

Knowledge and Use of Contraception among Currently Married Adolescent Women in India

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ABSTRACT This paper tries to examine the knowledge and practice of family planning methods among the currently married adolescent women (CMAW) in India. National Family Health Survey 1998-99 data have been used for the study. Even today 12 percent of CMAW do not have knowledge of any modern methods of contraception in the country. Age, education, place of residence, standard of living and husband's education plays a significant role in women having knowledge of all the modern methods of contraception. About 10 percent of CMAW are currently using contraception and there is constant increase in contraceptive use with the increase in number of living children, but its increase is much faster when women know all the modern methods of contraception. Living children and knowledge of contraception plays significant role in its use, besides that, exposure to mass media and husband wife communication plays significant role. There is a need to impart knowledge about all the family planning methods among the CMAW, so that it will help women to choose suitable and affordable method, enable couples to decide when to and whether to have child, and thereby facilitate fertility decline in the country.

INTRODUCTION

In India very high proportion of girls gets married at very young age and immediately are exposed to the risk of bearing children. Many marriages in the country are solemnized well before the legal age. Jejeebhoy (2000) for example has noted that as high as 34 percent of the adolescent girls aged 15-19 years in India are already married and presumably sexually active, while fewer than 10 percent of unmarried girls are reported to be sexually experienced. Further, current scenario suggest that stopping marriages before legal age has no easy solution. However, certain maladies arising out of early marriages can be minimized to certain extent by providing proper knowledge of family planning methods.

Many a times women shy away from using contraception mainly because they lack knowledge and are afraid of sterilization; copper T or pills does not suit them; or injection is not available etc; thereby have to carry the burden of unwanted pregnancies or go for abortion which is mainly unsafe, having knowledge of wide range of contraceptive methods helps women to overcome such difficulties. Further, it enable couples to decide when to and whether to have child. In this regard Bongaarts (1983) has demonstrated that 96 percent of variation in the fertility levels among societies is explained by the variation in age at marriage, use of

contraception, induced abortion and breast-feeding or lactational amenorrhea. Further, Mauldin and Ross (1991) have demonstrated that CPR alone can explain 85 to 87 percent of the variance in TFR. Therefore, this paper tries to examine the knowledge and practice of family planning methods among the currently married adolescent women (CMAW) in India.

METHODOLOGY

For the present study National Family Health Survey (NFHS-2) conducted during 1998-99 data has been used. Though NFHS-2 covered about 89,199 ever married women, we have selected only 6,888 currently married women who are 15-19 years old and currently living with husband. Data have been further filtered as and when required. Percentage distribution, cross tabulation and logistic regression has been applied in the present paper.

Knowledge of Various Contraceptive Methods by Place of Residence

India, although, was the first country to introduce family planning program as early as 1950s, but it is pathetic to know that 12 percent of the currently married adolescent women (CMAW) in India still do not have knowledge of any modern methods of

contraception, although it is only 5 percent in urban areas (Table 1). Among CMAW also female sterilization is the most popular method, followed by male sterilization and pill, whereas IUD is still very unpopular followed by condom. A huge rural-urban differential is noted in knowledge of all the methods of contraception, except sterilization. It has been found that even among the CMAW, knowledge of at least one method (modern or traditional) or at least one modern methods of contraception is pretty high (about 97%), although it is slightly higher for the urban women. However, till now not even 15% of the CMAW have knowledge of all the contraceptive methods, it is even worse in the rural areas. In urban areas about 60 percent, in rural areas 42 percent and total 45 percent of the CMAW knows all the modern methods of contraception. So far, prevention is the best medicine against dreaded disease HIV/AIDS, and use of condom is one of the means which could provide safety for sexually active population against it and other sexually transmitted diseases. But according to the NFHS-2 data, only 78 percent of CMAW from urban areas, 60 percent from rural areas and about 63 percent in total have knowledge of condom in India.

Table 1: Knowledge of various contraceptive methods by place of residence

Methods	Urban	Rural	Total
Don't know any modern method	5.4	12.8	11.5
Don't know any method ^(M+T)	1.3	3.7	3.3
Pill	85.7	71.0	73.5
IUD	71.1	54.2	57.1
Condom	77.9	59.4	62.6
Female Sterilization	97.2	94.5	95.0
Male Sterilization	83.8	80.7	81.3
Rhythm	40.5	34.1	35.3
Withdrawal	26.6	20.5	21.6
Knows at least one modern method	98.7	96.1	96.5
Knows at least one method ^(M+T)	98.7	96.3	96.7
Knows all modern methods	60.0	42.1	45.2
Knows all methods ^(M+T)	20.1	12.7	14.0
Knows only all modern methods	75.2	81.6	80.5
Knows only all traditional methods	26.5	20.5	21.6
Total cases	1,194	5,694	6,888

^{M+T} = Modern + Traditional method

Knowledge of all Modern Methods of Contraception by Background Characteristics

From Table 2 results show that the knowledge of family planning methods increases constantly with the increase in age of the women and education. Among illiterate women, only one third of women know all modern methods, whereas three fourth of women with high school or above level of education knows all modern the methods. In rural areas only 42 percent, but in urban areas 60 percent have knowledge of all

Table 2: Knowledge of all modern methods of contraception by background characteristics

Background	Know all	Others	Total
<i>Current Age</i>			
15	27.3	72.7	510
16	32.5	67.5	927
17	43.1	56.9	1237
18	49.4	50.6	2168
19	52.2	47.8	2046
<i>Education</i>			
Illiterate	33.5	66.5	3907
< Middle School	52.2	47.8	1635
Middle school complete	68.4	31.6	827
High school complete & above	74.0	26.0	519
<i>Place of Residence</i>			
Urban	60.0	40.0	1194
Rural	42.1	57.9	5694
<i>Standard of Living</i>			
Low	33.0	67.0	2564
Medium	48.4	51.6	3528
High	70.4	29.6	796
<i>Religion</i>			
Hindu	43.5	56.5	5543
Muslim	52.9	47.1	988
Others	50.1	49.9	357
<i>Caste / Tribe</i>			
Scheduled caste	42.1	57.9	1438
Scheduled tribe	27.8	72.2	896
Other backward caste	46.5	53.5	2256
Non of them	52.5	47.5	2213
<i>Husband's Education</i>			
Illiterate	29.5	70.5	2000
< Middle School	43.3	56.7	1733
Middle school complete	49.5	50.5	1289
High school complete & above	60.7	39.3	1850
<i>Discussed FP with Husband</i>			
No	40.9	59.1	5667
Yes	64.9	35.1	1221
<i>Exposure to Mass Media</i>			
Not exposed	34.0	66.0	3165
Partially exposed	51.9	48.1	3188
Fully exposed	71.0	29.0	535
Total	45.2	54.8	6,888

modern methods. Only one third of women who are from low standard of living and about half of women from medium standard of living knows all modern methods, whereas as high as 70 percent of CMAW from high standard of living have knowledge of all the modern methods of contraception. Data shows that percentage of women knowing all the modern methods of contraception is higher among Muslims compared to other women. However, from this result it can not be firmly confirmed that Muslim CMAW have higher knowledge, because here other factors are not taken into consideration. Among SCs 42 percent, among OBCs 47 percent and among general caste 53 percent have knowledge of all modern contraception. Compared with various castes, percentage of tribal women having knowledge of all the modern methods of contraception is quite low (27.8%), which indicates that the message of family planning methods even after about five decades of its advocacy could not reach tribal population in India. Therefore, planners and policy makers should scrutinize earlier programs, and rectify and modify accordingly so that tribal women could have full choice of contraception.

Ascertaining whether husband wife discussion about family planning methods would enhance its knowledge or when they have knowledge, they discuss is pretty difficult. However, here we assume the earlier proposition. Result shows that among the CMAW who discuss family planning with husband 65 percent have knowledge of all the modern methods of contraception but it is only 41 percent among their counter part. Result also shows that higher is the exposure to mass media, higher is the knowledge of contraception.

Results of Logistic Regression

From the bi-variate analysis it is not conclusive about what are the determinants of any phenomenon, because it depicts only the one to one relationship between two variables, whereas in reality hosts of factor play their role simultaneously, so logistic regression has been applied here. Results of logistic regression (Table 3) shows that with the increase of the age, education, standard of living and husband's education odds of knowing all modern methods of contraception increases. Compared to their

Table 3: Results of logistic regression

Independent variables	Knowledge of planning methods modern Family	
	Knows all=1 \hat{a}	Others = 0 Exp \hat{a}
<i>Current age</i> ^{Con}	0.160	1.173***
<i>Education</i>		
Illiterate ^R		
< Middle School	0.420	1.522***
Middle school complete	0.926	2.523***
High school complete & above	0.918	2.503***
<i>Place of Residence</i>		
Urban ^R		
Rural	-0.250	0.770**
<i>Standard of Living</i>		
Low ^R		
Medium	0.270	1.310***
High	0.639	1.895***
<i>Religion</i>		
Hindu ^R		
Muslim	0.346	1.413***
Others	0.233	1.262
<i>Caste / Tribe</i>		
Scheduled caste ^R		
Scheduled tribe	-0.672	0.511***
Other backward caste	-0.001	0.999
Non of them	-0.004	0.996
<i>Husband's Education</i>		
Illiterate ^R		
< Middle School	0.251	1.285**
Middle school complete	0.384	1.468***
High school complete & above	0.536	1.709***
<i>Exposure to Mass Media</i>		
Not exposed ^R		
Partially exposed	0.163	1.178**
Fully exposed	0.299	1.348
<i>Discussed FP with Husband</i>		
No ^R		
Yes	0.696	2.006***

^R = Reference category ^{Con} = Continuous variable; ***= p<0.001, **=p<0.01, *=p<0.05

counter part, rural women and who do not discuss family planning with husband are less likely to know all the modern methods of contraceptive. Compared to Hindu, Muslim women are more likely to know all modern methods. Whereas, compared to SC; ST women are less likely to know all modern methods. This result further strengthens the fact that message of family planning have not reach the deprived (tribal) section of the country, so there is a need to provide knowledge about family planning to tribal women with specifically designed programs.

Contraceptive Use by its Knowledge

To find out the current contraceptive use,

those women who are currently pregnant, and infecund women have been removed from the analysis as these group of women do not have the need to use contraception. Besides, who do not know any contraceptive method, has also been removed because the question of their using contraception does not arise. But their inclusion would simply deflate the results. It is found that having knowledge of various contraceptive methods has a great effect on its use. Among the respondents who knows only traditional methods about 24 percent are currently using some method of contraception (Table 4). Use of contraception by such a high percentage of women may be because it is costless and as they do not have to consult anybody which some women/couple may feel embarrassing to do so. But when women know all modern methods of contraception, its use goes down by about 10 percent point (to 13.7%). On the other hand, when women know one or more methods (either modern or traditional), its use is only about 10 percent, but surprisingly, when women knows only modern methods its use goes down to only 6 percent. Results clearly highlight that knowing traditional methods increases the use of contraception. But as the effectiveness of traditional methods are pretty low and it needs good husband-wife communication, its use is not advocated here. However, having its knowledge is added advantage for the women/couple.

Table 4: Percentage of women who knows at least one method by current use

<i>Knowledge</i>	<i>Using</i>	<i>Not using</i>	<i>Cases</i>
Knows all modern methods	13.7	86.3	2442
Knows all methods ^(M+T)	23.9	76.1	752
Knows any one or more modern methods	10.1	89.9	5279
Knows any one or more methods ^(M+T)	10.1	89.9	5287
Knows only all modern methods	6.3	93.7	4379
Knows only all traditional methods	24.4	75.6	1162
Total	9.8	90.2	6,888

Current use by Background Characteristics

The results from Table 5 indicate that with the increase in age and education there is also steady increase in the contraceptive use. Because with the increase in age need to use increases and with the increase in level of educa-

Table 5: Percentage of women by background characteristics and contraceptive use

<i>Background</i>	<i>Using</i>	<i>Not using</i>	<i>Total</i>
<i>Current Age</i>			
15	5.7	94.3	418
16	5.2	94.8	747
17	7.0	93.0	983
18	10.0	90.0	1681
19	14.6	85.4	1594
<i>Education</i>			
Illiterate	7.0	93.0	3089
< Middle School	12.2	87.8	1267
Middle school complete	15.8	84.2	651
High school complete & above	14.7	85.3	416
<i>Place of Residence</i>			
Urban	14.1	85.9	905
Rural	9.0	91.0	4518
<i>Religion</i>			
Hindu	9.0	91.0	4389
Muslim	13.1	86.9	772
Others	14.5	85.5	262
<i>Caste / Tribe</i>			
Scheduled caste	8.3	91.7	1136
Scheduled tribe	6.1	93.9	674
Other backward caste	7.8	92.2	1809
Non of them	14.6	85.4	1746
<i>Standard of Living</i>			
Low	7.6	92.4	1928
Medium	9.5	90.5	2790
High	18.2	81.8	632
<i>Husband's Education</i>			
Illiterate	6.8	93.2	1574
< Middle School	11.0	89.0	1332
Middle school complete	9.7	90.3	1019
High school complete & above	12.0	83.3	1486
<i>Discussed FP with Husband</i>			
No	6.2	93.8	4474
Yes	26.8	73.2	949
<i>Marital Duration</i>			
0	7.1	92.9	1689
1 – 2	9.4	90.6	2216
3 – 4	12.1	87.9	1130
5 and above	17.3	82.7	388
<i>Number of Living Children</i>			
0	5.2	94.8	2832
1	12.6	87.4	2021
2	21.7	78.3	507
3+	34.9	65.1	63
<i>Number of Living Sons</i>			
0	6.9	93.1	3893
1	16.4	83.6	1381
2+	26.2	73.8	149
<i>Exposure to Mass Media</i>			
Not exposed	5.8	94.2	2538
Partially exposed	13.1	86.9	2454
Fully exposed	14.8	85.2	431
Total	9.8	90.2	5423

tion women are better aware of all contraceptive methods. About 14 percent in urban areas and 9

percent in rural areas are currently using one or the other methods of contraception. Among CMAW lowest percentage of Hindu women followed by Muslim women are practicing family planning but higher percentages of women from other than these two religions are using contraception. When we look across various castes, it is found that highest percentage of women (14.5%) from forward caste are current users of family planning, followed by SC women (8.3%), OBC (7.8%) and ST (6.1%) women. It is because women from forward castes are mostly better educated, have desire for lesser number of children etc.

Further, the one to one relationship between standard of living (SL) and contraceptive use is found to be distinctly positive. About 8 percent of women from low SL, 10 percent from medium and 18 percent from high SL are currently contracepting. It may be because the women from the higher SL households are not handicapped by the financial constraints and thereby could choose the suitable methods of contraception, whereas, no clear relationship between husband's education and contraceptive use is noted. There is huge difference in contraceptive use between women who discuss with husband about family planning compared to their counter part. Among the women who discuss family planning with husband about one fourth (26.8%) of women are currently using contraception, whereas among their counter part not even one tenth (6.2%) of women are using contraception. It indicates that husband wife communication plays a great role in contraceptive use. As expected a very distinct positive relationship between marital duration and contraceptive use is observed. As the marital duration increases, percentage of women using contraception also steadily increases. Same relationship between number of living children, number living sons and exposure to mass media is observed.

Contraceptive use by Living Child(ren) and Knowledge of Contraception

It has been observed from Table 6 that among the CMAW when they do not have any child, about 5 percent uses contraception, when they have one child its use is 13 percent, it increases to 22 percent when they have two children and further increases to 27 percent when they have three or more children. Close observation into

Table 6: Percentage of women having knowledge of one or more methods by number of living children and current contraceptive use

Living children	Knowledge	Using	Not using	Cases
0	Others	3.8	96.2	1536
	Knows all modern methods	7.3	92.7	1207
	Total	5.3	94.7	2743
1	Others	7.3	92.7	1014
	Knows all modern methods	18.8	81.2	963
	Total	12.9	87.1	1977
2	Others	19.8	80.2	268
	Knows all modern methods	23.9	76.1	238
	Total	21.7	78.3	506
3 +	Others	21.7	51.9	27
	Knows all modern methods	48.1	73.5	34
	Total	26.5	63.9	61

the result reveals that there is a huge difference in contraceptive use between women who knows all modern methods of contraception and those who knows only some of them. Among the women who knows all the modern methods of contraception, even if they do not have child, 7 percent are using contraception, it increases to 19 percent when they have one living child, it rises to 24 percent when they have two living children and goes as high as to 48 percent when they have three or more living children. On the other hand, among CMAW who do not know all the modern methods of contraception, when they have no living child, contraceptive use is about 4 percent, 7 percent when they have one living child, 20 percent when they have two living children, and increases to 22 percent when they have three or more living children. The results clearly indicates that there is constant increase in contraceptive use with the increase in number of living children, but its increase is much faster when they have knowledge of all the modern methods of contraception. However, we also need to examine this fact from other angle. As, son preference in India is well established fact, so only having the larger number of children is not sufficient ground for contraceptive use. Hence we shall examine the relationship between number of living sons and knowledge of contraception with its use.

Contraceptive use by Living Son(s) and Knowledge of Contraception

In India, due to strong son preference, contraceptive practice depends not mainly on number of living children, but heavily on the number of living son(s). Here results (Table 7) show that among the CMAW who are not having any son, about 7 percent of the couple are contracepting, it increases to 17 percent when they have one son and it further increases to 26 percent when they have two or more sons. However, despite having desired number son(s), knowledge of wide range of contraception is must for its use. From the results it is quite clear that even if CMAW do not have any son, if they know all modern methods of contraception, its use is 10 percent, whereas among others it is only 5 percent. If the CMAW have one son and know all the modern methods of contraception, its use is as high as 22 percent, whereas among others it is only 12 percent. However, when CMAW have two or more sons, irrespective of their knowledge of contraception, its use is almost equal in both the groups of women. Of course this result may be due to the very small cell count. However, from this result it can be inferred that along with number of living sons, knowledge of all the methods of contraception has a great role in its practice. Hence, women without son(s) should be motivated to use contraception for their better reproductive health, not from fertility reduction per se. Because decision regarding fertility is personal matter and everyone has the right to

Table 7: Percentage of women having knowledge of one or more method by number of living sons and current of use of contraception

Living sons	Knowledge	Using	Not using	Cases
0	Others	4.7	95.3	2107
	Knows all modern methods	10.0	90.0	1675
	Total	7.1	92.9	3782
1	Others	11.8	88.2	663
	Knows all modern methods	21.5	78.5	693
	Total	16.7	83.3	1356
2 +	Others	26.7	73.3	75
	Knows all modern methods	25.7	74.3	74
	Total	26.2	73.8	149

decide how many children (sons?) to have, provided they are not eliminating daughters.

Results of Logistic Regression

Results of binary logistic regression model I (Table 8) show that with the increase in number

Table 8: Results of Binary Logistic regression

Independent variables	Current contraceptive use Using =1 Not using = 0			
	Model I		Model II	
	$\hat{\alpha}$	Exp $\hat{\alpha}$	$\hat{\alpha}$	Exp $\hat{\alpha}$
Living children ^{Con}	0.794	2.212***	0.777	2.175***
Knows All Modern Methods				
Others ^R				
Knows all	0.778	2.178***	0.211	1.235*
Current Age ^{Con}	-	-	0.076	1.079
Education				
Illiterate ^R	-	-		
< Middle School			0.186	1.204
Middle school complete			0.539	1.714**
High school complete & above			0.311	1.365
Place of Residence -				
Urban ^R	-	-		
Rural			-0.054	0.947
Standard of Living -				
Low ^R	-	-		
Medium			-0.136	0.873
High			0.312	1.367
Marital Duration ^{Con} -		0.009	1.009	
Religion				
Hindu ^R	-	-		
Muslim			0.050	1.051
Others			0.444	1.559*
Caste / Tribe				
Scheduled caste ^R	-	-		
Scheduled tribe			-0.293	0.746
Other backward caste			-0.023	0.977
Non of them			0.530	1.698***
Husband's Education-				
Illiterate ^R	-	-		
< Middle School			0.228	1.256
Middle school complete			0.066	1.069
High school complete & above			0.050	1.051
Exposure to Mass Media-				
Not exposed ^R	-	-		
Partially exposed			0.606	1.833***
Fully exposed			0.520	1.682*
Discussed FP with Husband				
No ^R	-	-		
Yes			1.271	3.565***

^R = Reference category ^{Con} = Continuous variable, ***= p<0.001, **=p<0.01, *=p<0.05

of living children, the odds of contraceptive use also significantly increases. On the other hand, among those women who know all the modern methods of contraception, odds of using contraception is 2.2 times higher than their counterparts. So, when we include only these two variables in the model, influence of both the variables on the contraceptive use is highly significant. However, weight-age of number of living children slightly overweighs the weight-age of knowledge of all modern methods of contraception. But it is a known fact that these are not the only variables that affect the contraceptive use, in the society, unlike laboratory tests, various variables affect simultaneously, so in the second model other variables are also included.

Results of logistic regression (Table 8) model II show that when we include other variables in the model, the effect of living children is even greater on the contraceptive use, although the knowledge of contraceptive methods still plays a great role but its influence slightly decreases. Compared to SC women, general caste women are more likely to use contraception, and it is statistically highly significant. On the other hand, compared to SC CMAW, ST and OBC women are less likely to use contraception, but the result is statistically not significant. Compared to Hindu women, women from other religions are more likely to use contraception. In terms of contraceptive use, exposure to mass-media also plays a determining role, compared to women who are not exposed, partially exposed and fully exposed women are more likely to use contraception. Further, CMAW who discuss family planning with husbands are more likely to use family planning methods compared to their counterparts. From this result it can be surmised that providing knowledge about various family planning methods, exposing women to different mass media and husband-wife communication would be able to increase the contraceptive use among the CMAW in the country.

CONCLUSION

In India even after about five decades of family planning programmes, 12 percent of CMAW do not have knowledge of any modern methods of contraception. Several factors play significant roles in women having knowledge of all the modern methods of contraception. Living children and knowledge of contraception play significant roles in its use. Therefore, there is a need to impart knowledge about all the family planning methods among the CMAW so that it will help women to choose suitable and affordable methods, enable them to lead a burden and danger-free and healthy reproductive life, enable couples to decide when to and whether to have children, and thereby facilitate fertility decline in the country. To make aware about various family planning methods, skits, drama, cultural programs etc should be organized in the initial stage. In the later stage, grass-root level workers like Anganwadi workers, ANM, Dais, traditional birth attendants etc may be asked to meet women in small groups with similar needs and impart knowledge about the various family planning methods in detail –including positive and negative aspects of each method and avoid advocating any specific method. CMAW since are in reproduction process, they should be encouraged to use contraception not for fertility reduction per se, but for better reproductive and child health.

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