fertility). Women age, husband age, women age at marriage, husband education (no and secondary), women current work status, wealth index (poorer, poorest and middle), ideal number of children, number of children died, ever use of contraceptives, cousin marriage and region (Punjab) has significant impact on size of family (two family norm). Positive relationship is found between women age, husband education, women who is currently not working or for those who never worked, women whose husband desire more children than her, ideal number of boys, ideal number of children, contraceptive knowledge, contraceptive users and number of children died with size of family. Age at marriage, husband age, women education, women current work status, wealth index, women whose husband desire same number of children than wife, polygamous marriage, cousin marriages and urban residents have negative association with family size.

Poisson regression model for completed and incomplete fertility data is also run on children ever born. The analysis is carried without categorization of children ever born to understand general fertility behaviour. Age of women, age at marriage, education of women (secondary and higher level), wealth index (richer and richest), husband desire for children, ideal children, ever use of contraceptives, child mortality and polygyny contribute significantly on fertility. Factors which have positive effect on fertility of women are age of women, lack of agreement among spouses on number of children, high fertility intentions, son preference, contraceptive use and consanguineous marriages. Age of women at marriage, age of husband, education of wife, education of husband (secondary and Higher), wealth index (richer and richest), polygyny and urban residents have inverse effect on fertility.

Birth interval analysis exposed the length of interval between subsequent births which is helpful in understanding the reproductive behavior. Factors affecting the spacing behavior of Pakistani women are also studied. It is studied with the help of analysis of two birth intervals i.e. marriage to first birth interval and higher order birth intervals. It can be concluded after observing prediction model that in marriage to first birth interval, age at marriage and age at first birth has played vital role in its determination. It is evident from prediction model (preferred model) of higher order births that major contribution towards subsequent birth interval is due to proximate determinants of fertility or biological variables (age of women, age at marriage, period of breastfeeding, period of amenorrhea and period of abstinence). Some socio-economic, demographic or cultural variables have also shown significant results even in the presence of biological factors in higher order birth intervals. These are region (Punjab) and birth order. The significance of these factors may be due to non inclusion of some important proximate determinants such as frequency and duration of contraceptive use etc.

Finally it is concluded that urbanization and modernization factors are playing its role in declining the fertility through control of stopping behavior (children ever born to women) but not spacing behavior (birth intervals). Attitudinal factors through stopping behaviour (lack of agreement between spouses about fertility desires, fertility intention, son

preference and contraceptive use) are causing increase in the fertility. Biological factors for both stopping and spacing behavior have expected universal effect. There is need to lower fertility by changing the attitudes of couples towards fertility. Family planning programs should be revised to get the replacement level of fertility by changing the behaviours of both couple and family.