## THE IMPACT OF SPOUSE'S EDUCATIONAL STATUS ON FAMILY SIZE IN LOWER MIDDLE SOCIOECONOMIC GROUP OF RAWALPINDI CITY

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### ABSTRACT

*Objective:* To establish a relationship between family size and educational status of female and male subjects belonging to lower middle socioeconomic group of Rawalpindi city.

Study Design: Cross sectional comparative study.

*Place and Duration of Study:* Rawalpindi city over a period of six months, from September 2015 to February 2016.

*Material and Methods:* The 200 participants of this study were categorized according to their educational status after noting their demographic profiles. Comparison of the number of offsprings in different educational categories was done.

*Results:* The data suggested that both illiterate women and men had the maximum number of offsprings. Sixty percent of illiterate wives and fifty-eight percent of illiterate husbands had five or more offsprings each. Amongst the better-educated respondents of both groups, seventy six percent had three or less offsprings. In this regard, the majority of post Matric qualified husbands had the least number of offsprings. Fisher's Chi-square test was used to establish the relationship between educational status and family size. A highly significant relationship was seen when these variables were co-related statistically (*p*-value=0.001).

*Conclusion:* The results emphasise the importance of education of couples, especially in the densely packed lower-middle socioeconomic groups, as data showed that better educated participants had a smaller family size.

Keywords: Education, Family size, Socio economic status.

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### INTRODUCTION

The World Bank calls education the single most influential investment that can be made in the developing world as education is a powerful lever for poverty reduction and economic growth<sup>1</sup>. Years in school might influence fertility in different ways: by changing student values, by making it more likely that a girl/boy will marry an educated husband/wife who desires a smaller family, and by improving knowledge through family life education or other means<sup>2</sup>. Typically, the norms conveyed through education promote the small, nuclear family<sup>3</sup>. The complex effect of education, especially of females, on fertility has been widely studied in the literature, and is a highly relevant topic in research on reproductive

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behavior<sup>4</sup>. Many studies including Akram, (2002) in Bangladesh and Tuman, et al., (2007) in Colombia and Peru have studied this relationship. These studies showed a significant and inverse relationship between education and fertility<sup>5,6</sup>. Educated women may have a larger role in the decision about the choice of a husband and the timing of marriage. Within marriage, they may have better rapport with their husbands, particularly in relation to childbearing decisions and use of contraceptives7. Husband's education, a comparatively lesser researched area as compared to female education, may also influence fertility. Adamchak and Mbizvo, (1994) carried out a study to assess the impact of husband's and wife's education and occupation on family size in Zimbabwe which concluded that husband's education had a strong negative effect, and wife's education had a moderate negative effect on the number of children ever born<sup>8</sup>.

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In Pakistan, a developing country, the significance of further insight into such a relationship becomes even more relevant. Pakistan has a population of approximately over 195 million, which is growing at a steady rate of 1.5 percent per year<sup>9</sup>. It is ranked sixth among the most populous countries of the world and is second among the Muslim world<sup>10</sup>. The 2014 estimates show a fertility rate of 2.86 children born to each woman with Pakistan targeting to achieve replacement level of fertility that is 2.1 births by the end of 202511. The association of education, specifically female education and family size has been investigated by Pakistani researchers in the past. Kakar, et al. 2011 conducted a study on a sample of one hundred women (17 to 35 years of age) from different establish a relation between family size and educational status of male and female subjects of reproductive age group belonging to lower middle socioeconomic group. It also focused on comparing the number of offsprings in each educational category of the study as well as comparing family size of female and male subjects of different educational backgrounds.

## MATERIAL AND METHODS

This cross sectional comparative study was conducted in a group of two hundred subjects who were divided into two equal groups (Group A and Group B) consisting of 100 males and 100 females. The participants of the study were selected by convenience sampling from Rawalpindi city including densely packed localities such as Shadmaan colony, Kotha Klaan,

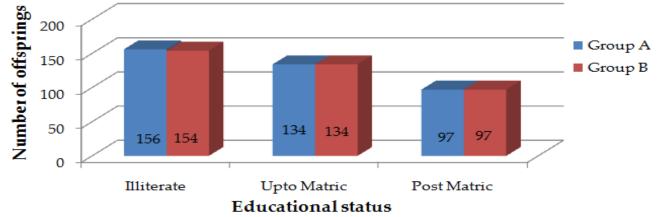


Figure: Comparison of the number of offsprings in different educational categories of Group A and B.

areas of Quetta<sup>12</sup>. Chaudry and Irshad (2009) also studied the effects of female literacy on desired family in a sample of one hundred and fifty females<sup>13</sup>. However, population growth statistics strongly suggest that investigating factors that are responsible for this high population growth in both males and females in Pakistan for further insight.

The present study focused on a population group in Rawalpindi city, which is the fourth most populous metropolitan area of Pakistan having a population of approximately 2.164 million and is one of the most urbanised districts in Punjab<sup>8</sup>. It was designed with the objective to Morgah, Dhok Qaim Shah, Bakramandi, Mareer Hassan, Dhok Rattan and Dhok Elahi Baksh. Consent of the subjects to participate in this study was taken from all the participants. The selected candidates falling in the inclusion criteria were explained the importance of this study. After interviewing and assessing the participants, data was collected and recorded on a questionnaire. Questionnaire included questions regarding demographic profile, family size, socioeconomic and educational status (level and medium of education).

Inclusion criteria included married men and women of age group between 30-40 years belonging to lower-middle socioeconomic class. The socio economic status of the subjects was assessed by these variables: income (combined household income versus individual income), education (exposure to formal schooling), household landholding and occupation<sup>14-16</sup>. The subjects of the two groups were categorized into three educational categories (illiterate, upto-Matric and post-Matric). In all three categories participants who had attended primary school where medium of education was in Urdu, with English as an additional subject were included. Illiterate subjects included those individuals who had no formal schooling or dropped out of school

of the data regarding educational status of Group A and B with the number of their respective offsprings was also done by Chi-square statistically test. A *p*-value less than 0.05 was considered statistically significant.

## RESULTS

The total number of offsprings in Group A was 387. Distribution of number of offsprings in different educational categories in this group showed that illiterate women had the maximum number of offsprings i.e. 156. Post-Matric educated females had the least number of children i.e. 97 (figure).

Table-I: The relationship between education status of subjects in Group A and number of off springs (n=100).

Education Status of subject			Total				
	2	3	4	5	6	Total	<i>p</i> -value
Illiterate	1	3	9	11	9	33	0.001*
Upto Matric	5	9	7	9	4	34	
Post Matric	12	13	6	2	0	33	
Total	18	25	22	22	13	100	

Chi-square test, \**p*<0.01 = highly significant.

Table-II: The relationship between education status of husbands of Group B and the number of offsprings (n=100).

Education Status			Total	a value			
of subject	2	3	4	5	6	Total	<i>p</i> -value
Illiterate	0	6	8	10	9	33	0.001*
Upto Matric	4	8	11	8	3	34	
Post Matric	13	12	5	3	0	33	
Total	17	26	24	21	12	100	

Chi-square test, \**p*<0.01 = highly significant.

in the initial year. Subjects with upto-Matric education were those who had studied in the primary school years until class ninth but had not completed their matriculation and post-Matric included those subjects who had completed class tenth and had attained some post-Matric vocational/technical diploma due to which they could get better employment.

Biostatistical analysis and interpretation of the results was done using SPSS-21. Categorical variable were expressed as frequencies. Analysis Amongst the illiterate women of Group A, only 1 participant was in the two offspring category, 3 participants had 3 offsprings each, 9 participants were in the 4 offspring category, 11 participants (33%) were in the 5 offspring category and 9 participants were in the 6 offsprings category. Amongst the women of Group A who had upto-Matric educational qualification it was seen that 5 participants were in the 2 offsprings category, 9 had 3 offsprings each, 7 had 4 offsprings each, 9 participants (27%) had 5 offsprings each and 4 fell in the 6 offsprings category. Amongst the post-Matric qualified females, 12 participants were in the 2 offsprings category, 13 participants had 3 offsprings each, 6 participants had 4 offsprings, only 2 participants were in the 5 offspring category and none of the post Matric qualified participants had 6 offsprings. The majority (39%) of the post-Matric qualified women had only 3 children. When the results were analysed statistically a highly significant (*p*-value=0.001) relationship was seen between the three educational qualification groups and the number of offsprings (table-I).

The total number of offsprings in group B was 385. The distribution of the total number of offsprings according to the different educational status revealed that the post-Matric qulalified husbands had the least number of children i.e. 97 and the illiterate husbands had the maximum number of offsprings i.e. 154 (figure). Amongst the illiterate men, none of the of the subjects fell into the 2 offspring category, 6 had 3 offsprings each, 8 had 4 offsprings each, 10 had 5 offsprings each and 9 were in the 6 offsprings category. The majority (30%) of illiterate men were in the 5 offsprings category. Out of the upto-Matric qualified husbands, 11 (32%) were in the 4 offspring category, 4 had 2 offsprings each, 8 had 3 offsprings each, 8 had 5 offsprings each and only 3 were in the 6 offsprings category. Amongst the post-Matric qualified husbands 13 (39%) were in the 2 offspring category, 12 had 3 offsprings each, 5 had 4 offsprings each and only 3 were in the 5 offsprings category. A highly significant relationship was seen when these variables co-related (*p*-value=0.001) were (table-II).

Percentage distribution of the number of offsprings in the three educational categories of group A and B reveals that lower the education status, more is the number of offsprings in both men and women in this study group. It can be seen that 61% of illiterate wives and 58% of illiterate husbands had 5 or more offsprings. Amongst the better-educated respondents of both groups, 76% each of both wives and husbands

had 3 or less offsprings. Amongst both men and women it was seen that post-Matric qualified husbands had the least number of offsprings.

# DISCUSSION

The United Nations, the U.S. National Academy of Sciences, the Population Council and other bodies have examined the linkages between education and childbearing to provide a greater understanding of these issues. In many developed countries, it has been observed that more education is associated with smaller family size as women who are college graduates tend to have fewer children than women with high school degrees or lower levels of education<sup>17</sup>. In contrast, in a number of less developed countries, women with no education have about twice the number of children as women with ten or more years of school<sup>18</sup>. Another important contributing factor in this regard is that the age at marriage of educated females is higher than their illiterate counterparts<sup>19</sup>. Education may also indirectly lead to wider use of contraceptives and reduce her vulnerability to unwanted pregnancies<sup>13</sup>. In this regard, improving education level of male population of reproductive age group is also essential.

After categorizing the subjects of the present study according to the level of education achieved at the time of conducting the study, it was evident from the findings, that in each group there is a decline in the total number of offsprings as the educational status rose up. A statistically significant relationship highlighted that higher the education level, less are the number of offsprings produced. On comparison of the number of offsprings in each study group, our data showed that the post-Matric qualified husbands had the least number of offsprings. Amongst the females, the majority of post-Matric qualified respondents had three offsprings per subject. The majority of respondents in the Illiterate group had a comparatively higher number of offsprings i.e. five offsprings per subject. This depicts the importance of both male

and female education in better managing the family size.

### CONCLUSION

The results of this study prove that better education status of both wives and husbands especially in the densely packed lower-middle socioeconomic group of the study population, has a negative impact on the family size. Our data emphasized that couples, who had acquired better education, had a smaller family.

### RECOMMENDATION

Education brings awareness regarding the advantages of having a smaller family size, use of contraceptives and female health issues. Hence providing improved educational facilities in this group of the population, especially in densely populated areas of Pakistan, is essential if population growth rate is to be controlled.

### **CONFLICT OF INTEREST**

This study has no conflict of interest to declare by any author.

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