

My Body, Your Choice: Partner's Age and Education as Determinants of Contraceptive Use in India

Gyan Chandra Kashyap*, Shobhit Srivastava** & Madhumita Bango***

Abstract

Many couples in low and middle-income countries would like to limit or delay their pregnancy but they do not have sufficient access to modern contraceptive methods. Although women mostly pay for unmet needs for family planning, they are often not considered as fertility decision makers by their partners. This paper aims to explore the role played by a partner's age and education differences in explaining contraceptive use and unmet need among married couples in India. Data were drawn from the National Family Health Survey-4 survey and a stratified two-stage sample design was adopted to reach out to the surveyed households. A total of 63,696 couples aged 15-49 years of women and men aged 15-54 years were included in the analysis. Among the married couples included in the study, husbands were older and more educated than the wives. Mean and the standard deviation of the age of married couples was 4.84 ± 3.87 & 1.44 ± 4.25 years. Woman with more education ($OR=1.31$) were more likely to use contraception methods than those who had no schooling. Unmet need for family planning was lesser among the couples where the husband was older ($OR=0.89$) compared with the couples where both were of the same age or wife was older. With the increasing wealth quantile, the use of contraceptive methods was growing from the poorest to the richest group ($OR=2.0$). According to our findings, not just individuals' but couples' characteristics matter in determining unmet needs for family planning and use of contraception.

Keywords: Unmet need, family planning, contraception use, India.

I. Introduction

Although many women in low and middle-income countries like to limit or delay their pregnancy, they do not have sufficient access to modern contraceptive methods (Pal et al., 2018). In other words, there is a discrepancy between women's reproductive intentions and their contraceptive behaviour. This gap is commonly known as unmet need for family planning, and generally it refers to the proportion of women who desire to postpone or limit their births but are not using contraception (Sengupta & Das, 2012). A direct consequence of unmet need for family planning consists of unintended pregnancies, which pose severe risks for women and their families leading to unsafe abortion, and child and maternal mortality (Asif & Pervaiz, 2019; Black et al., 2016; Rajkumari et al., 2013). Thus, family planning is a feasible solution not only to help in spacing and limiting the number of children, but also to improve maternal and child health (Pal et al., 2018).

Unmet need for contraception is experienced by about 10 per cent of married -or in union- women worldwide (Pal et al., 2018). In South Asia, the proportion of married women who want to stop or delay childbearing but are not using contraception is the highest worldwide accounting for about 87 million cases (Kantorová et al., 2020). Although India was one of the first countries in the world reducing the total fertility rate (TRF) due to National Family Planning Programme (NFPP) which enabled individuals to exercise control over their fertility (Donta et al. 2016; Sengupta & Das,

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2012), women's contraceptive prevalence rate is only 54 per cent and it is mostly through female sterilization (Shakya et al., 2018).

Different factors cause the fear of side effects for using contraceptives. Among others, household's income, urban/rural residence, age of women, parity, level of education, employment status, mass media exposure and religion have been identified as those mattering most (Chaurasia, 2014; Asif & Pervaiz, 2019; Ojaka, 2008; Westoff, 2006; Bhandari et al., 2006; Saini et al. 2007; Westoff, 2012). However, low levels of contraceptive use are also largely driven by social norms promoting early and high fertility and son preference (Ghule et al., 2015), suggesting that women's level of autonomy over contraceptive decision-making within the family is a key factor in explaining the level of contraceptive use (Patrikar et al., 2014; Saleem & Bobak, 2005). Although women are those who mostly pay for unmet needs, they are often not considered as fertility decision-makers by their partners (Epari et al., 2017; Barla, 2016; Begum et al. 2014). Therefore, more than exclusively focusing on women's characteristics, interpersonal and socio-demographic features of the couple should be considered.

First of all, the age gap between husband-and-wife merits to be considered. Indeed, early marriage among Indian women is a common phenomenon. According to the International Institute for Population Sciences, 27 per cent of 20–24 year-old females are married by the age of 18 years, and 7 per cent are married by the age of 15 years. Indian adolescents face several health risks due to early marriage which is associated with early pregnancy, high fertility, close spacing between births, unwanted pregnancy, and pregnancy termination (Barla, 2016). The risk of maternal death is four times higher for women giving birth below the age of 16 years and the death rate of their new-borns is 50 per cent higher (Barla, 2016). Moreover, young women are more likely to be ignorant of contraceptive methods and the availability of family planning programmes. They are also characterized by low decision-making power.

Moreover, Begum et al. (2014) suggested that the observed discrepancy between met and unmet need for contraception by age may be due to the less priority given to young women's contraception need by health providers since having a child immediately after marriage is a vastly diffused conception (Begum et al. 2014; Calhoun et al. 2013). However, this cultural barrier increases the unmet need for family planning among young – as well as among lower parity? - women by putting them at a higher risk of unintended pregnancy (Begum et al. 2014).

Secondly, it may be important to focus on the discrepancy in educational attainment. Indeed, education may significantly influence men's fertility norms and attitudes toward contraceptives (Ghule et al., 2015) which, in turn, has a great impact on the women's decision to use or not contraceptive methods (Prata et al., 2017). Indeed, some studies conducted in urban India observed that the decision for contraception use was taken together by the husband and wife in 71 per cent cases, by the husband alone in 24.3 per cent cases, and the woman alone by only 4.2 per cent cases (Chopra & Dhaliwal, 2010). This finding indicates that the role of women is secondary to the husband in the matter of family planning. Thus, the partner's level of education should be better investigated also because findings on the relative importance of the husband's versus the wife's education are inconsistent (Irani et al, 2014; Gubhaju, 2009; Hossain et al, 2007). This paper aims at contributing to the existing literature by exploring the role played by the partner's age and education differences in explaining contraceptive use and unmet need among married couples in India.

II. Data and methods

We have used the data from a cross-sectional study conducted to provide crucial information about the health and family welfare and data on important issues in these areas in India and each state and union territory. The National Family Health Survey-4 is a nationally representative survey, and its fourth round was conducted in 2015-16 by the International Institute for Population Studies under the supervision of the Ministry of Health & Family Welfare, Government of India. All four survey questionnaires (Household Questionnaire, Woman's Questionnaire, Man's Questionnaire, and

Biomarker Questionnaire) were canvassed using Computer Assisted Personal Interviewing (CAPI). The NFHS-4 survey adopted a stratified two-stage sample design to reach out to the surveyed households.

Study participants

We have utilized the couple file for our analysis. A total of 63,696 couples consisting of women aged 15-49 years and men aged 15-54 years were included in the analysis. In the context of India, the use of contraception and unmet need for family planning was estimated for the married couples (IIPS, 2017; IIPS, 2007).

Outcome variables

The analysis was done using two dependent variables: the use of contraception and the unmet need for FP among married couples. The use of contraception was recoded as 0 “not using any contraception” and 1 “using contraception either modern or traditional.” Secondly, unmet need was recoded as 0 as “no unmet need” and 1 “having an unmet need.” The analysis was done using a couple data file to capture how couple characteristics affect the use of contraception and unmet need, which was an unseen part in the earlier analysis.

Predictor variables

The predictors consist of couple characteristics, household characteristics and fertility-related characteristics.

Couple characteristics: The spousal educational difference which was created through continuous variable for schooling among husband and wife and which was recorded (both had no education, the wife was more educated, both equally educated and husband more educated) and the spousal age gap was generated through the continuous variable of age for husband and wife. It was recorded as husband and wife of same age/wife older and husband older. Spousal working status was created through the working status of husband and wife. This was formed as both not working, only wife working, the husband working and both working. Media exposure about the family planning was generated through family planning media exposure to husband and wife and recorded as no and yes.

Household characteristics: Religion was detailed as Hindu, Muslim, and others. Caste as SC/ST and non-SC/ST), residence as urban and rural, wealth status as poorest, poorer, middle, richer and richest, and region of India as north, central, east, northeast, west, and south.

Fertility-related characteristics: Children ever born were recoded as 0,1,2,3 and 4+, duration of marriage as 0-4, 5-9 and 10+ years, an ideal number of children as 0,1,2,3 and 4+, wanted fertility was generated by subtracting an ideal number of children by an actual number of children and recoded as less than actual, actual and more than actual, fertility preference as both husband and wife want more, wife wants but husband doesn't, husband wants but wife doesn't, both don't want and others, age at cohabitation was created as less than 18 years and 18 years or more.

Statistical analysis

We begin with the descriptive analysis (frequency distribution) to present the sample composition under three domains (couple characteristics, household characteristics, and fertility-related characteristics) in the study. Further, cross-tabulation was done to study the association with the dependent variable, use of contraception, unmet need for family planning and with all the predictor variables included in three domains. Adjusted odds ratio from the binary logistic regression was executed to determine the factors associated with contraception and unmet need for family planning a dichotomous variable and couple characteristics, household characteristics and fertility-

related characteristics predictor variables included in the study. The analyses were weighted. Data were analysed using STATA 14 software.

III. Results

Among most of the married couples included in the study, husbands were older than wives. Mean and the standard deviation of the age of married couples was 4.84 ± 3.87 years (Figure 1).

Figure 1: Age differences between married couples in India

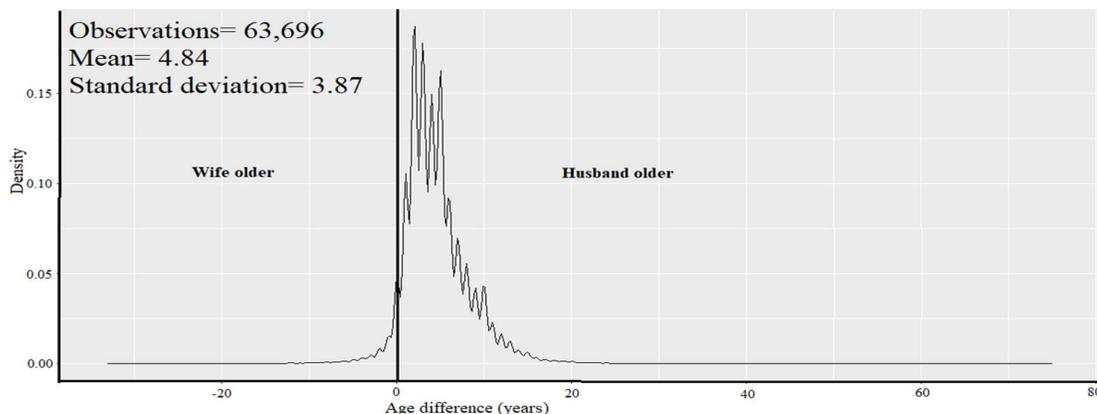


Figure 2 shows the educational difference between husband and wife. Husbands were more educated than the wives. Mean and the standard deviation of years of schooling was 1.44 ± 4.25 years.

Figure 2 Educational difference between married couples in India

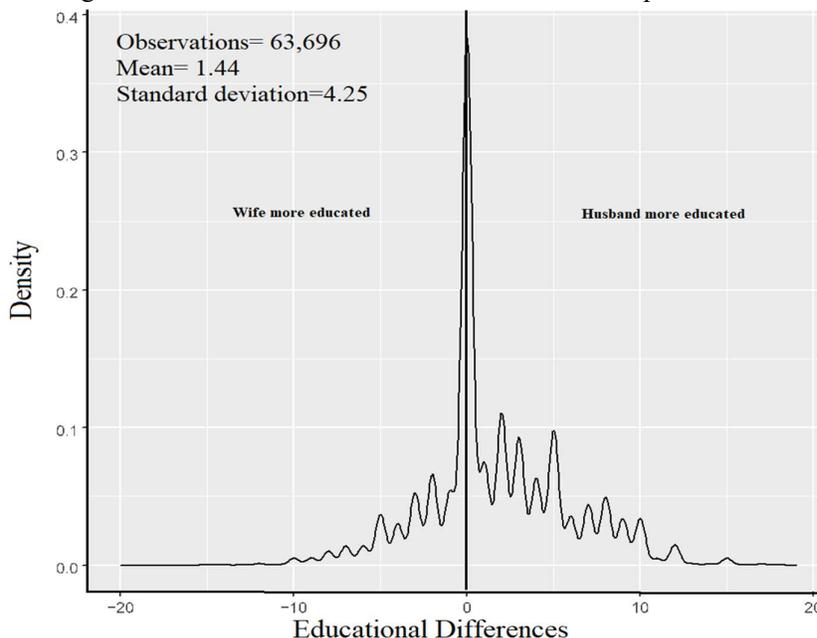
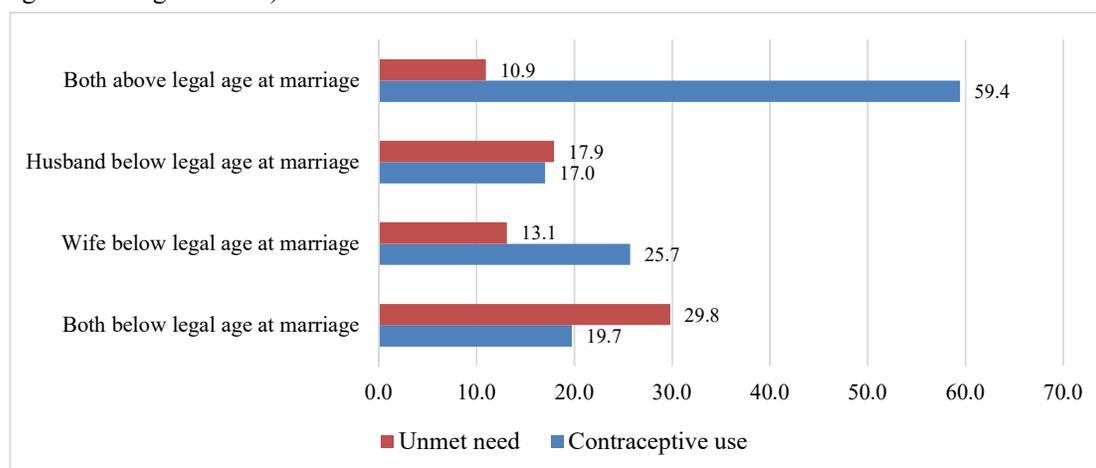


Figure 3 reveals that contraceptive use was the highest among the couples if both husband and wife were married after legal age at marriage. In contrast, it was lowest when the husband was married below the legal age at marriage. As expected, unmet need was the highest if both husband and wife were below legal age of marriage and lowest if both were above the legal age at marriage.

Figure 3: Prevalence of contraceptive use and unmet need among partners (categories based on legal age at marriage in India)



Note:

Both above legal age at marriage: wife ≥ 18 years and husband ≥ 21 years

Husband below legal age at marriage: wife ≥ 18 years and husband < 21 years

Wife below legal age at marriage: wife < 18 years and husband ≥ 21 years

Both below legal age at marriage: wife < 18 years and husband < 21 years

In India nearly 15 per cent of the couples had no schooling, although the husband was more educated than the wife (Table 1). Further, around one-fourth of the couples (23%) were working. Among the Indian couples, almost 93 per cent of the husbands were older, whereas in a minimal number of couples (7%), the wife was older than the husband. However, 70 per cent of the couple lived in rural areas, while 30 per cent of couples who lived in urban areas. On an average, 31 per cent women aged 15-49 years have given birth to two children. More than three-fifths of the couples (63%) have been married for more than ten years. But 59 per cent of the couples were most likely to have two children and 3 per cent of them didn't want to have children. While 32 per cent of women wanted more children in the future, 18 per cent couples (both husband and wife) wanted more children and 28 per cent couples didn't want any child further.

Table 1: Percentage distribution of spousal, household and fertility-related characteristics of Indian couples (NFHS-4, 2015-16)

Spousal characteristics	Per centage	Sample
Spousal educational difference		
Both had no schooling	14.51	9,245
Wife more educated	21.74	13,845
Both equally educated	14.22	9,056
Husband more educated	49.53	31,550
Spousal age gap		
Both of same age or wife older	6.87	4,374
Husband older	93.13	59,322
Spousal working status		
Both not working	6.89	4,386
Only wife working	1.94	1,238
Only husband working	68.62	43,710
Both working	22.55	14,362
Couple's media exposure (heard about family planning)		
No	20.24	12,895
Yes	79.76	50,801

.....contd.

Table 1..... continued

Spousal characteristics	Per centage	Sample
Religion		
Hindu	75.42	48,042
Muslim	13.03	8,302
Others	11.54	7,352
Caste		
SCs/STs	17.88	11,386
Non-SCs/STs	82.12	52,310
Residence		
Urban	29.74	18,944
Rural	70.26	44,752
Wealth status		
Poorest	17.89	11,395
Poorer	21.03	13,395
Middle	21.28	13,552
Richer	20.18	12,853
Richest	19.63	12,501
Regions		
North	21.26	13,542
Central	24.54	15,630
East	16.36	10,420
North-East	12.89	8,210
West	10.86	6,919
South	14.09	8,975
Behavioural characteristics		
Children ever born		
0	8.79	5,596
1	16.85	10,735
2	31.19	19,867
3	20.54	13,084
4+	22.63	14,414
Duration of marriage (years)		
0-4	18.0	11,465
5-9	18.58	11,836
10+	63.42	40,395
Ideal number of children		
0	3.41	2,175
1	4.85	3,089
2	58.86	37,489
3	19.61	12,489
4+	13.27	8,454
Wanted fertility		
Less than actual	26.32	16,766
Actual	41.58	26,482
More than actual	32.1	20,448
Fertility preference		
Both want more	17.88	11,390
Women want husbands don't	4.13	2,631
Husbands want women don't	3.43	2,183
Both don't want	27.8	17,708
Others	46.76	29,784
Age at cohabitation		
Less than 18 years	40.7	25,927
18 and more years	59.3	37,769
Total	100.0	

Note: SC/ST: Scheduled Castes/Scheduled Tribes

Several factors are likely to contribute to the positive relationship between contraception and unmet need among Indian couples (Table 2). A strong association has been found between the use of contraception and the couple's education. Around 60 per cent of the couples with no education used contraception, compared with 61 per cent couples where the husband was more educated. Further, the unmet need for family planning was 9 per cent contrary to the 13 per cent where the wife was more educated. Unmet need for family planning generally increases with increasing years of schooling. Around half of the couples (51%) used any contraceptive measures where both were the same age or wife was older. By contrast, 68 per cent couples used contraception when they both worked against 14 per cent of the couples who had an unmet need for family planning when both were not working. Around 60 per cent of the couples heard about family planning through media and used contraception compared with the 12 per cent couples who had an unmet need for family planning with no media exposure. The likelihood of using contraceptive methods increases sharply with the household's wealth index and vices-versa for unmet need. Fifty per cent of the households with the lowest wealth quantile used contraception while the prevalence was 61 per cent households in the highest wealth quantile.

On the other hand, almost 11 per cent of the richest households had unmet needs while it was 14 per cent for the poorest households. The table shows that the prevalence of unmet need was the highest in the North-East region of the country (14%) while it was lowest in the northern region (8%). Couples in the early duration of marriage are less likely to use any contraception (28%) and more likely to have an unmet need for family planning (20%), contrary to the couples are in the marriage for more than ten years (69%). When the fertility preferences for the couples are less than the family size, they are more likely to use a contraceptive method, while when the couples want more children than they have at present, the prevalence of unmet need for family planning is the highest, i.e., 14 per cent.

Table 2: Prevalence of contraceptive use and unmet need by spousal, household, and fertility-related characteristics of Indian couples (NFHS-4, 2015-16).

Spousal characteristics	Contraceptive use	Unmet need
Spousal educational difference		
Both had no schooling	58.98	9.37
Wife more educated	57.29	12.87
Both equally educated	56.45	12.6
Husband more educated	60.51	10.12
Spousal age gap		
Both of same age or wife older	51.09	13.77
Husband older	59.4	10.87
Spousal working status		
Both not working	47.2	14.16
Only wife working	57.26	11.48
Only husband working	56.91	11.96
Both working	68.02	7.47
Couple media exposure (heard about family planning)		
No	54.33	12.42
Yes	59.97	10.72
Household characteristics		
Religion		
Hindu	59.59	10.69
Muslim	53.15	13.08
Others	62.51	11.43
Caste		
SCs/STs	60.2	10.43
Non-SCs/STs	58.64	11.17

.....contd

Table 2..... continued

Spousal characteristics	Contraceptive use	Unmet need
Residence		
Urban	59.32	11.59
Rural	58.75	10.72
Wealth status		
Poorest	49.96	14.16
Poorer	58.93	10.67
Middle	60.53	9.99
Richer	61.83	10.26
Richest	61.14	10.79
Regions		
North	66.94	8.44
Central	55.09	12.59
East	56.55	12.04
North-East	57.32	13.29
West	59.02	12.21
South	60.05	9.12
Behavioural characteristics		
Children ever born		
0	9.47	9.27
1	39.58	17.45
2	70.79	9.84
3	73.0	8.49
4+	63.69	10.65
Duration of marriage (years)		
0-4	27.64	20.47
5-9	52.47	16.07
10+	69.36	6.99
Ideal number of children		
0	51.15	12.58
1	54.77	13.45
2	60.64	10.55
3	59.66	10.6
4+	51.47	12.94
Wanted fertility		
Less than actual	68.97	9.76
Actual	72.89	9.5
More than actual	29.68	14.36
Fertility preference		
Both want more	24.36	15.82
Wives want husbands don't	25.96	15.87
Husbands want wives don't	29.13	30.51
Both don't want	45.35	20.3
Others	82.98	2.73
Age at cohabitation		
Less than 18 years	63.63	9.26
18 and more years	55.39	12.37

Note: SC/ST: Scheduled Caste/Scheduled Tribe

Table 3 describes the adjusted odds ratios for contraceptives and unmet need for family planning among Indian women. Results reveal that woman with more education (OR=1.31; CI=1.19-1.44) were more likely to use contraception methods than women who had no schooling. Unmet need for family planning was lesser among the couples where the husbands were older (OR=0.89; CI=0.81-0.97) compared with the couples where both were of the same age or wife was older. Working couples were 1.8 times (CI=1.57-2.06), significantly more likely to use contraceptive methods than single working couples. With the increasing wealth quantile, contraception methods

were growing from the poorest to the richest group (OR=2; CI=1.77-2.25). By contrast, couples were more likely to have an unmet need for family planning and belonged to the poorest section than the richest (OR=0.75; CI=0.67-0.84). Women reporting three children were ten times (CI=8.6-12.82) more likely to use contraceptive methods than those who had none or 1 (OR=6.86; CI=5.76-8.17) or two children (OR=9.76; CI=8.13-11.71). Couples who reported 4.31 times (CI=3.6-5.17) were more likely to have an unmet need for family planning, having four and more children. Couples with two children (ideal) were 2.4 times (CI=2.13-2.8) less likely to use them than those with one child.

Table 3: Logistic Regression estimates to find association for contraceptive use and unmet need with background characteristics in India

Spousal characteristics	Contraceptive use	Unmet need
	OR (95% CI)	OR (95% CI)
Spousal educational difference		
Both had no schooling	Ref.	Ref.
Wife more educated	1.31* (1.19, 1.44)	1.20* (1.09, 1.32)
Both equally educated	1.17* (1.05, 1.31)	1.27* (1.14, 1.41)
Husband more educated	1.09* (1.01, 1.18)	1.12* (1.03, 1.22)
Spousal age gap		
Both of same age or wife older	Ref.	Ref.
Husband older	1.32* (1.18, 1.48)	0.89* (0.81, 0.97)
Spousal working status		
Both not working	Ref.	Ref.
Only wife working	1.17 (0.94, 1.47)	0.77* (0.62, 0.95)
Only husband working	1.40* (1.24, 1.59)	0.78* (0.71, 0.85)
Both working	1.80* (1.57, 2.06)	0.69* (0.62, 0.77)
Couple media exposure (heard about family planning)		
No	Ref.	Ref.
Yes	1.10* (1.03, 1.19)	0.91* (0.85, 0.97)
Household characteristics		
Religion		
Hindu	Ref.	Ref.
Muslim	1.14* (1.04, 1.25)	0.96 (0.89, 1.04)
Others	0.97 (0.86, 1.10)	1.27* (1.17, 1.39)
Caste		
SCs/STs	Ref.	Ref.
Non-SCs/STs	0.88* (0.81, 0.95)	1.05 (0.98, 1.12)
Residence		
Urban	Ref.	Ref.
Rural	1.03 (0.96, 1.11)	0.89* (0.83, 0.95)
Wealth status		
Poorest	Ref.	Ref.
Poorer	1.46* (1.34, 1.60)	0.83* (0.76, 0.90)
Middle	1.56* (1.42, 1.72)	0.80* (0.73, 0.88)
Richer	1.70* (1.53, 1.89)	0.77* (0.70, 0.85)
Richest	2.00* (1.77, 2.25)	0.75* (0.67, 0.84)
Regions		
North	Ref.-	Ref.
Central	0.73* (0.67, 0.79)	1.28* (1.18, 1.39)
East	0.82* (0.74, 0.90)	1.51* (1.38, 1.66)
North-East	1.02 (0.91, 1.14)	1.82* (1.65, 2.00)
West	0.46* (0.42, 0.52)	1.87* (1.69, 2.06)
South	0.33* (0.30, 0.36)	1.69* (1.53, 1.87)

.....contd

Table 3.....continued

Spousal characteristics	Contraceptive use	Unmet need
	OR (95% CI)	OR (95% CI)
Behavioural characteristics		
Children ever born		
0	Ref.	Ref.
1	6.86* (5.76, 8.17)	2.55* (2.29, 2.84)
2	9.76* (8.13, 11.71)	3.04* (2.65, 3.48)
3	10.50* (8.60, 12.82)	3.60* (3.07, 4.23)
4+	8.27* (6.64, 10.31)	4.31* (3.60, 5.17)
Duration of marriage (years)		
0-4	Ref.	Ref.
5-9	1.01 (0.90, 1.13)	0.49* (0.45, 0.53)
10+	1.28* (1.15, 1.44)	0.18* (0.16, 0.20)
Ideal number of children		
0	Ref.	Ref.
1	2.97* (2.42, 3.64)	0.75* (0.63, 0.90)
2	2.44* (2.13, 2.80)	0.70* (0.60, 0.81)
3	1.88* (1.60, 2.19)	0.77* (0.65, 0.90)
4+	1.45* (1.21, 1.74)	0.93 (0.78, 1.11)
Wanted fertility		
Less than actual	Ref.	Ref.
Actual	1.14* (1.04, 1.24)	0.86* (0.79, 0.94)
More than actual	0.42* (0.37, 0.48)	1.10 (0.98, 1.24)
Fertility preference		
Both want more	Ref.	Ref.
Wives want husbands don't	0.64* (0.54, 0.76)	1.08 (0.96, 1.23)
Husbands want wives don't	0.40* (0.34, 0.47)	2.93* (2.61, 3.30)
Both don't want	0.52* (0.46, 0.58)	2.71* (2.46, 2.98)
Others	4.89* (4.36, 5.49)	0.48* (0.43, 0.53)
Age at cohabitation		
Less than 18 years	Ref.	Ref.
18 and more years	1.01 (0.95, 1.07)	1.02 (0.96, 1.08)

Note: Ref; Reference category; * p<0.05; OR: Odds Ratio; CI: Confidence Interval.

IV. Discussion and conclusion

Effective family planning programmes require a proper identification of socio-economic and demographic features of women with unmet need, including their partners' characteristics. Indeed, decision-making patterns of contraceptive use is often gender unbalanced in India, with the partner deciding most. Thus, clear evidence of the role played by Indian couples' characteristics - in terms of differences in age and educational attainment - in influencing unmet needs for family planning and level of contraception use is needed.

Results observed in this study show a strong association between the use of contraceptive methods and the couples' educational level. In India, nearly 15 per cent of the couples have no schooling compared with half of the couples (50%) with husband is more educated than the wife.

The role of wives is secondary to that of the husbands in family planning and evidence of the relative importance of the husbands versus the wives' education provided inconsistent results (Irani et al, 2014; Gubhaju, 2009; Hossain et al, 2007). Compared with couples with no education, those more educated reported a higher level of contraception uses and higher level of unmet needs. More specifically, couples with women more educated than men were about 30 per cent more likely to use contraception, whereas those composed by more educated men were only about 9 per cent are more likely to use contraceptive methods compared with not educated couples.

Overall, our findings suggest that education is a good predictor of contraceptive use with highly educated couples reporting higher odds of using contraception. Empirical evidence supports a fertility-depressing effect of education. However, most fertility studies focus on women's level of education without considering that wife's and husband's education is positively correlated (Basu, 2002).

Studies that have included both partners' education have so far provided inconclusive findings. Education may affect fertility decision through two important mechanisms: the social learning and the social influence. According to the first one, individuals' acquisition of information and knowledge with regard to contraception and family planning comes from the interpersonal networks and impersonal sources like mass media. According to the second, individuals exert influence over others' decisions and authority like that of the partner (Bongaarts & Watkins, 1996; Montgomery & Casterline, 1996).

In addition, our findings show that the odd of reporting unmet need for family planning was 27 per cent higher amongst couples with the same level of education and about 20 per cent higher among couples with women having a higher level of education. This result finds support in the existing literature that unmet need is more frequent among better educated couples since individuals with more education are more interested in avoiding pregnancy but face more obstacles to using contraception than other women (Tapare, 2017). Therefore, equally educated partners may be more likely to share the same attitudes regarding fertility intentions by dealing with the same obstacles.

At the same time, the current study found that the unmet need for family planning was the highest among couples with less educated husband. This result could be explained by the fact that less educated husbands may, on the one hand, have lower awareness regarding the benefits of use of contraception and, on the other, showing more masculine attitude with their partners by discouraging wives to adopt family planning programmes (Singh et al., 2018).

Regarding partners' difference in age, we found that compared with couples with the same age partners or with older wives, those with traditionally older husbands were about 32 per cent more likely to use contraceptive methods and significantly less likely to have unmet needs. However, this result was strongly moderated by partners' level of education showing that only for older and highly educated partners the likelihood of using contraception and to have not unmet need is higher.

However, among the Indian couples, almost 93 per cent of the husband is older, whereas just in a minimal number of couples (7%), the wife is older than the husband. Therefore, robustness checks have been implemented to better explore the role played by difference in age as predictor of unmet needs for contraception and family planning.

Exploring a couple's related determinants of contraceptive use is essential to shed light key factors of investment to deal with weakness of actual family planning policies in India. Higher and better focused programmes respond to family planning needs (Rajkumari et al., 2013). India has among the highest number of maternal deaths in the world (World Health Organization, 2015) and prior studies clearly show that meeting the unmet need for family planning can help to reduce them significantly (Cleland et al., 2006). Moreover, family planning and better reproductive health are deeply connected with children's health, spread of sexually transmitted diseases, poverty, education, gender equality and human rights.

According to our findings, not just individuals' but especially couples' characteristics matter in determining the unmet needs for family planning and use of contraception. Thus, further investments must consider joint responsibility with regard to fertility intention and reproductive health since men and women are equal partners in public and private life (Purwar et al, 2018).

However, some limitation of this research must be acknowledged. First, this paper is based on cross-sectional study design and so hypothesis of causal relationship could not be advanced.

Moreover, we used retrospective self-reported information that, although reliable, can be affected by subjective biases and inaccuracy of recall.

Intensive investments are needed to provide safe access to family planning to everyone. Moreover, findings revealing a role of couples' characteristics in making choices regarding family planning should be considered to identify specific ways to motivate people's use of contraceptive methods. Finally, improving the empowerment of women through higher education, employment and autonomy about family planning issues will significantly help India achieve sustainable development goals.

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