

Effects of male literacy on family size: A cross sectional study conducted in Chakwal city

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Abstract

Objectives: To determine the effects of male education on family size, the desired family size, knowledge and use of contraception and opinion about female education.

Methods: The cross-sectional study was carried out in Chakwal city, Punjab, Pakistan, from June to October 2009. A pre-tested questionnaire was used for data collection. The respondents were males and data on their demographics, age at marriage, actual and desired family size, knowledge about methods of contraception, and opinion about female education was collected. SPSS 15 was used for statistical analysis.

Results: Out of the 178 respondents, 52(29.2%) were illiterate and 126(70.8%) were educated. Among the educated, 97(77%) were in favour of small families compared to only 10(19.2%) of the uneducated males ($p < 0.001$). Besides, 118 (93.6%) educated males were aware of any method of contraception. The most important source of awareness was television 45(37.8%) followed by lady health visitors 40(33.9%). Among the respondents, 38(21.3%) were not using any contraceptive method because they considered it unIslamic, 16(9.1%) had fear of side effects, 57(32.0%) were desirous of large families, while 67(37.6%) had other reasons, like trying to conceive. Among the uneducated males, 17(32.7%) didn't discuss any family planning issue with their wives compared to 14(11.3%) of educated males ($p < 0.001$).

Conclusion: Educational status of the males had an effect on the desired family size, contraceptive use and views in favour of female education.

Keywords: Male literacy, Family size, Contraception. (JPMA 66: 399; 2016)

Introduction

In the developed world, the population has stabilised, but Pakistan, being the 6th most populous country with a population of 176 million,¹ is expected to reach 229 million by 2025.² The situation is really grave as Pakistan is placed 146 among 187 countries according to Human Development Index (HDI).³

To achieve the Millennium Development Goals (MDGs) target 5-A and 5-B, efforts needed to be made for providing effective family planning services to the community. Family planning can also help to achieve MDG. Studies have shown that family size is inversely proportion to literacy level.⁴ Fertility levels in Nepal among females with secondary or higher education are about 2.2. births per woman compared to 4.8 births among females with no education, but Indonesia shows no effect on fertility with education.⁵

In the developing countries, millions of women in the reproductive age who don't use contraceptives prefer to

postpone or limit childbirth. This indicates their failure to take necessary decision to prevent and avoid unwanted pregnancy.⁶ Unmet need for family planning is defined as percentage of all fecund women who are married or living in union and thus presumed to be sexually active but are not using any method of contraception, either do not want to have more children or want to postpone the next pregnancy for at least two more years, or do not know when or if they want another child.⁷ According to Pakistan Demographic and Health Survey (PDHS) 2012-13, more than four among 10 married women with at least primary education use a contraceptive method compared to three in 10 with no education. However, overall results indicate that men are more likely to want more children than women irrespective of educational status.⁸

Among several landmark decisions taken at the historic Cairo International Conference on Population and Development (ICPD) with global consensus, prominent recognition was accorded to promotion of male involvement for responsible parenthood, particularly in developing countries.⁹ It is essential to analyse the male role in family planning issues as 38 to 52 percent of the men believe that all decisions related to reproduction and family planning should be made by them alone.¹⁰ Males take lead in our society in decision-making ranging from

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personal decisions regarding the size of families to the policy and programmed decisions taken at all levels of government.¹¹

Previous research into the barriers to family planning service use has highlighted the importance of looking beyond physical access, and taking into account the socio-economic and cultural environment in which an individual lives.¹²

The current study was planned to help us understand the attitude of Pakistani males towards family planning efforts, and the factors responsible for high figure of unmet needs of family planning in Pakistan. The study aimed at determining the relationship of male education with family size, and the effects of education on the desired family size, knowledge and use of contraception and opinion about female education.

Subjects and Methods

The cross-sectional study was conducted in Chakwal city, Punjab, Pakistan, from June to October 2009. Chakwal is a semi-urban city with well-established health facilities.

For the purpose of the study, any person who had at least completed formal primary education from school or madrasa was defined as literate, while a person with no education at all and who could not read or write even a single word was defined as illiterate.

Multistage sampling technique was used. Initially it was random selection of study areas followed by systematic random selection of households, till an equal number of sample was taken from each chosen cluster. Chakwal Tehsil has 30 union councils. List of Mohallas was obtained from Union Councils. Out of three randomly chosen Union Councils, six Mohallahs were randomly chosen, and 30 households were approached in each Mohallah by systematic random sampling. If the approached household didn't fulfil the criteria, the next household was chosen.

All married males were included, while those with more than one wife and infertile couples were excluded.

The sample size was calculated using World Health Organisation (WHO) calculator with confidence interval (CI) of 95%, relative precision of 0.07 using contraceptive prevalence rate as 30%.⁸ It was inflated by 9% to compensate for non-respondents and incomplete responses.

Data was collected through a questionnaire. The questionnaire was pre-tested among the peers. The questionnaire was filled in by the respondents or by the

interviewer if the respondent was illiterate.

SPSS15 was used for data processing and analysis. Chi-square test was applied to analyse the statistical significance of the results. Correlation coefficient was also calculated to assess the direction and strength of association between education and fertility. $P < 0.05$ was considered statistically significant.

Results

Of the 180 male subjects enrolled, there were 2 (1.1%) dropouts. The mean age at marriage was 25.0 ± 4.3 years.

Overall, 52 (29.2%) subjects were uneducated and 126 (70.8%) were educated. The wives of 105 (59%) cases had educational level up to matriculation and 73 (41%) had education above matriculation. It was observed that 107 (60.1%) respondents were in the favour of small family (3 or less issues), while 71 (39.8%) were in favour of larger families (4 or more children) (Table-1).

Ten (19.2%) of the uneducated respondents were in favour of smaller families compared to 97 (77.0%) of educated cases ($p < 0.001$). Among the 52 uneducated respondents, 10 (19.2%) had less than 3 issues, 30 (57.6%) had 4 or 5 issues, and 12 (23.2%) had 6 or more. Of the 126 educated respondents, 94 (74.5%) had 3 or less issues, 24 (19.3%) had 4 or 5, and 8 (6.1%) had 6 or more

Table-1: Educational status and its relationship with parity.

Educational Status	Frequency	Percent	No. of children		
			< 3	4-5	> 6
*Un-educated	52	29.2	10	30	12
*Educated	126	70.8	93	24	9
Matric	57	32.02	38	13	6
Intermediate	36	20.22	31	4	1
Graduate	22	12.4	15	6	1
Masters	10	5.62	8	1	1
Higher	1	0.06	1		
Total	178		103	54	21

*p-value = < 0.001 .

Table-2: Choice of Contraceptive Method.

Method	Frequency	Percent
Condoms	44	36.6
Hormonal	37	30.7
Natural	17	14.2
Tubal Ligation	11	9.2
Intrauterine device	9	7.5
Vasectomy	2	1.6
Total	120	100.0

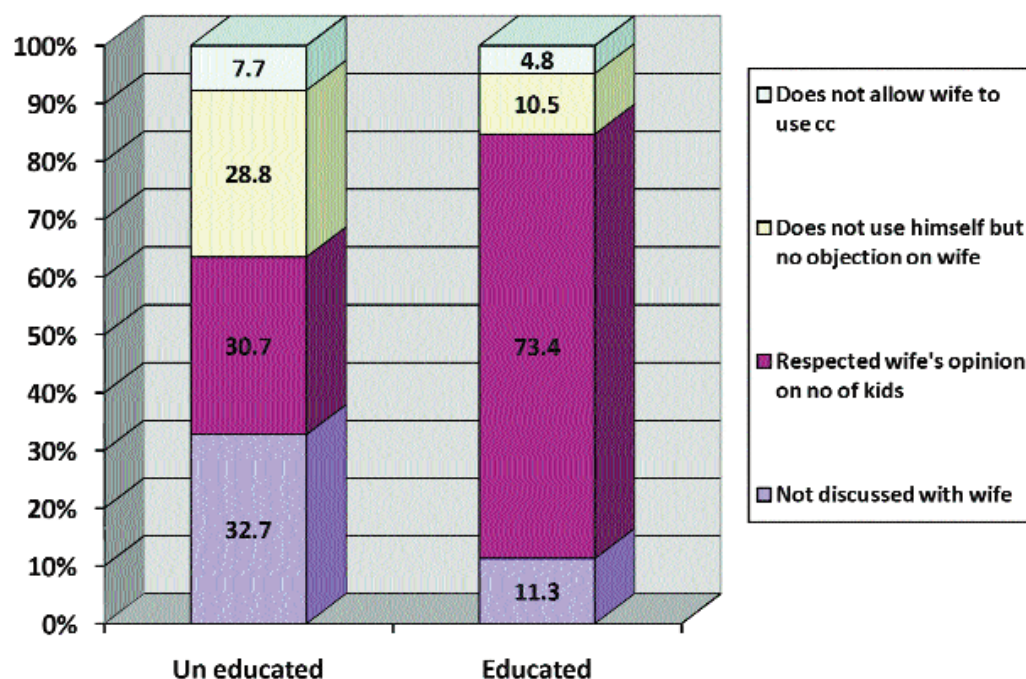


Figure: Relationship of male education with understanding between spouses.

($p < 0.001$).

When data was stratified according to respondents' wives' educational status, it was observed that of the 105 uneducated females 42(40%) had 3 or less issues, 44 (42.0%) had 4 or 5 issues, and 19(18.0%) had 6 or more. Among the 73 educated females, 61(83.5%) had 3 or less issues, 10 (13.7%) had 4 or 5 issues, and 2(2.7%) had 6 or more.

Overall, 37(71.1%) uneducated respondents had some knowledge about contraceptive methods compared to 118(93.6%) of the educated group ($p < 0.001$). The most important source of contraceptive awareness was television in 67(37.6%) subjects followed by lady health visitors (LHVs) 60 (33.7%), friends or relatives 41(23.0%), newspapers 7(3.9%) and wives were the source of awareness in 3(1.7%) cases. The most frequent contraceptive method was condom used by 44(36.6%) subjects, and hormonal method 37(30.7%) (Table-2).

When asked about the reasons of not using contraception, 38(21.3%) respondents mentioned it as unIslamic, 16 (9.1%) had fear of side effects, 57 (32.0%) were desirous of large families, while 67 (37.6%) were not using family planning because of other reason; mostly recently married, or trying to conceive.

When asked about reasons for preferring smaller families

(3 or less issues), 84 (47.1%) subjects chose the option of 'better bringing-up of children', 48 (26.9%) 'due to health of mother', and 46(25.8%) 'due to financial pressure'. The most important motive behind larger families was the desire of a son in 79(44.4%) cases, contraceptive failure was seen as cause in 24(13.5%) cases, 20(11.2%) thought that larger families meant more income, 71(39.8%) respondents, considered it non-religious to decide about family size, while 15 (8.4%) said their wives desired big families.

Among the uneducated respondents, 17(32.7%) didn't discuss any family planning issue with their wives, 16(30.7%) respected wives' opinion on the number of kids, 15(28.8%) didn't use any contraceptive method but had no objection on wife, and 4 (7.7%) didn't allow their wives to use any contraceptive method. In the educated group, 14 (11.1%) didn't discuss any family planning matter with their wives, 93 (73.7%) respected wives' opinion on deciding the family size, 13(10.3%) didn't use any method but had no objection on wife, and 6(4.8%) didn't allow their wives to use any contraception ($p < 0.001$) (Figure).

In the uneducated group, 22(42.3%) respondents thought that higher education (graduation and/or above) was compulsory for girls whereas in the educated group 114 (90.5%) respondents thought so ($p < 0.001$).

Discussion

The educational status displayed significant positive relationship with odds of practising contraceptive services. It was observed that educational status was an important determinant of the desired and attained family size. The findings are consistent with a study carried out in Sindh,¹² and other studies done elsewhere.¹³ The link between higher levels of education among women and smaller family size across the developing world is

clear.^{14,15} Interestingly, it was observed that in couples where educated females were married to uneducated males, usually it was the educational level of the male that governed parity issues. The findings are similar to earlier studies.^{16,17} This observation is important as it gives a clue to the reasons of unmet need of family planning.¹⁸ A significant relationship ($p < 0.001$) was found in our study between number of children and females' level of education i.e. in low empowered women, 48.3% have 5 or more children while among the high empowered women this rate was found only in 5.7%.¹⁹

The proportion of currently married women who are currently using any method of contraception has risen with age from 10 percent among women age 15-19 to 48 percent among age 35-39.⁸ Mean age at marriage shifts towards the positive side as educational level increases, thus it again indirectly indicates effects of literacy on family size. Similar findings have been reported earlier.^{20,21}

According to the National Demographic Health Survey, awareness of contraception is 96%.⁸ Effect of education is evident on the respondent's knowledge about some type of contraceptive technique, whether traditional or modern. Same findings have been found in a Nigerian study.²²

Television was the most effective medium for communication of knowledge about family planning. The second most important means of awareness was LHVs. Males most probably got the knowledge indirectly through their wives. Findings are consistent with another study conducted in Sindh.¹²

The most preferred method was condom followed by hormonal methods, while vasectomy was the least preferred method. It is similar to the findings of a study carried out in Khoshab.²³ The role of mother in law as being the determinant of family size has not been found. It is in accordance with a previous study.²⁴ Quite interestingly it was found that average number of children was less among couples living in the joint family system.

The majority was of the opinion that both husband and wife should have better communication and understanding in taking the decisions. Similar findings have been reported in a Karachi study.²⁵ In the educated group, 90% respected their wives' opinion on family planning matters, while in the uneducated group, only 31% did so. Thus, male education appears to be a significant factor in decreasing the unmet need. The most potent motive behind the desire of large family was the

desire for a son (44.4%). Similar findings are reported in other studies.^{18,19,26,27} There is a common feeling in our society that adoption of contraception is unIslamic. Although the number of respondents not favouring contraception was not very big, still the religious beliefs were an important cause of non-adoption of contraception. Regarding males' attitude towards taking fertility decisions it was observed that education had a positive relationship with mutual understanding between spouses.

Education had a positive relationship with male's belief that females should have right of higher education with increasing tendency of males towards favouring female education. This opinion was mainly because they agreed that an educated mother can better rear the children. This attitude has two-fold advantage; firstly, it will result in better education of female issues, and, secondly, it will negate the perception that there is a problem of marriage once the females are highly educated.

Due to time constraints and limitation of resources, the study was done on a small scale. The results would have been more conclusive with a larger sample size.

Conclusion

Educational status of males had a significant effect on the desired family size, contraceptive use and views in favour of female education. Educated respondents had smaller families, were more likely to have knowledge of contraception, and were more open to discussing family planning issues with their spouses. As gender role is important to be addressed to get the full benefits of family planning programmes, it is mandatory to involve men in health education and issues regarding family planning.

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