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# Desire for No More Children and Contraceptive Use in Pakistan

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## 1. INTRODUCTION

Pakistan has been experiencing rapid population growth since the second half of this century. The growth rate accelerated after the 1950s as a result of the decline in mortality coupled with sustained high fertility. The area constituting Pakistan had a population of 16.6 million in 1901, 33.7 million in 1951, and 126 million in 1994 [Hakim (1994), p. 2].

Recognising the problem of rapid population growth, Pakistan has been trying to control it through different family planning strategies and approaches since the 1960s. However, various surveys indicate that the rate of success in family planning has not been encouraging. So far, the population welfare programme has achieved a sizeable recognition of the need for family planning but the actual use of family planning methods remains limited. The use of family planning methods in Pakistan is determined by various factors and may vary between different segments of the population according to various socio-economic, cultural, and economic factors. It is also possible that a woman does not want more children but cannot use family planning methods because of seclusion or her subordinate position in the family [Hakim (1992)]. However, the desire for children is one of the main reasons considered in this connection.

## 2. DATA SOURCE AND METHODOLOGY

In this article, using data from the Pakistan Contraceptive Prevalence Survey (PCPS) 1984-85, the use of contraceptive has been examined in relation to the desire for no more children. In PCPS 1984-85, the information was collected from 7405 currently married women aged 15–49 years [Government of Pakistan (1986)]. The analysis identifies the magnitude of desire for no more children, the extent of unmet need and the gap in contraceptive behaviour, and also the effect of demographic and socio-economic factors on these.

Both bivariate and multivariate analysis have been applied to see the effect of desire for no more children on contraceptive use. Initially, a limited number of other

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variables have been statistically controlled, using cross tabulations. Therefore, the effect of individual variables on current use of contraception have been examined when all other variables are simultaneously controlled. This has been done by using the logit linear model as it is considered appropriate when the dependent variable is dichotomous and the independent variables are categorical. This model allows the statistical control of the independent variables and hence determines the net effect of each variable on the dependent variable. The use of logit linear model in social science research has been described in Goodman (1971, 1972, 1978); Little (1978); Knoke and Burke (1980); Tsui *et al.* (1981); Hogan and Frenzen (1981); Frenzen and Hogan (1982); Nelder and Wedderburn (1972); and Adena and Wilson (1982).

## 3. RESULTS AND DISCUSSION

### 3.1. Desire for No More Children

The desire to have no more children may be used as an estimate of the demand for family planning services. At the beginning of a family planning programme, the target is usually those women who do not want any more children. There is however, a considerable gap between the desire for no additional births and the practice of family planning. Freedman and Berelson (1976, p. 9) point out a number of reasons why the surveys find inconsistencies between this attitude and the practice of family planning.

The analysis reveals that the proportion of currently married women who want no more children increases with age (Table 1). The desire for no more children is less than 10 percent upto age 24. A majority of the women aged 30 and over do not want more children. By that time, most of them would already have four or more surviving children with two or more surviving sons.

Table 1

*Percentage of Currently Married Women Who Do Not Want More Children, By Age of Women, Pakistan 1984-85*

| Age of Women | Percentage Wanting No More Children | Number of Women |
|---|---|---|
| 15-19 | 1.0 | 569 |
| 20-24 | 9.5 | 1420 |
| 25-29 | 28.1 | 1675 |
| 30-34 | 52.8 | 1154 |
| 35-39 | 68.2 | 1155 |
| 40-44 | 79.7 | 863 |
| 45-49 | 91.0 | 569 |
| Total | 43.4 | 7405 |

The proportion of currently married women wanting no more children according to the number of living children and living sons, while controlling for the age of women, is presented in Table 2. As expected, the proportion wanting no more children rises sharply with the number of living children and age. However, the differentials are also pronounced in each age group. In the younger age group, the desire for no more children is more widely distributed. With three living children, only one-fifth (21 percent) of the women in age group 15-24 want no more children, as compared to around one-third (30 percent) in age group 25-34, and nearly two-thirds (63 percent) in age group 35-49 years. Similar differentials are noted in the desire for no more children of women with four living children in three age groups, that is, 43 percent in age group 15-24, 49 percent in age group 25-34, and 76 percent in age group 35-49 years. With five or more living children, the effect of age is not visible; 80 percent desire no more children even in the younger age group (15-24).

The number of living sons in the family also appears to be a decisive factor for women wanting no more children. The proportion rises sharply if there is at least one son in the family of two children. In Pakistani society, the ideal situation for women appears to have at least two sons in a four-child family, as above 64 percent of such women in all age groups desire no more children.

The younger age group (15-24 years) in particular seems to have adopted this ideal family norm, whereby 71 percent of women desire no more children when they have two living sons in a four-child family. In this age group, desire for no more children again starts declining when women have three or more sons, suggesting a preference for a balanced sex composition of children in the family. However, strong son preference is clearly visible in older age groups (25-34 and 35-49 years). The younger age cohort (15-25 years) is comparatively more educated and may have a slightly more balanced approach towards sex composition of children in their families.

### 3.2. Unmet Need and Gap

The prevalence of current use of contraception according to expressed desire to stop bearing children, while controlling for age of women, is shown in Table 3. The proportion of women using contraception among those wanting no more children is over five times greater than among those who want more children. A majority of the women who want no more children and are not current users are aged 35 or over. Presumably, most of these women (35 years or over) have already completed their desired family size, that is, have five or more surviving children.

About three percent of the women who want more children are currently using contraception. They are mostly younger women of lower parity and, presumably, use contraception for spacing purposes. Only 16 percent of women who want no more

Table 2

*Percentage of Currently Married Women Who Want No More Children, By Number of Living Children, Number of Living Sons, Number of Living Children and Sons, Controlling for Age of Women, Pakistan 1984-85*

| Number of Children/Sons | Age of Women | | | | |
|---|---|---|---|---|---|
| | 15-24 | 25-34 | 35-49 | Total | Number |
| **Living Children** | | | | | |
| 0 | 0.2 | 0.8 | 4.6 | 0.7 | 928 |
| 1 | 1.1 | 3.2 | 27.5 | 4.2 | 1041 |
| 2 | 9.5 | 14.5 | 49.1 | 17.2 | 999 |
| 3 | 21.3 | 29.7 | 63.3 | 36.2 | 977 |
| 4 | 42.7 | 49.4 | 75.9 | 58.0 | 1007 |
| 5+ | 80.5 | 73.9 | 88.1 | 83.7 | 2454 |
| **Living Sons** | | | | | |
| 0 | 0.4 | 4.7 | 14.8 | 3.3 | 1861 |
| 1 | 6.3 | 21.2 | 58.4 | 24.2 | 1817 |
| 2 | 33.3 | 49.2 | 81.9 | 58.9 | 1519 |
| 3 | 39.7 | 68.4 | 85.9 | 77.2 | 1072 |
| 4+ | 36.8a | 75.4 | 92.1 | 87.0 | 1137 |
| **Living Children and Sons** | | | | | |
| No Living Children | 0.2 | 0.8 | 4.6 | 0.7 | 928 |
| **One Living Child** | | | | | |
| 0 Son | 1.2 | 2.9 | 16.8 | 2.9 | 491 |
| 1 Son | 1.1 | 3.4 | 35.6 | 5.3 | 550 |
| **Two Living Children** | | | | | |
| 0 Son | 0.0 | 7.0 | 15.2 | 5.1 | 247 |
| 1 Son | 11.0 | 17.9 | 59.1 | 21.1 | 487 |
| 2 Sons | 15.3 | 15.3 | 57.6 | 21.4 | 264 |
| **Three Living Children** | | | | | |
| 0 Son | 0.0 | 10.6 | 26.1 | 11.3 | 119 |
| 1 Son | 9.5 | 25.1 | 51.3 | 27.0 | 351 |
| 2 Sons | 40.7 | 35.6 | 82.0 | 49.2 | 383 |
| 3 Sons | 25.8 | 44.9 | 59.9 | 45.9 | 127 |
| **Four Living Children** | | | | | |
| 0 Son | 0.0a | 12.4 | 32.5 | 19.3 | 75 |
| 1 Son | 27.2 | 36.3 | 67.1 | 49.8 | 428 |
| 2 Sons | 71.1 | 65.0 | 64.1 | 74.5 | 871 |
| 3 Sons | 57.5 | 72.4 | 87.7 | 81.2 | 949 |
| 4 Sons | 36.8a | 75.4 | 92.1 | 87.0 | 1137 |
| **Total** | **7.1** | **38.2** | **77.0.0** | **43.4** | **7405** |

*Note*: a– Indicates less than 20 cases in the cell.

children use contraception. From a family planning programme point of view, it is important to identify precisely where the remaining gap lies and what the potential demand for family planning in Pakistan is. On the basis of availability of required data, Westoff (1978, 1988, 1988a); Westoff and Pebley (1981); and Bongaarts (1991) suggest various methods for calculating the unmet need and demand for contraception. The proportion of currently married women who want no more children and are not practising birth control is referred to as the conventional measure of unmet need suggested by Westoff and Pebley (1981). Estimates of these measures are readily available from most of the surveys [Bongaarts (1991), p. 295]. Westoff (1988, 1988a) also suggested estimating the potential demand for contraceptives for spacing and for limiting births, and he incorporated pregnant and recently amenorrheic women whose pregnancy was unintentional. However, Bongaarts (1991) expresses his concern about overestimates of unmet need if Westoff's (1988a) measures are followed.

Table 3

*Percentage of Currently Married Non-pregnant Women Who Are Current Contraceptive Users, By Desire for No More Children and Age, Pakistan 1984-85*

| | Age of Women | | | | |
|---|---|---|---|---|---|
| Desire for Children | 15-24 | 25-34 | 35-49 | Total | Number |
| Desire More Children | 2.4 | 3.8 | 1.7 | 2.9 | 3278 |
| Desire No More Children | 16.3 | 17.8 | 15.4 | 16.2 | 2910 |
| Total | 3.5 | 9.6 | 12.5 | 9.1 | 6188 |

Westoff and Pebley (1981, p. 127) have developed 12 alternative measures of unmet need for family planning. To measure the unmet need for family planning, the proportion of fecund, non-pregnant, currently married women, who do not want any more children but at the same time do not use contraception, has been used in that article. The unmet need may remain at the same level when, in the transitional stages of a family planning programme, the proportions using contraceptives are changing. The level of unmet need will be zero if all women want more children, or if all women want no more children, and all are using contraception [Westoff and Pebley (1981), p. 128]. Using the WFS data, Westoff and Pebley (1981, pp. 133–134) find that, on average, an 11 percent (ranging from 5 to 25 percent) reduction in the fertility rate could be achieved if all the need was met.

As suggested by Sarma and Jain (1974, p. 98), another measure, among those wanting no more children, namely the proportion of fecund not-pregnant women who are not practising contraception indicates the magnitude of the gap between desire and practice. The gap will identify which sub-groups have not acted according to their attitudes, or, alternatively, it will indicate shortcomings in the programme inputs. The gap could be narrowed by increasing the proportion of current users among those who want no more children. Both unmet need and gap measures are, in fact, sensitive measures of unmet need which, according to Westoff (1978, p. 15), is a product of the percentage who want no more children and the percentage not using contraception.

It has been found that about 43 percent of currently married non-pregnant fecund women aged 15-49 years want no more children and are not using contraception, which indicates the level of unmet need and a great potential for adoption of family planning methods (Table 4). However, among those who want no more children, 84 percent are not using contraception, which indicates the magnitude of the gap between desire and practice. This gap can be narrowed by increasing the use of contraception among those who want no more children without influencing women's general attitude towards family size. This means that even if the proportion of women wanting no more children in the future remains constant at the present level, the use of contraception can be increased.

Table 4

*The Extent of Unmet Need and the Gap in Contraceptive Behaviour By Age of Women, Pakistan 1984-85*

| Age of Women | Women Desiring No More Children (%) | (N) | Unmet Need (%) | (N) | Gap (%) | (N) |
|---|---|---|---|---|---|---|
| 19-24 | 7.7 | 1574 | 6.7 | 1559 | 83.7 | 121 |
| 25-34 | 41.1 | 2242 | 37.3 | 2027 | 82.2 | 921 |
| 35-44 | 74.8 | 1819 | 71.8 | 1595 | 84.2 | 1361 |
| 45-49 | 91.7 | 553 | 90.4 | 481 | 85.8 | 507 |
| **Total** | **47.0** | **6188** | **43.4** | **5622** | **83.8** | **2910** |

The findings show that in Pakistan the level of unmet need varies with the age of the woman (Table 4). The lowest unmet need is 7 percent in the younger age group (15-24) as compared to the greatest unmet need of 90 percent among older women

(45-49 years). As women grow older, they are more likely to have achieved their desired family size. However, some of these older women do not use contraception because of traditional resistance to innovation; also, more often, they may suspect subfecundity due to the practice or even abstain from or have infrequent intercourse. None of this may have been expressed in the answers during the interview. In contrast to unmet need, there is very little variation in the magnitude of the gap between desire and practice, which is around 82 to 86 percent in all age groups.

The level of unmet need and the magnitude of the gap between desire and practice when the age of the women and other demographic and socio-economic variables are controlled for is presented in Table 5. The level of unmet need varies greatly with the number of living children. The difference in the level of unmet need is 81 percentage points between women with less than two and those with five or more living children. However, no marked variation in the gap indicator is observed with respect to the number of living children, where the difference is only 10 percentage points between women with less than two and those with five or more living children. A similar picture is visible in the case of the number of living sons. This suggests that demographic factors have little influence in narrowing the gap relative to the unmet need.

The magnitude of the gap between desire and practice has a strong association with women's education. Regardless of age, the gap between desire and practice is the highest among women who have no education and declines with primary and secondary levels of education. In this study the difference found in each educational group in the magnitude of the gap is large, which indicates that the family planning programme has not yet reached uneducated women in Pakistan.

The education of women influences greatly the level of unmet need and the magnitude of the gap. More than one-third of the women with secondary or higher education who want no more children are not practising contraception as against more than two-fifths of such women with no education. When controlled for age, however, the pattern becomes different: the level of unmet need is higher for women with no education among those aged 25 and older. The association between the level of unmet need and education is positive among younger women (15-24 years), but it is negative among those aged 35-49 years and not consistent for women aged 25-34 years.

The level of unmet need or the magnitude of the gap is less influenced by the education of husbands. In fact, the primary education of husbands has no effect and does not indicate any differentials as compared with no education. Only a secondary or higher level of husband's education influences the level of unmet need and the magnitude of the gap to some extent, in the direction observed for women's own education.

Table 5

*The Extent of Unmet Need and the Gap in Contraceptive Behaviour, By Number of Living Children and Selected Background Characteristics, Controlling for Age of Women, Pakistan 1984-85*

| | Unmet Need (%) | | | | Gap (%) | | | |
|---|---|---|---|---|---|---|---|---|
| | Age Group | | | | Age Group | | | |
| Characteristics | 15-24 | 25-34 | 35-49 | Total | 15-24 | 25-34 | 35-49 | Total |
| **Living Children** | | | | | | | | |
| 0-1 | 0.6 | 1.9 | 16.0 | 2.7 | 100.0 | 100.0 | 90.8 | 93.6 |
| 2 | 8.4 | 14.4 | 49.8 | 17.5 | 88.8 | 85.5 | 92.6 | 89.2 |
| 3 | 19.0 | 26.7 | 63.3 | 35.4 | 81.9 | 74.4 | 91.4 | 83.2 |
| 4 | 38.7 | 50.0 | 75.4 | 58.1 | 78.7 | 83.5 | 83.6 | 83.3 |
| 5+ | 79.7 | 72.2 | 88.4 | 83.6 | 81.8 | 83.0 | 83.6 | 83.4 |
| **Living Sons** | | | | | | | | |
| 0 | 0.4 | 3.8 | 13.3 | 3.1 | 100.0 | 100.0 | 87.0 | 92.1 |
| 1 | 5.5 | 20.0 | 58.4 | 23.8 | 84.6 | 83.6 | 87.5 | 85.9 |
| 2 | 29.2 | 51.7 | 82.8 | 60.2 | 82.2 | 85.7 | 86.2 | 85.7 |
| 3 | 41.0 | 66.9 | 84.9 | 76.4 | 88.5 | 78.9 | 83.5 | 82.0 |
| 4+ | 29.6 | 73.0 | 92.2 | 86.7 | 72.0 | 78.7 | 83.5 | 82.4 |
| **Women's Education** | | | | | | | | |
| No Education | 6.0 | 36.9 | 76.7 | 44.2 | 88.0 | 89.4 | 87.4 | 88.0 |
| Primary | 9.4 | 42.2 | 70.5 | 38.8 | 84.7 | 72.1 | 67.7 | 70.8 |
| Secondary+ | 10.6 | 35.8 | 69.2 | 35.7 | 62.0 | 42.3 | 56.0 | 50.0 |
| **Husband's Education** | | | | | | | | |
| No Education | 5.8 | 35.5 | 78.0 | 45.9 | 87.3 | 89.8 | 88.2 | 88.6 |
| Primary | 6.3 | 44.7 | 74.1 | 45.0 | 100.0 | 91.4 | 86.6 | 88.7 |
| Secondary+ | 8.0 | 36.6 | 72.5 | 38.0 | 76.1 | 69.3 | 75.0 | 72.8 |
| **Women's Work Status** | | | | | | | | |
| Employee | 23.8 | 51.7 | 72.5 | 58.6 | 70.0 | 82.7 | 80.3 | 80.4 |
| Self-employed | 5.7 | 30.1 | 78.5 | 45.0 | 100.0 | 84.5 | 92.0 | 90.3 |
| Work at Home | 6.7 | 38.8 | 75.5 | 42.7 | 82.0 | 81.7 | 82.7 | 82.3 |
| **Husbands' Occupation** | | | | | | | | |
| Employee | 6.2 | 38.3 | 77.0 | 38.5 | 78.8 | 76.8 | 75.8 | 76.3 |
| Self-employed | 6.4 | 37.3 | 77.5 | 43.9 | 87.2 | 81.5 | 83.9 | 83.3 |
| Agriculture | 7.9 | 36.3 | 77.0 | 46.0 | 88.2 | 92.1 | 89.5 | 90.1 |
| Unemployed | 2.5 | 34.3 | 87.5 | 51.4 | 49.1 | 69.4 | 92.9 | 87.8 |
| **Region of Residence** | | | | | | | | |
| Punjab | 7.0 | 38.6 | 79.8 | 45.8 | 89.0 | 82.1 | 85.6 | 84.7 |
| Sindh | 6.6 | 41.5 | 77.4 | 44.5 | 78.6 | 81.1 | 84.8 | 83.2 |
| NWFP | 6.3 | 33.6 | 67.1 | 37.6 | 73.7 | 84.9 | 78.6 | 80.5 |
| Balochistan | 3.3 | 17.8 | 46.8 | 24.9 | 70.4 | 79.8 | 89.1 | 85.5 |
| **Place of Residence** | | | | | | | | |
| Urban | 9.2 | 40.4 | 78.6 | 46.7 | 79.0 | 67.1 | 73.97 | 1.9 |
| Rural | 5.8 | 36.2 | 75.2 | 42.2 | 86.6 | 90.3 | 89.68 | 9.7 |

The level of unmet need and the magnitude of the gap between desire and practice also vary with the work status of women. The level of unmet need is higher among employed women than among those who either work for family business or perform home duties. The differential among working women is more pronounced for younger age groups (15-24 and 25-34 years) as compared to the older age group (35-49 years). However, the differences in the magnitude of the gap are very small, which indicates that work status of women has a lesser effect than their education. In other words, women's work status plays a less important role in narrowing the gap between desire and practice than the education of women. Women who do not work outside the home are in an intermediate position between those who work for an employer and those who are engaged in family business.

Husband's occupation also affects to some extent both the level of unmet need and the magnitude of the gap between desire and practice. These differentials are in the expected direction. The level of unmet need is lower (39 percent) among women whose husbands are employed than in other categories of husband's occupation (ranging from 44 to 51 percent). Likewise, the magnitude of the gap between desire and practice is slightly lower (76 percent) among women whose husbands are employed as compared to other categories of husband's occupation (where it ranges from 83 to 88 percent).

The level of unmet need and the magnitude of the gap vary according to the region of residence of women, from 25 percent for Balochistan to 46 percent for the Punjab. The level of unmet need is very close in the Punjab and Sindh. The magnitude of the gap is very large in all four regions of Pakistan, ranging from 81 percent for the NWFP to 86 percent for Balochistan. This indicates that the family planning programme has been equally unsuccessful in reaching and convincing most of the population in all regions of Pakistan about the use of contraception.

A considerable variation exists in the level of unmet need and the magnitude of the gap according to the place of residence. The level of unmet need is rather high in urban than in rural areas, and this relationship still persists when the age of women is controlled. In urban areas, the level of unmet need is 47 percent as compared to 42 percent for those living in rural areas. The magnitude of the gap in rural areas is as high as 90 percent whereas it is 72 percent in the urban areas. These findings prove that the family planning programme is even less effective in rural areas, where the need for it is the greatest.

### 3.4. Effect on Contraceptive Use

This section aims at determining the effect of the desire for no more children on current contraceptive use. As noted earlier, the proportion of women wanting no more children increases with an increase in the number of living children, enhancement of educational levels for women, and employment of women outside

their homes, which in turn affect contraceptive use. Therefore, it is important to know whether the desire to have no more children has an independent effect on contraceptive use. This is done by controlling for the number of living children, women's educational level, and their work status in the logit linear model.

The results are presented in Table 6 in several steps to delineate the effects of each group of controlling variables. The results clearly suggest that the desire for no more children directly affects the level of current use. The effect is significant no matter what set of variables is controlled. In model A, the odds ratios indicate that the chances of current use of contraception are about seven times higher among women who desire no more children than among those who desire more (2.547/0.393).

Table 6

*Logit Linear Model to Determine the Effects of Desire for No More Children on Current Use of Contraception, Pakistan 1984-85*

| Desire for Children | Parameter Estimates | Odds Ratio | XRX2 |
|---|---|---|---|
| **Model A: Gross Effects** | | | 413.0** |
| Desire More | –0.935 | 0.393 | |
| Desire No More | 0.935 | 2.547 | |
| **Model B: Net Effects** | | | 393.6** |
| Desire More | –0.773 | 0.462 | |
| Desire No More | 0.773 | 2.166 | |
| **Model C: Net Effects** | | | 70.2** |
| Desire More | –0.733 | 0.481 | |
| Desire No More | 0.733 | 2.081 | |
| **Model D: Net Effects** | | | 60.8** |
| Desire More | –0.729 | 0.482 | |
| Desire No More | 0.729 | 2.073 | |

Overall Effects in Model A: –2.578, Model B: –2.722, Model C: –2.113, and Model D: –2.175.

*Notes*: (1) ** $P < 0.001$.
(2) Model A is univariate and is based on desire more or desire no more children.
(3) Model B controls for the number of living children.
(4) Model C controls for the number of living children and women's education.
(5) Model D controls for the number of living children, women's education, and work status.
(6) There are 3278 women who desire more and 2909 who desire no more children.

In Model B, when the number of living children is controlled for, odds ratios indicate that the chance of being a contraceptive user is about five times higher among those women who do not want more children than among those who want more (2.166/0.462). The addition of women's education and their work status as control variables does not make much difference (Models C and D). The odds ratios indicate still 4.3 times differentials in contraceptive use between the two categories of women (desiring or not desiring more children, 2.081/0.481 or 2.073/0.482). It is therefore evident that contraceptive use according to the desire for more children is mainly influenced by the number of living children. Further, the use of contraceptives is affected by the desire for no more children, independently of socio-economic variables.

## 4. SUMMARY AND CONCLUSION

Forty-three percent of currently married women aged 15-49 years wanted no more children. If pregnant women are excluded, the proportion rises to 47 percent. The proportion of women wanting no more children rises sharply with the number of living children and age. The number of living sons in the family appears to be a decisive factor for woman wanting no more children. In Pakistani society, the ideal situation for woman appears to have at least two sons in a four-child family: 64 percent of such women in all groups desire no more children. Strong son-preference is more visible in the older age groups (25-49 years). The younger age cohort (15-25 years) is more educated and may have a more balanced approach towards sex composition of children in their families.

The total demand for contraception has been found to be around 52 percent, but only 9 percent were current users of contraception during 1984-85. Forty-three percent of currently married non-pregnant women aged 15-49 years want no more children and are not using contraception; this indicates the level of unmet need and the great potential for adoption of family planning methods. However, among those who want no more children, 84 percent are not using contraception, which indicates the magnitude of the gap between desire and practice. This gap can be narrowed by increasing the use of contraception among those women who want no more children without influencing their general attitude towards family size. This means that even if the proportion of women wanting no more children in the future remains constant at the present level, the use of contraception can be increased.

The level of unmet need varies with the age of women, seven percent among the 15-24 age group as compared to 91 percent among older women (45-49 years). In contrast to unmet need, there is very little variation in the magnitude of the gap between desire and practice, which is around 82 to 86 percent in all age groups. The level of unmet need also varies greatly with the number of living children or living sons. However, no marked variation in the gap indicator is observed with respect to

the number of living children or sons. This suggests that demographic factors have little influence in narrowing the gap relative to the unmet need.

Among socio-economic variables, the education of women greatly influences the level of unmet need and the magnitude of the gap. More than one-third of the women with secondary or higher-level education who want no more children are not practising contraception as against more than two-fifths of such women with no education. The magnitude of the gap between desire and practice has a strong association with women's education. Regardless of age, the gap between desire and practice is the highest among women who have no education and declines with primary and secondary levels of education. The difference found for each educational group in the magnitude of the gap is large, which indicates that the family planning programme has not yet reached uneducated women in Pakistan.

A considerable variation also exists in the level of unmet need and the magnitude of the gap according to the place of residence. The magnitude of the gap in rural areas is as high as 90 percent whereas it is 72 percent in urban areas. These findings prove that the family planning programme is the least effective in rural areas of Pakistan.

The proportion of currently married non-pregnant women using contraception among those wanting no more children is over five times greater (16 percent) than among those who want more children (3 percent). A majority of the women who want no more children and are not current users are aged 35 or above. Most of these women (35 years or above) have already completed their desired family size, that is, have five or more surviving children. The small number of women (3 percent) who want more children and are using contraception are mostly young women of lower parity and are, presumably, using contraception for spacing purposes. The contraceptive use by desire for children is mainly influenced by the number of living children independent of socio-economic variables. The effect of desire for no more children on current contraceptive use, controlling for the number of living children, education, and work status, has also been determined by using the logit linear model. The results suggest that desire for no more children directly affects the level of current use. The effect is significant no matter what set of variables is controlled for.

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# Comments

The topic of this paper is very interesting. More so because it is directly concerned with the main goal of the population planning programme, namely, limiting the births in families with the help of contraceptive use by the couples.

Some of my observations on the paper are as follows:

- The use of the term 'differentials' needs clarification.
- The statement that "the family also appears to be a decisive factor for women wanting no more children" needs clarification as an observation by the author from Table 2. How, in Pakistani society, is it the ideal situation for women to have one son out of two children? The author also needs to distinguish between "analysis" and "observations" here from a table.
- It is not clear how the author can conclude from Table 2 that the younger age group in particular seems to have adopted "this" ideal family size. Does the author think that Table 2 gives any idea about the "ideal" family? Or does he take 70 percent with an equal number of sons and daughters as ideal? How could this be considered as a result of preference when there is no supporting evidence?
- In a population with a very low level of female literacy, especially in the majority rural segment, how could females aged 15-24 be considered as more educated and having a balanced approach? One needs independent evidence to this effect, either from the PCP Survey or from some other studies to substantiate this observation.
- Instead of giving a large number of foreign references, it would have been better if the author had outlined his study objectives directly and clearly.
- It is not clear how the approach mentioned by the author can be considered conventional? Is it so because it has been suggested in the two references given in the paper (Westoff; Westoff and Pebley)? A discussion was perhaps needed by giving the author's own rationale for considering the proportion wanting no more children among the currently married women as "unmet need". Having read the literature referred to by him, the author should have given the justification of his choice. There seems to be no need to give the long list of eleven items.
- The author's finding about the negative association of educational level and contraceptive use confirms the findings of many others in Pakistan and elsewhere. Similarly, the influence of work participation on contraceptive use being lower than the level of association with

educational level is interesting and goes along with similar findings in some other studies.

— It seems desirable that the author should explain the background, reasons or issues to be examined and the rationale of using the multivariate analysis in the study. The explanation provided by the author is about the model but not about the need for this analytical approach.

— The conclusions by the author, that the number of living children is an important determinant of the desire for more children and contraceptive use, and that the use of contraceptives is affected by the desire for no more children independent of socio-economic conditions, are interesting.

It seems that a number of relevant studies done by some Pakistani researchers in this area have generally been overlooked. To my knowledge, there are at least 14 studies which directly or indirectly deal with the topic covered by the paper. Most surprising, the papers in the 1990-91 PDHS report and the results from some of the latest surveys done under the auspices of NIPS have not been referred to in the paper. At the end, I would like to commend the author for his valuable paper but would like to recommend that the domain of his analysis be extended and updated to cover evidence from more recent data sets.

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