

# **Reasons for Discontinuing and not Intending to Use Contraception in India**

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India's National Family Health Survey (NFHS) was conducted in 1992–93 under the auspices of the Ministry of Health and Family Welfare. The survey provides national and state-level estimates of fertility, infant and child mortality, family planning practice, maternal and child health, and the utilization of services available to mothers and children. The International Institute for Population Sciences, Mumbai, coordinated the project in cooperation with 18 population research centres throughout India, the East-West Center in Honolulu, Hawaii, and Macro International in Calverton, Maryland. The United States Agency for International Development provided funding for the project.

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# Reasons for Discontinuing and not Intending to Use Contraception in India

**Abstract.** *Based on data from India's 1992–93 National Family Health Survey, this study analyzes the main reasons for discontinuing contraceptive use and for not intending to use contraception in the future. The study also analyzes the effects of seven demographic and socioeconomic variables on reported reasons for discontinuing contraception or intending not to use contraception.*

*The results indicate that 38% of currently married women age 13–49 who discontinued using contraception did so because of a method-related problem or method failure. Comparing states, the proportion who discontinued because of a method-related problem or method failure ranges widely—from 11% in Meghalaya to 94% in Nagaland. It is not highly correlated with state-level fertility. By contrast, the proportion reporting a method-related problem or method failure as their main reason for discontinuing contraception does not vary widely across socioeconomic groups, either within individual states or in India as a whole.*

*In the country as a whole, 15% of women who do not use contraception and who do not intend to use contraception in the future report method-related problems as their main reason for not intending to use contraception, while 9% mention opposition to family planning. The proportion reporting method-related problems or opposition to family planning is particularly high among women in the prime reproductive ages and among women not regularly exposed to electronic mass media. The proportion reporting opposition to family planning is several times higher among Muslim women than among Hindu women or women of other religions. The estimated effects of age, media exposure, and religion are largely independent of other, potentially confounding, socioeconomic variables.*

*Only 1% or less of women mention accessibility or cost as their main reason for discontinuing contraception or not intending to use contraception in the future. Similarly, very few women mention replacing a dead child as a reason for discontinuing contraception.*

*The finding that method-related problems and method failure are important reasons for discontinuing contraception and the finding that method-related problems and opposition to family planning are important reasons for not intending to use contraception in the future suggest that the quality of family planning services in India*

*needs improvement. These findings also suggest the importance of education and motivation activities. Programmes should pay particular attention to women in those states and social categories in which the proportions mentioning method-related problems and opposition to family planning are especially high.*

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## INTRODUCTION

It is well documented that effective family planning programmes can minimize unintended pregnancies, reduce maternal mortality, and improve child survival (Population Reference Bureau 1998; Winikoff and Sullivan 1987; Choe et al. 1999). To be successful, however, family planning programmes must motivate women to begin using contraception and must encourage women who are already using family planning not to discontinue contraceptive use. This report analyzes women's reasons for discontinuing contraception and not intending to use contraception in the future, based on data from India's 1992–93 National Family Health Survey (NFHS). It also analyzes the effects of seven demographic and socioeconomic variables on women's reported reasons for discontinuing and not intending to use contraception.

Through the years, India's family planning programme has focused primarily on sterilization. Both programme targets and performance evaluations have emphasized numbers of sterilizations performed. For this reason, there has been little incentive for programme managers or field workers to promote temporary contraceptive methods, such as pills or condoms. Discontinuation rates for temporary methods have been high, in no small part because of the poor quality of services offered for these methods. Thus programme priorities account in large part for both the low prevalence and the high discontinuation rates for temporary contraceptive methods.

Low prevalence and high discontinuation rates help to explain the low impact of temporary methods on fertility in India compared with the importance of these methods in many other countries (Jejeebhoy 1989). The relative neglect of temporary methods also has an impact on health. Because of the emphasis on sterilization, most Indian couples think of family planning as a means of stopping childbearing rather than as a means of spacing births, even though birth spacing can be beneficial to the health of both mother and child (Rajaretnam and Deshpande 1994).

This situation has changed somewhat in recent years. The top-down targets for family planning have been officially abandoned, and the government has been making greater efforts to promote temporary methods (Narayana 1998). Under the new approach, community needs and participation are given high priority in providing family planning services (Ministry of Health and Family Welfare 1998a), and the government is making efforts to increase the supply of temporary methods through a variety of sources. As a consequence, there has been some shifting toward temporary methods (Ministry of Health and Family Welfare 1998b).

The most commonly cited reasons for contraceptive discontinuation and non-use in India and other developing countries include: quality, accessibility, and cost of family planning services; side effects (either experienced by a woman herself or by other women she knows); fear of a particular method or health reasons for not

using a method; desire for more children; a woman's perception that she is already sterile or in menopause; and opposition to family planning for religious or other reasons. Misconceptions about contraceptive use and a negative image of the family planning programme are also sometimes mentioned as reasons for discontinuation and non-use.

Research in other countries provides a basis for comparison with the situation in India. A study in Nigeria found that 35% of married women of reproductive age who were not using family planning reported that they were not using contraception because they themselves or someone they knew had encountered a method-related problem or had fears associated with the use of contraception. In the same study, another 31% of the women reported that their husbands were opposed to family planning (Fakeye and Babaniyi 1989). In examining religious beliefs about contraception among Muslims and beliefs about the possible health hazards of oral contraceptives, Fakhr El-Islam et al. (1988) found that religious beliefs and beliefs about health risks are mutually reinforcing.

A recent qualitative study conducted in rural Nepal indicated that poor knowledge and misconceptions are important reasons for low use of family planning (Sturley 1998). In a comparative study of IUD and pill use in Tunisia and Morocco based on Demographic and Health Survey data, Esseghairi et al. (1991) found that urban/rural residence and source of supply are strong correlates of both method failure and method discontinuation. In Bangladesh, Ahmed et al. (1990) found an association between source of supply and patterns of condom use and discontinuation. On the whole, these studies suggest that method-related problems are important reasons for contraceptive discontinuation and non-use. However, the relative importance of different kinds of method problems varies from country to country.

In India, several studies have reported lack of knowledge, misconceptions, inaccessibility, and cost as reasons for not using family planning. In an early study in Uttar Pradesh, Simmons et al. (1971) found that women who knew about family planning mentioned cost, fear of side effects, and shame as important reasons for not using contraception. In a qualitative study conducted 20 years later in rural Uttar Pradesh, Levine et al. (1992) found that perceptions that family planning services were of poor quality and concerns about method problems were important reasons for non-use. In a prospective study of temporary method users, Gandotra and Das (1990) found that discomfort, side effects or fear of side effects, physical complaints, method failure or fear of method failure, need for a safer method, and need for a more permanent method accounted for most instances of discontinuation and method switching.

A follow-up study of IUD acceptors in Mysore found very high rates of discontinuation, primarily because of excessive bleeding, pain/discomfort/ill health, white discharge, expulsion, method failure, or opposition from others (Prabhavathi

and Sheshadri 1988). Another study, based on several follow-up evaluation surveys of IUD acceptors in various parts of Karnataka, also reported high rates of discontinuation, primarily due to side effects (Population Research Centre, Dharwad 1991). In a study conducted in two districts of rural south India, both programme officers and field workers reported that many couples do not use temporary methods because they fear side effects, find the methods inconvenient, or experience opposition from others (Rajaretnam and Deshpande 1994). Respondents also mentioned a lack of incentives to promote temporary methods because the performance of family planning field workers was evaluated primarily in terms of numbers of sterilization acceptors. A study conducted in low-income areas of Delhi noted side effects and method dissatisfaction as primary causes of contraceptive discontinuation (Talwar et al. 1986).

Socioeconomic and demographic variables that may be related to women's reason for contraceptive discontinuation or non-use include woman's age, number and sex of living children, experience of child death, urban/rural residence, religious affiliation, and woman's education, occupation, and exposure to mass media. Using data from the 1992–93 National Family Health Survey (NFHS), Ramesh et al. (1996) and Retherford and Mishra (1997) showed the effects of these variables on contraceptive use, and Nair et al. (1999) showed their effects on sources of supply of family planning. The analysis presented here evaluates the effects of these variables on women's reasons for contraceptive discontinuation and intention not to use contraception in the future.

## **DATA AND METHODS**

Most studies of contraceptive discontinuation and non-use in India have been based on small surveys that cover only limited areas of the country. This study, based on India's 1992–93 National Family Health Survey (NFHS), provides the first comprehensive, national-level analysis of women's reasons for contraceptive discontinuation and non-use.

The NFHS collected data from a nationally representative sample of 89,777 ever-married women age 13–49, living in 88,562 households. The survey covered 25 states (including Delhi, which recently attained statehood). The sample size varied from state to state, ranging from about 1,000 in each of six small northeastern states to more than 11,000 in Uttar Pradesh, which is India's most populous state. In some states the sample design was self-weighting, and in others certain categories of respondents (for example, those in urban areas) were over-sampled. Analysis of data from these states requires weights to restore the correct proportions. Tabulations at the national level require a different set of weights because the sampling fraction varies from state to state. Thus each woman in the NFHS has two sets of weights—

one that is used when the state is the unit for tabulation and the other when tabulation is for the whole country. The analysis in this report is based on the weighted data. The survey reports for India (IIPS 1995) and for individual states discuss the sample design for the NFHS in more detail.

The NFHS included a series of questions on contraceptive use. The survey asked currently married women who were not currently pregnant, had at some time used contraception, but were not currently using any method the main reason why they had discontinued using contraception. The numbers responding to this question are small, primarily because most Indian couples who use contraception rely on sterilization, in which case there can be no discontinuation. In addition, the NFHS does not provide any information on past discontinuation of family planning among current users or among women who were pregnant at the time of the interview. Neither does the survey provide information on the timing of past periods of contraceptive use, which would allow the calculation of life-table statistics on discontinuation. These data limitations necessarily restrict the scope of any analysis of contraceptive discontinuation.

Currently married women who were not using contraception at the time of the survey, comprising slightly more than half of the sample, were asked whether they intended to use contraception in the future. Those who answered that they did not intend to use contraception, comprising just under one-third of the sample, were asked their primary reason for not intending to use contraception. The survey does not provide any information, however, on why women were not using contraception at the time of the interview. In particular, there is no information on why women who said that they intended to use family planning in the future were not using contraception at the time of the survey. This analysis of non-use is limited to those women who were not using contraception at the time of the survey and who said that they did not intend to use contraception in the future.

'Main reason for discontinuation' and 'main reason for not intending to use contraception in the future' are the two response variables used in this report. For purposes of multivariate analysis, reasons for contraceptive discontinuation are grouped into three broad categories: 'wanted child', 'method problem or failure', and 'other'. Reasons for not intending to use contraception in the future are grouped into four broad categories: 'wants more children', 'cannot have children', 'method problem', and 'opposition to family planning'. Since wanting more children and intending to use contraception in the future (after having had the wanted children) are not incompatible, some of the respondents who supplied these answers may have effectively evaded the question on reasons for not intending to use contraception in the future.

The NFHS also collected information on various demographic and socioeconomic characteristics that can affect a woman's reasons for discontinuing contracep-



tion or not intending to use contraception in the future. The variables selected for this analysis are: woman's age (13–24, 25–34, 35–49); residence (urban, rural); education (illiterate, literate but less than middle school complete, middle school complete or higher); religion (Hindu, Muslim, other); caste/tribe (scheduled caste or scheduled tribe, other)<sup>1</sup>; exposure to electronic mass media (regularly exposed, not regularly exposed)<sup>2</sup>; and geographic region (north, central, east or northeast, west, south).

The analysis includes these predictor variables because they are known to have substantial effects on contraceptive use (Ramesh et al. 1996) and are likely to affect discontinuation and intention not to use contraception as well. Contraceptive use and method choice are known to depend on a woman's age, suggesting that a woman's reasons for discontinuation are also likely to change with age. A young woman is likely to discontinue contraception because she wants more children, while an older woman is likely to discontinue because of menopause. A woman's reasons for not intending to use contraception in the future are also likely to vary with age.

Urban women usually have better access than do rural women to contraception, to information about contraception, and to healthcare providers in case they have a problem using contraception. For these reasons, urban/rural residence is likely to affect both discontinuation and intention to use contraception. A woman's level of education is likely to affect her knowledge of contraceptive methods and side effects, her preconceptions about family planning, and a host of other factors that may influence discontinuation or intention not to use contraception. Contraceptive use and method choice also vary widely by religion. Muslims are less likely to use contraception than are Hindus. If they use contraception, they are more likely than Hindus to use temporary methods, and if they do not use contraception, they are more likely than Hindus to give religious opposition as the reason (Mishra 1999).

Women who belong to scheduled castes or tribes tend to have poorer access to family planning services and lower acceptance rates than other women. They may also have cultural practices and beliefs that affect discontinuation and intention to use contraception. Exposure to electronic mass media substantially affects both current contraceptive use and intentions for future use (Retherford and Mishra 1997). Finally, region is included in the analysis because family planning acceptance in

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1. Scheduled castes (SC) and scheduled tribes (ST) are those castes and tribes identified by the Government of India as socially and economically disadvantaged and in need of protection from social injustice and exploitation.

2. A woman is categorized as regularly exposed to electronic mass media if she listens to radio or watches television at least once a week or goes to a cinema hall or theatre to see a movie at least once a month.

India varies widely by region. Reasons for discontinuation and intention not to use contraception are likely to vary by region as well.

This report comprises two sections. The first discusses the effects of the seven demographic and socioeconomic characteristics on reasons for discontinuing contraceptive use, and the second discusses the effects of these variables on reasons for not intending to use contraception in the future. Because both response variables are categorical with more than two categories, all analysis is based on multinomial logistic regression. To make the results more accessible to non-statisticians, they are transformed via multiple classification analysis into simple bivariate tables and figures (Retherford and Choe 1993). The underlying multinomial logistic regression coefficients are not shown.

Both unadjusted and adjusted effects of the predictor variables are estimated. The unadjusted effects of each predictor variable are calculated from a separate multinomial logistic regression. Thus, each set of unadjusted percentages pertaining to a specific predictor variable corresponds to a separate regression based on only that one predictor variable. The adjusted percentages, by contrast, are predicted from a single multinomial logistic regression that includes all seven predictor variables. In calculating adjusted percentages for any given predictor variable, the other six variables, treated as controls, are held constant by setting them to their mean values. Thus the set of controls changes for each predictor variable under consideration. In the calculation of both unadjusted and adjusted percentages, each multinomial logistic regression is calibrated by resetting the values of the constant terms in the estimated equations so that the predicted percentages obtained when all predictor variables are set to their mean values equal the observed percentages calculated directly from the data.

## **CONTRACEPTIVE DISCONTINUATION**

In previous studies, women in India have indicated three main reasons for discontinuing contraceptive use: (1) wanting to become pregnant, (2) becoming pregnant because of method failure or improper use of a method, or (3) experiencing side effects or some other problem with a method. Other reasons for discontinuation mentioned less frequently include difficulty in obtaining a method, separation from spouse, onset of poor health, and changing perceptions of fecundity (e.g., the woman may believe that she is menopausal and no longer at risk of becoming pregnant).

In the NFHS, non-pregnant women who had previously used a family planning method but were not using any method at the time of the survey were asked the main reason why they had stopped using contraception. The reason given for contraceptive discontinuation is assumed to refer to the most recent discontinuation and the most recent method used.

**Table 1 Distribution of ever-married women age 13–49 who have ever used contraception by type and number of methods ever used, India: NFHS, 1992–93**

Type of method ever used	Number of methods ever used				Total number of women	Mean number of methods ever used
	1	2	3	4+		
Male sterilization	84	12	3	1	3,131	1.2
Female sterilization	82	13	4	2	24,020	1.3
IUD	39	36	16	9	4,366	2.0
Pill	31	36	21	12	4,580	2.2
Condom	34	34	21	11	6,172	2.1
Injection	20	31	22	27	178	2.7
Periodic abstinence	31	41	19	9	7,593	2.1
Withdrawal	18	42	27	13	4,685	2.4
Other	42	30	13	15	706	2.0
All women	75	17	6	2	41,167	1.3

*Note:* In this and subsequent tables, percentages and numbers of women are based on the weighted samples.

Table 1 gives a general indication of the frequency of discontinuation and method switching among ever-married women age 13–49, based on their reports of the number of methods ever used. Among all women who have ever used contraception, 25% have used more than one method. Inasmuch as sterilization precludes the need to use any other method, it is not surprising that women who are sterilized have used fewer methods than women who have used temporary methods. Among women who are sterilized, less than 18% have ever used any other method. By contrast, more than 60% of women who have ever used IUD, pill, condom, injection, periodic abstinence, or withdrawal have also used another method, indicating substantial discontinuation and switching among temporary methods. The NFHS did not ask women if there was a time lag between discontinuing one method and starting another, so that it is not possible to distinguish between discontinuation and switching in Table 1.

The last column in Table 1 shows the mean number of methods used. The means are calculated from the full distribution, which extends to as many as seven methods used, rather than from the truncated distributions shown in the table. Overall, the mean number of methods used is only 1.3, reflecting the high proportion of women who have used sterilization as their first and only method. Women currently using temporary methods have used between two and three methods on average.

### Reported reasons for discontinuing contraception

Table 2 and Figure 1 show the distribution of women according to their main reason for discontinuing contraception, both for the whole country and for urban and rural

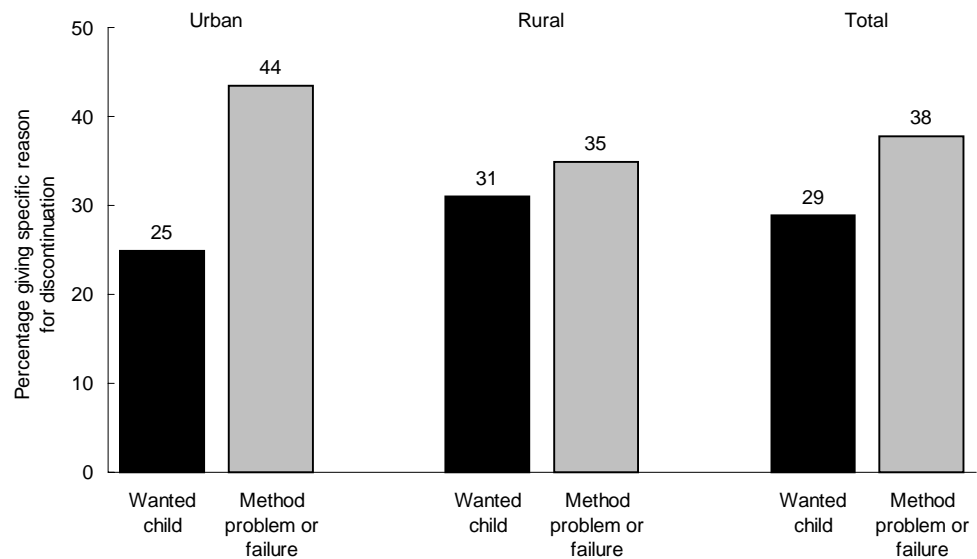
**Table 2 Main reason for discontinuing contraception among currently married, non-pregnant, non-sterilized women (whose husbands were also not sterilized) age 13–49 who had previously used contraception but were not using contraception at the time of the survey, by residence, India: NFHS, 1992–93**

Reason	Percentage giving specific reason		
	Total	Urban	Rural
<b>Wanted child</b>	<b>28.9</b>	<b>24.9</b>	<b>31.0</b>
Wanted to have a child	28.4	24.7	30.3
Wanted to replace dead child	0.5	0.2	0.7
<b>Method problem or failure</b>	<b>37.8</b>	<b>43.5</b>	<b>34.9</b>
Created health problem	14.6	20.2	11.6
Created menstrual problem	6.6	7.6	6.0
Method failed/got pregnant	5.3	3.4	6.4
Did not like the method	4.0	3.8	4.1
Inconvenient to use	2.7	3.6	2.2
Lack of sexual satisfaction	1.8	1.4	2.1
Lack of privacy for use	1.4	2.2	1.0
Hard to get method	1.0	0.7	1.2
Put on weight	0.4	0.6	0.3
<b>Other</b>	<b>33.3</b>	<b>31.7</b>	<b>34.1</b>
Other	31.0	29.1	32.0
Don't know	2.3	2.6	2.1
<b>Total percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Number of women	4,180	1,462	2,718

areas separately. The distribution is based on currently married, non-pregnant, non-sterilized women age 13–49 who had previously used contraception but were not using any method at the time of the survey. In India as a whole, 29% of this group discontinued because they wanted to have a child, 38% because of a method problem or failure, and 33% for some other reason. Only 0.5% of these women reported that they discontinued family planning because they ‘wanted to replace a dead child’, indicating that replacement of dead children is of negligible importance in explaining contraceptive discontinuation.

The 38% who discontinued because of a method problem or failure can be further broken down as follows: 15% discontinued because the method created a health problem, 7% because it created a menstrual problem, and 5% because the method failed or the woman got pregnant. Another 11% discontinued because of some other method problem, including ‘did not like the method’, ‘inconvenient to use’, ‘lack of sexual satisfaction’, ‘lack of privacy for use’, ‘hard to get method’, or ‘put on weight’. Only 1% discontinued primarily because it was ‘hard to get method’, indicating that inaccessibility of family planning services is not a serious problem, at least not among family planning acceptors.

Women also mentioned the onset of menopause and absence of their husbands as reasons for discontinuing contraception, although these are not specified as distinct responses but rather are lumped into the ‘other’ category. Of all the women responding



**Figure 1 Major reasons for discontinuing contraception, by residence, India: NFHS, 1992–93**

to this question, 31% mentioned a reason for discontinuing other than the specific reasons given in Table 2, and 2% did not know or did not answer the question.

The percentage of women who report ‘wanted to have a child’ as their main reason for discontinuing contraception is somewhat higher in rural areas (30%) than in urban areas (25%), consistent with a larger desired family size and higher fertility in rural areas. The percentage reporting ‘wanted to replace dead child’ is also higher in rural areas, consistent with higher child mortality and higher fertility in rural areas. A considerably larger proportion of women in urban areas report ‘created health problem’ as their main reason for contraceptive discontinuation. This may reflect greater health consciousness among urban women. The percentage reporting ‘created menstrual problem’ is also higher in urban areas than in rural areas.

Table 3 and Figure 2 show reasons for discontinuing contraception by state. The table and figure report only three aggregated categories: ‘wanted child’, ‘method problem or failure’, and ‘other’. There is considerable variation by state in the proportion of women giving these three reasons for contraceptive discontinuation. The proportion citing ‘wanted child’ ranges from 6% in Nagaland to 46% in Gujarat and 50% in Meghalaya. (The proportion in Meghalaya is based, however, on fewer than 50 cases and is therefore subject to considerable sampling variability.) The proportion citing ‘other’ reasons ranges from 0% in Nagaland to 50% or more in Delhi, Jammu, Assam, Tripura, Goa, and Kerala. The reasons for such large variability among states are not clear.

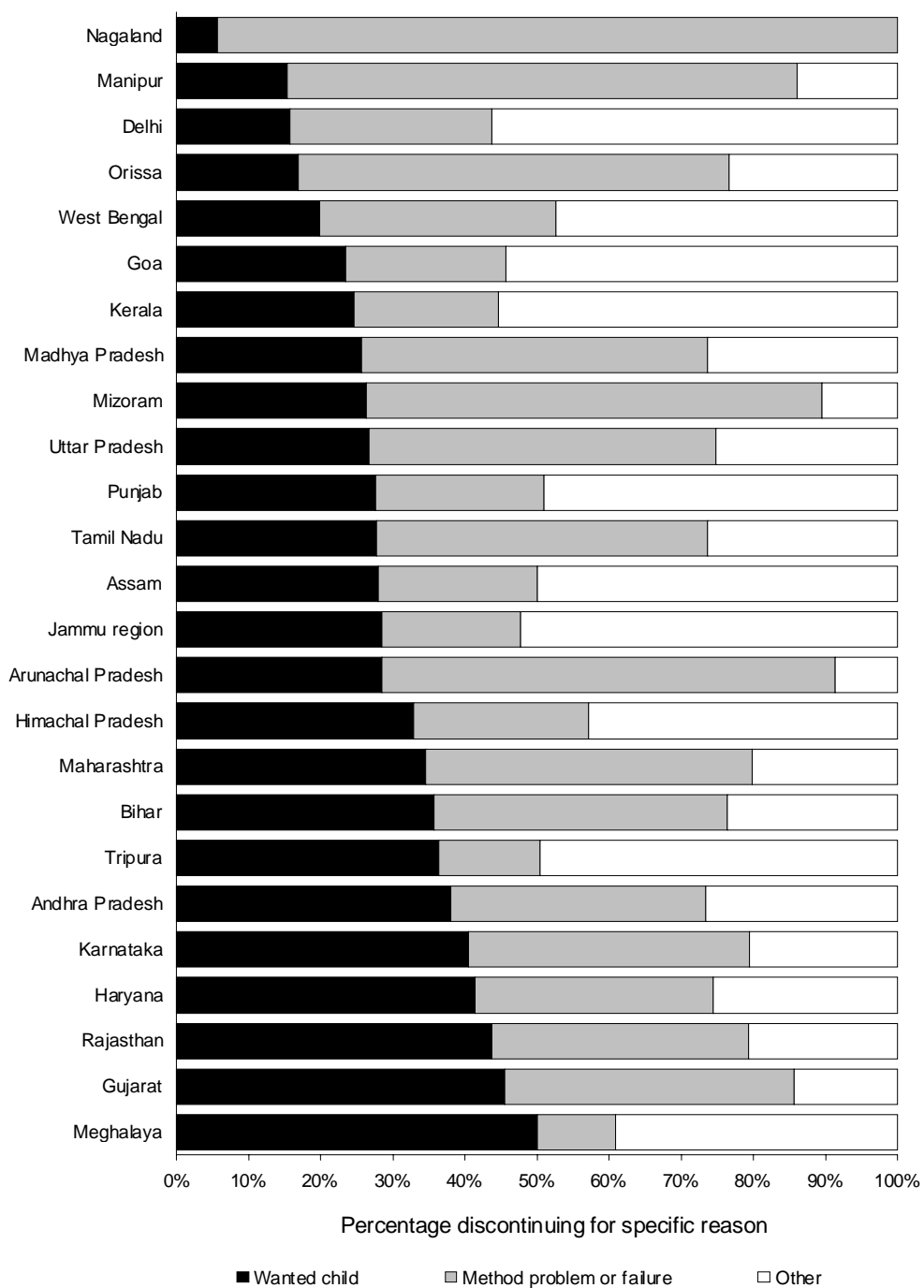
Among women who report ‘other’ reasons for discontinuing contraception, many probably discontinued because their husbands were away or because they perceived

**Table 3 Main reason for discontinuing contraception among currently married, non-pregnant, non-sterilized women (whose husbands were also not sterilized) age 13–49 who had previously used contraception but were not using contraception at the time of the survey, by state: NFHS, 1992–93**

State	Percentage giving specific reason			Number of women
	Wanted child	Method problem or failure	Other	
<b>India</b>	29	38	33	4,180
<b>North</b>				
Delhi	16	28	56	279
Haryana	41	33	26	165
Himachal Pradesh	33	24	43	207
Jammu region of Jammu and Kashmir	29	19	52	162
Punjab	28	23	49	192
Rajasthan	44	36	21	121
<b>Central</b>				
Madhya Pradesh	26	48	26	237
Uttar Pradesh	27	48	25	556
<b>East</b>				
Bihar	36	41	24	135
Orissa	17	60	23	133
West Bengal	20	33	47	390
<b>Northeast</b>				
Arunachal Pradesh	29	63	9	35
Assam	28	22	50	414
Manipur	15	71	14	72
Meghalaya	50	11	39	46
Mizoram	(26)	(63)	(11)	19
Nagaland	6	94	0	53
Tripura	36	14	50	107
<b>West</b>				
Goa	24	22	54	221
Gujarat	46	40	14	147
Maharashtra	35	45	20	139
<b>South</b>				
Andhra Pradesh	38	35	27	79
Karnataka	41	39	21	175
Kerala	25	20	55	352
Tamil Nadu	28	46	26	194

( ) Percentage based on fewer than 25 unweighted cases.

that they had become infecund. This is certainly the case in Kerala, where ‘husband absent’ and ‘menopausal/had hysterectomy’ are separated out from the ‘other’ category and coded as separate categories. (These categories are separated in Kerala but not in other states because temporary separations due to husbands working in the Middle East are very common in Kerala.) Table 3 shows that in Kerala 55% of all women who have discontinued contraception report that they discontinued for ‘other’ reasons. Out of this 55%, 36% report ‘husband absent’, and another 7% report ‘menopausal/had hysterectomy’ as their main reason for discontinuation. Thus, in Kerala about four-fifths of the ‘other’ responses in Table 3 are accounted for by ‘husband absent’ and ‘menopausal/had hysterectomy’ (Population Research Centre, Thiruvananthapuram 1995).



**Figure 2 Reasons for discontinuing contraception (percentage distribution by reason), by state: NFHS, 1992-93**

The proportion reporting ‘method problem or failure’ is interesting from a policy point of view, because with improvement in service quality many of these women might be persuaded to resume contraception or to avoid discontinuation in the first place. Table 3 shows that the proportion reporting ‘method problem or failure’ varies considerably by state. In Orissa, Arunachal Pradesh, Manipur, Mizoram, and Nagaland, 60% or more of women who have discontinued contraception give ‘method problem or failure’ as their main reason. In Madhya Pradesh and Uttar Pradesh, two large states in central India, 48% of these women report ‘method problem or failure’.

### **Factors affecting reasons for discontinuation**

Table 4 gives definitions and mean values of the variables potentially associated with specific reasons for contraceptive discontinuation, both for India as a whole and for urban and rural areas separately. Because all variables are categorical, the mean value for a category of a given variable is the same as the proportion of women falling in that category. The table presents these proportions as percentages. The means of the response variables have already been discussed. The means of the predictor variables show the distribution among the categories of each variable of currently married, non-pregnant, non-sterilized women (whose husbands were also not sterilized) who have discontinued using contraception.

The women who have discontinued contraception are somewhat concentrated in the 25–34 age group, apparently because use of temporary methods—and thus the possibility of discontinuation—is greatest in this age group. Thirty-five percent of women who have discontinued contraception live in urban areas, substantially higher than the urban proportion (26%) of all currently married women in the NFHS sample. This difference reflects both higher contraceptive prevalence and greater use of temporary methods in urban areas. For similar reasons, the proportion who have completed middle school or higher is also greater among women who have discontinued contraception than among the NFHS sample as a whole. Among women who have discontinued contraception, 73% are Hindus, 20% are Muslims, and 7% belong to other religions. This over-representation of Muslims, compared with the proportion of Muslims in the overall NFHS sample (12%) reflects Muslim women’s preference for temporary methods. Only 14% of women who have discontinued contraception belong to scheduled castes or scheduled tribes, compared with 21% in these groups in the total NFHS sample. This is primarily because contraceptive use rates are much lower among women in scheduled castes or tribes than among other women. Sixty-five percent of women who have discontinued contraception are regularly exposed to electronic mass media, compared with 53% in the NFHS sample as a whole. This reflects the comparatively high use of family planning and choice of temporary methods among women exposed to the media.



**Table 4 Variable definitions and mean values for currently married, non-pregnant, non-sterilized women (whose husbands were also not sterilized) age 13–49 who had previously used contraception but were not using contraception at the time of the survey, by residence, India: NFHS, 1992–93**

Variable name	Variable definition	Mean value of variable expressed as percentage		
		Total	Urban	Rural
<b>Response variables</b>				
<b>Reasons for discontinuation</b>				
Wanted child	Reason for discontinuing contraception is 'wanted to have a child' or 'wanted to replace dead child'	29	25	31
Method problem or failure	Reason for discontinuing contraception is 'created health problem', 'created menstrual problem', 'method failed/ got pregnant', 'did not like the method', 'inconvenient to use', 'lack of sexual satisfaction', 'lack of privacy for use', 'hard to get method', 'put on weight'	38	44	35
Other	Other reason	33	32	34
<b>Predictor variables</b>				
<b>Age group</b>				
13–24	Woman is in the age group 13–24 years	29	22	33
25–34	Woman is in the age group 25–34 years	39	40	38
35–49	Woman is in the age group 35–49 years	32	38	29
<b>Residence</b>				
Urban	Woman lives in an urban area	35	100	0
Rural	Woman lives in a rural area	65	0	100
<b>Education</b>				
Illiterate	Woman is illiterate	44	22	56
Literate, < middle complete	Woman is literate with less than a middle school education	22	21	23
≥ middle school complete	Woman is literate with at least a middle school education	34	57	22
<b>Religion<sup>a</sup></b>				
Hindu	Woman lives in a household whose head is Hindu	73	74	72
Muslim	Woman lives in a household whose head is Muslim	20	20	20
Other religion	Woman lives in a household whose head is neither Hindu nor Muslim	7	6	8
<b>Scheduled caste or scheduled tribe<sup>b</sup></b>				
SC/ST	Woman lives in a household whose head belongs to a scheduled caste (SC) or a scheduled tribe (ST)	14	6	17
Non-SC/ST	Woman lives in a household whose head does not belong to either a scheduled caste (SC) or a scheduled tribe (ST)	86	94	83
<b>Exposure to media</b>				
Exposed	Woman is regularly exposed to electronic mass media (radio or television at least once a week or cinema at least once a month)	65	87	54
Not exposed	Woman is not regularly exposed to radio, television, or cinema	35	13	46

Table 4, continued

Variable name	Variable definition	Mean value of variable expressed as percentage		
		Total	Urban	Rural
<b>Predictor variables</b>				
<b>Region</b>				
North	Woman lives in Delhi, Haryana, Himachal Pradesh, Jammu region of Jammu and Kashmir, Punjab, or Rajasthan	12	13	11
Central	Woman lives in Madhya Pradesh or Uttar Pradesh	24	22	25
East and Northeast	Woman lives in Bihar, Orissa, West Bengal, Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, or Tripura	33	22	38
West	Woman lives in Goa, Gujarat, or Maharashtra	11	18	8
South	Woman lives in Andhra Pradesh, Karnataka, Kerala, or Tamil Nadu	21	25	18
<b>Number of women<sup>c</sup></b>	Weighted number of currently married, non-pregnant, non-sterilized women (including women whose husbands are not sterilized) age 13–49 who previously used contraception but are not using contraception now	4,180	1,462	2,718

a. The 'other religion' category includes Christian, Sikh, Buddhist, Jain, and other religions.

b. Scheduled castes (SC) and scheduled tribes (ST) are those castes and tribes identified by the Government of India as socially and economically disadvantaged and in need of protection from social injustice and exploitation.

c. Actual number of women varies slightly for individual variables depending on the number of missing values.

The distribution of women who have discontinued contraception varies considerably across regions, largely reflecting the distribution of the total NFHS sample across regions. The separate distributions for urban and rural areas indicate that currently married, non-pregnant, non-sterilized women who have discontinued contraception tend to be younger, less educated, and less exposed to the media in rural areas than in urban areas.

Table 5 shows unadjusted and adjusted effects of the predictor variables on reasons for contraceptive discontinuation. Figure 3 depicts the adjusted effects of age. The proportion reporting 'method problem or failure' as their main reason for discontinuation is uniformly high (ranging from 27 to 48% in the adjusted estimates) across all socioeconomic groups, suggesting wide-scale problems with the quality of family planning services in India. No doubt a substantial proportion of these women would have continued using family planning had they not faced a problem with the method they were using.

As expected, the proportion reporting 'wanted child' as their main reason for discontinuing contraception declines rapidly with age, from 48% among women age 13–24 to 11% among women age 35–49. Controlling for the socioeconomic variables in the table makes no difference in the estimated effect of age. The proportion of women who report 'method problem or failure' as their main reason for contra-

**Table 5 Unadjusted and adjusted effects of selected demographic and socioeconomic factors on reasons for discontinuing contraception among currently married, non-pregnant, non-sterilized women (whose husbands were also not sterilized) age 13–49 who had previously used contraception but were not using contraception at the time of the survey, India: NFHS, 1992–93**

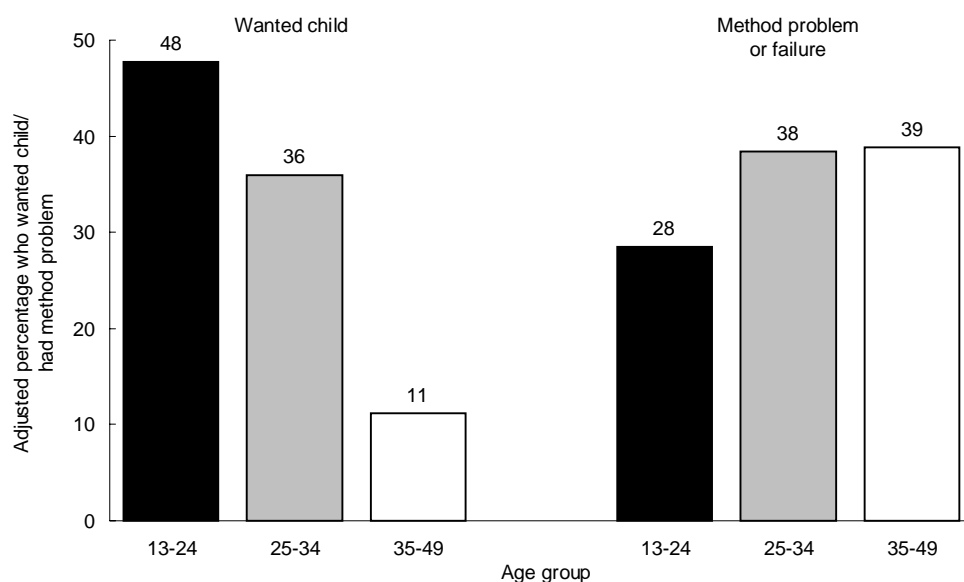
Variable	Percentage giving specific reason					
	Unadjusted			Adjusted		
	Wanted child	Method problem or failure <sup>†</sup>	Other	Wanted child	Method problem or failure <sup>†</sup>	Other
<b>Age group</b>						
13–24 <sup>†</sup>	48	28	24	48	28	24
25–34	36*	39	26*	36*	38	26*
35–49	11*	40	49*	11*	39	50*
<b>Residence</b>						
Urban	25*	44	32*	25*	44	31*
Rural <sup>†</sup>	31	35	34	31	35	34
<b>Education</b>						
Illiterate <sup>†</sup>	29	39	33	30	40	30
Literate, < middle complete	26	37	37*	25	38	37*
≥ middle school complete	31	38	32	30	35	36*
<b>Religion</b>						
Hindu <sup>†</sup>	30	39	31	31	39	31
Muslim	25	34	40*	25	33	42*
Other religion	23	37	40*	22*	42	36
<b>Scheduled caste or scheduled tribe</b>						
SC/ST	33*	34	32	31	34	35
Non-SC/ST <sup>†</sup>	28	38	33	29	38	33
<b>Exposure to media</b>						
Exposed	29	38	33	29	37	33
Not exposed <sup>†</sup>	28	38	34	28	39	33
<b>Region</b>						
North	32	29	39*	34*	27	39*
Central	26*	48	26*	25*	48	28*
East and Northeast	24	34	42*	24*	35	42*
West	38	43	19*	40	42	18*
South <sup>†</sup>	31	35	34	32	35	33
<b>Number of women</b>		4,180			4,180	

Note: For definitions of variables see text and Table 4. Both unadjusted and adjusted percentages shown in this table are estimated by multinomial logistic regression. Unadjusted percentages are based on separate multinomial logistic regressions for each predictor variable with that variable as the only predictor variable. Adjusted percentages are based on a single multinomial logistic regression consisting of all the predictor variables in the table. For any given predictor variable in the adjusted column, the set of control variables consists of all the other predictor variables in the table.

<sup>†</sup>Reference category

\*The coefficient in the underlying multinomial logistic regression differs significantly from 0 at the 5% level.

ceptive discontinuation increases with age. This may be in part because older women have had more time than younger women to experience a method problem or failure. It may also be that women who started using a method recently are less likely than earlier users to have experienced a problem or failure because family planning methods have improved over time. Again, controlling for residence, education, and other socioeconomic variables included in the table makes little difference in the estimated effect of age. The proportion of women reporting ‘other’ reasons for discon-

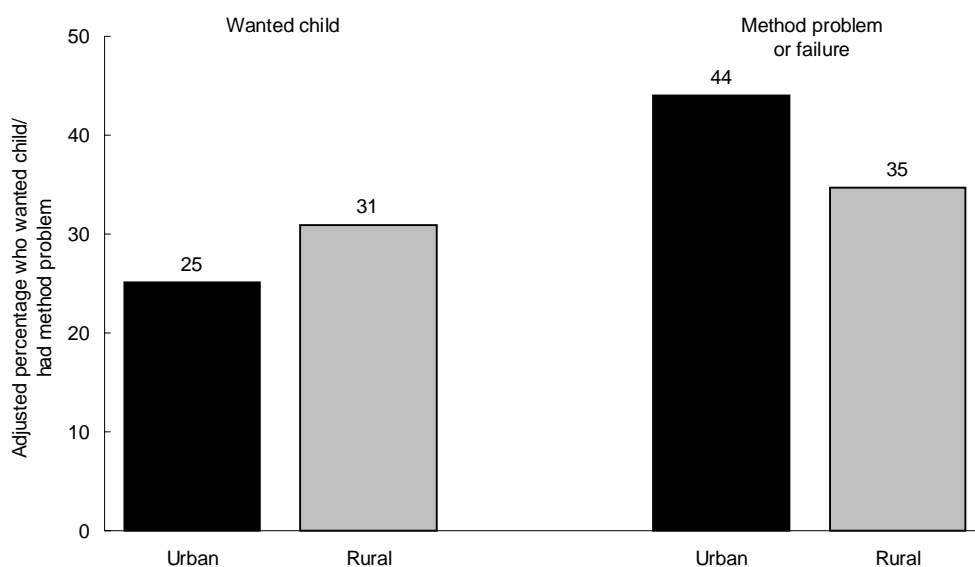


**Figure 3 Adjusted effects of age on reasons for discontinuing contraception, India: NFHS, 1992–93**

tinuation increases sharply with age, with about one-half of women in the 35–49 age group reporting ‘other’ reasons.

Table 5 and Figure 4 show that the proportion reporting ‘wanted child’ is significantly higher in rural areas than in urban areas, as expected. This effect of residence remains unchanged after controlling for other factors in the table. Urban women are much more likely than rural women to report ‘method problem or failure’ as their main reason for discontinuing contraception. This may be in part because of greater health consciousness in urban areas. With few exceptions, education, caste/tribe, media exposure, and region do not have significant effects on reasons for discontinuation. Among religious categories, Hindus are most likely and women of ‘other religion’ are least likely to report ‘wanted child’ as their main reason for discontinuation.

Table 6 shows adjusted effects of the predictor variables on reasons for contraceptive discontinuation separately for urban and rural areas. Age has the same effect on reasons for discontinuation, whether urban and rural areas are considered separately or together. The effects of education, however, are less consistent. In urban areas, more-educated women are more likely than less-educated women to report ‘wanted child’ as a reason for discontinuation, and they are less likely to report ‘method problem or failure’. In rural areas, education has no clear effect on reason for discontinuation. The effects of most of the other predictor variables are not statistically significant. Caste/tribe, media exposure, and region do not have any noteworthy effects on reasons for discontinuation, whether urban and rural areas are considered together or separately.



**Figure 4 Adjusted effects of urban/rural residence on reasons for discontinuing contraception, India: NFHS, 1992–93**

## INTENTION NOT TO USE CONTRACEPTION IN THE FUTURE

There are several possible reasons why currently married women may not be using contraception or may not intend to use contraception in the future. These include lack of knowledge about contraception, lack of knowledge of a source where contraceptives can be obtained, fear of contraception, difficulty in obtaining contraceptives, high cost of contraceptives, separation from husband, desire for more children, opposition to family planning, health concerns or worries about side effects, or presumed infecundity (e.g., because of menopause). Women who are currently trying to get pregnant may or may not intend to use contraception in the future. Women who do not intend to use contraception in the future may believe that continued non-use will be necessary to reach their desired family size. Nevertheless, desire for more children is not, in general, a valid reason for not intending to use contraception at any time in the future because contraception may be initiated after the desired number of children are born.

### Reported reasons for not intending to use contraception

As mentioned, the NFHS did not collect information on women's reasons for not using contraception at the time of the interview. Currently married women who were not using contraception were asked, however, whether they intended to use family planning at any time in the future, and those who responded negatively were asked

**Table 6 Adjusted effects of selected demographic and socioeconomic factors on reasons for discontinuing contraception among currently married, non-pregnant, non-sterilized women (whose husbands were also not sterilized) age 13–49 who had previously used contraception but were not using contraception at the time of the survey, by residence, India: NFHS, 1992–93**

Variable	Percentage giving specific reason					
	Urban			Rural		
	Wanted child	Method problem or failure <sup>†</sup>	Other	Wanted child	Method problem or failure <sup>†</sup>	Other
<b>Age group</b>						
13–24 <sup>†</sup>	46	34	20	49	26	26
25–34	37*	41	22	36*	36	28*
35–49	9*	42	50*	12*	38	50*
<b>Education</b>						
Illiterate <sup>†</sup>	20	53	27	34	34	32
Literate, < middle complete	23	43	34*	26*	36	38
≥ middle school complete	28*	40	33*	29	34	36
<b>Religion</b>						
Hindu <sup>†</sup>	27	44	30	32	36	31
Muslim	22	41	37*	28	28	44*
Other religion	15*	46	39	25	38	37
<b>Scheduled caste or scheduled tribe</b>						
SC/ST	32	36	33	32	32	36
Non-SC/ST <sup>†</sup>	24	44	32	31	35	34
<b>Exposure to media</b>						
Exposed	25	44	31*	32	33	35
Not exposed <sup>†</sup>	21	39	40	30	37	33
<b>Region</b>						
North	25	27	48*	39	27	34
Central	19*	55	26*	28*	43	28*
East and Northeast	21	37	42*	26*	33	41
West	32	49	20*	46	36	17*
South <sup>†</sup>	27	43	29	34	30	36
<b>Number of women</b>		1,462			2,718	

Note: For definitions of variables see text and Table 4. Adjusted percentages shown in this table are estimated by multinomial logistic regression. Each set of adjusted percentages by residence is based on a single multinomial logistic regression consisting of all the predictor variables in the table. For any given predictor variable, the set of control variables consists of all the other predictor variables in the table.

<sup>†</sup>Reference category

\*The coefficient in the underlying multinomial logistic regression differs significantly from 0 at the 5% level.

their main reason. Nearly 60% of currently married women who were not using contraception at the time of the survey did not intend to use contraception in the future. Of these, 52% said that their main reason for not intending to use contraception was a desire for more children.

Table 7 and Figure 5 show the reasons women give for not intending to use contraception. These are grouped into four broad categories—wants more children, can't have children, method problem, and opposition to family planning—plus a residual 'other' category. More than half of all currently married, non-contracepting women mention a desire for more children as their main reason for not intending to use contraception in the future. This large proportion suggests that many women perceive family planning as a means of stopping childbearing but not as a means of spacing

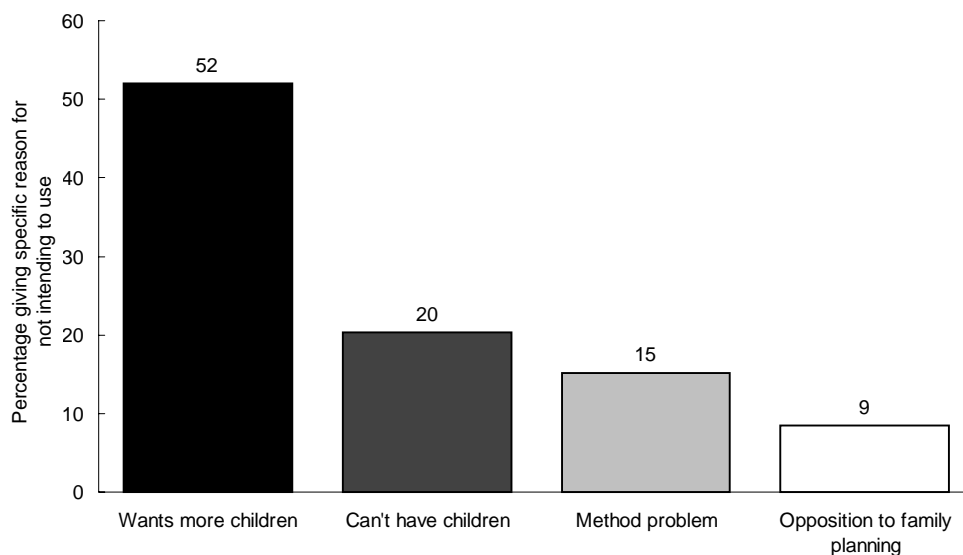
**Table 7 Reasons for not intending to use contraception among currently married women age 13–49 who were not using contraception (and whose husbands were not using contraception) at the time of the survey and who did not intend to use contraception in the future, by residence, India: NFHS, 1992–93**

Reason	Percentage giving specific reason		
	Total	Urban	Rural
<b>Wants more children</b>	<b>52.1</b>	<b>45.7</b>	<b>53.8</b>
Wants children	40.4	36.7	41.4
Wants a son	10.3	7.8	11.0
Wants a daughter	1.4	1.2	1.4
<b>Can't have children</b>	<b>20.4</b>	<b>26.9</b>	<b>18.6</b>
Menopausal/had hysterectomy	11.6	13.9	11.0
Difficult to get pregnant	4.9	8.5	3.9
Health does not permit	3.9	4.5	3.7
<b>Method problem</b>	<b>15.1</b>	<b>13.5</b>	<b>15.5</b>
Lack of knowledge	4.3	2.1	4.8
Doesn't like existing methods	3.2	3.7	3.1
Afraid of sterilization	2.7	2.2	2.8
Worry about side effects	1.8	2.2	1.7
Can't work after sterilization	1.7	0.9	1.9
Inconvenient	0.7	1.7	0.5
Cost too much	0.4	0.4	0.5
Hard to get methods	0.3	0.3	0.2
<b>Opposition to family planning</b>	<b>8.5</b>	<b>8.7</b>	<b>8.5</b>
Against religion	3.5	3.8	3.5
Opposed to family planning	1.3	0.9	1.4
Husband opposed	3.3	3.4	3.2
Other people opposed	0.4	0.6	0.4
<b>Other</b>	<b>3.9</b>	<b>5.2</b>	<b>3.5</b>
Other	3.7	5.0	3.3
Don't know	0.2	0.2	0.2
<b>Total percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Number of women	29,142	6,034	23,108

Note: Percentages in this table differ slightly from those in Table 6.25 in the NFHS all-India report (IIPS 1995). The discrepancies occur because in Table 6.25, 50 women with 'don't know' responses were redistributed to other categories.

births. Another one-fifth report that they do not intend to use contraception because they are infecund or because of health problems.

Fifteen percent of these women mention some method-related problem as their main reason for not intending to use contraception. Only 0.4% mention cost, however, suggesting that the Indian family planning programme has been successful in providing inexpensive contraception or at least that women do not perceive cost as a major impediment to contraceptive use. Only 1% report 'inconvenient' or 'hard to get methods' as reasons for not intending to use contraception, suggesting that availability and accessibility are also not perceived as major problems. India's family planning programme deserves credit for these achievements. Nevertheless, the fact that about 14% of women who do not intend to use contraception in the future mention method-related problems—including lack of knowledge, dislike of existing methods, fear of sterilization, and worries about side effects—suggests that there is considerable scope for improving the quality of family planning services.



**Figure 5 Major reasons for not intending to use contraception in the future, India: NFHS, 1992-93**

Nine percent of currently married, non-contracepting women report ‘opposition to family planning’ as their main reason for not intending to use contraception in the future. Further breakdown of this percentage reveals that 3.5% mention that family planning is against their religion, 1.3% say that they themselves are opposed to family planning, 3.3% say that their husbands are opposed, and 0.4% say that other people are opposed. Government education and motivation campaigns might be advised to focus on this group of women (and on their husbands) in an effort to persuade at least some of them to change their attitudes about family planning.

Table 7 presents results separately for urban and rural areas. Rural women are somewhat more likely than urban women to report ‘wants more children’ as their main reason for not intending to use contraception in the future. They are also somewhat less likely to report ‘cannot have children’ as their main reason. Urban/rural differences in the other two broad categories—method problems and opposition to family planning—tend to be small. The one exception is ‘lack of knowledge’, mentioned by 4.8% of women in rural areas but only 2.1% in urban areas.

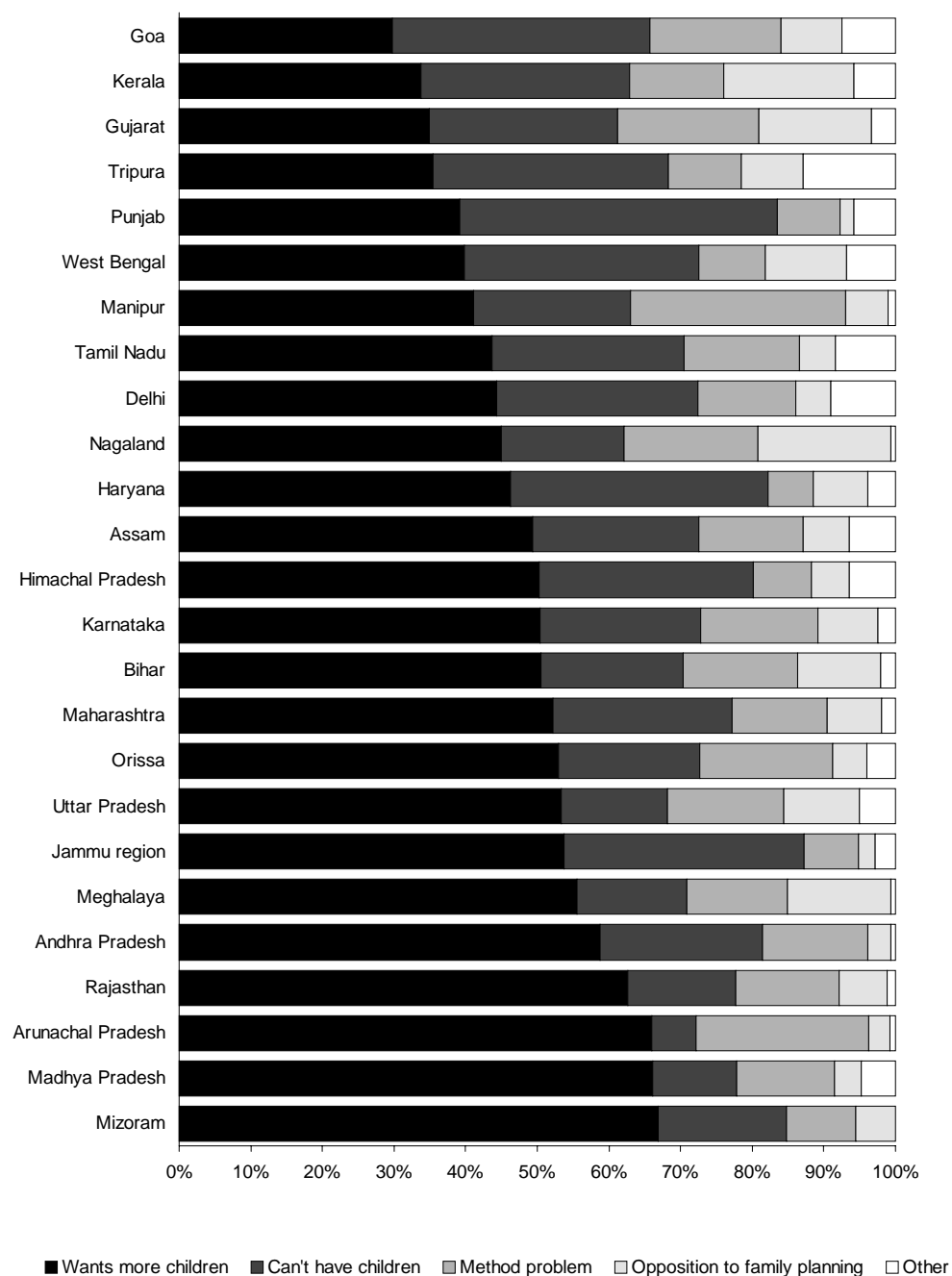
Table 8 and Figure 6 show variations at the state level. In Figure 6, states are arranged in ascending order according to the proportion of women reporting ‘wants more children’ as their main reason for not intending to use family planning. The proportion reporting ‘wants more children’ tends to be higher and the proportion reporting ‘can’t have children’ tends to be lower in states that have higher fertility and lower levels of economic development. The proportion reporting ‘can’t have children’ is also high in Punjab, for reasons that are unclear.



**Table 8 Reasons for not intending to use contraception among currently married women age 13–49 who were not using contraception (and whose husbands were not using contraception) at the time of the survey and who did not intend to use contraception in the future, by state: NFHS, 1992–93**

State	Percentage giving specific reason					Number of women
	Wants more children	Can't have children	Method problem	Opposition to family planning	Other	
<b>India</b>	52	20	15	9	4	29,142
<b>North</b>						
Delhi	44	28	14	5	9	630
Haryana	46	36	6	8	4	429
Himachal Pradesh	50	30	8	5	6	468
Jammu region of Jammu and Kashmir	54	33	8	2	3	456
Punjab	39	44	9	2	6	431
Rajasthan	63	15	15	7	1	2,035
<b>Central</b>						
Madhya Pradesh	66	12	14	4	5	2,017
Uttar Pradesh	53	15	16	11	5	5,467
<b>East</b>						
Bihar	51	20	16	12	2	2,883
Orissa	53	20	19	5	4	1,554
West Bengal	40	33	9	11	7	782
<b>Northeast</b>						
Arunachal Pradesh	66	6	24	3	1	382
Assam	49	23	15	6	7	714
Manipur	41	22	30	6	1	384
Meghalaya	56	15	14	14	1	457
Mizoram	67	18	10	6	0	145
Nagaland	45	17	19	19	1	422
Tripura	36	33	10	9	13	186
<b>West</b>						
Goa	30	36	18	8	8	879
Gujarat	35	26	20	16	3	873
Maharashtra	52	25	13	8	2	1,139
<b>South</b>						
Andhra Pradesh	59	23	15	3	1	1,292
Karnataka	50	22	16	8	3	1,222
Kerala	34	29	13	18	6	642
Tamil Nadu	44	27	16	5	8	1,171

In Orissa, Arunachal Pradesh, Manipur, Nagaland, Goa, and Gujarat, 18% or more of currently married, non-contracepting women who do not intend to use contraception in the future report method problems as their main reason. By contrast, 9% or fewer of such women report method problems in Haryana, Himachal Pradesh, Jammu, Punjab, and West Bengal. Interestingly, Kerala, which is the lowest-fertility state, has one of the highest proportions (18%) of women reporting opposition to family planning as their main reason for not intending to use contraception. This may be due to a relatively high proportion of Muslims in the state. The proportion citing opposition to family planning is also high—at 14% or more—in Meghalaya, Nagaland, and Gujarat. Jammu, Punjab, Arunachal Pradesh, and Andhra Pradesh are at the other extreme, with only 3% reporting opposition to family planning.



**Figure 6 Reasons for not intending to use contraception in the future (percentage distribution by reason), by state: NFHS, 1992–93**

In states where a substantial proportion of women report method problems or opposition to family planning as reasons for not intending to use contraception, improving service quality and strengthening education and motivation campaigns could make an important contribution to improving the performance of family planning programmes.

### **Factors affecting reasons for not intending to use contraception**

Table 9 gives definitions and mean values of the variables potentially affecting women's reasons for not intending to use contraception, both for India as a whole and for urban and rural areas separately. The mean values refer to currently married women age 13–49 who were not using contraception (and whose husbands were not using contraception) and who did not intend to use contraception at any time in the future. Mean values for the response variables have already been discussed in earlier tables and figures. Because all predictor variables included in the analysis are categorical, the mean values for categories of a predictor variable are the same as the proportions of women who fall in those categories.<sup>3</sup>

Forty percent of women who do not intend to use contraception are in the 13–24 year age group, indicating that a substantial proportion of young Indian women do not intend to use contraception. Four-fifths of the women are rural, and three-quarters are illiterate. Eighty percent are Hindu, 16% are Muslim, and 4% belong to 'other' religions. About one-fourth are from scheduled castes or tribes, and about three-fifths are not regularly exposed to the electronic mass media.

Among women who do not intend to use contraception, the proportion in the 13–24 age group is much higher in rural areas than in urban areas. The proportion illiterate is also much higher in rural areas. The proportion who are Muslim is much higher in urban areas, whereas the proportion who belong to a scheduled caste or tribe is much higher in rural areas. The proportion who are regularly exposed to the electronic mass media is much higher in urban areas.

Table 10 gives the unadjusted and adjusted effects of the seven demographic and socioeconomic variables on reasons for not intending to use contraception. Figure 7 depicts the adjusted effects of age.

The proportion who report desire for more children as their main reason for not intending to use contraception declines steeply with age, as expected. The proportion who report that they cannot have children increases steeply with age, also as expected. The proportion reporting a method problem as their main reason

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3. The means of the predictor variables here are somewhat different from those given earlier because in this table the small 'other' category is excluded.

**Table 9 Variable definitions and mean values for currently married women age 13–49 who were not using contraception (and whose husbands were not using contraception) at the time of the survey and who did not intend to use contraception in the future, by residence, India: NFHS, 1992–93**

Variable name	Variable definition	Mean value of variable expressed as percentage		
		Total	Urban	Rural
<b>Response variables</b>				
<b>Reasons for not intending to use contraception</b>				
Wants more children	Reason for not intending to use contraception in the future is 'wants children', 'wants a son', or 'wants a daughter'	54	48	56
Can't have children	Reason for not intending to use contraception in the future is 'menopausal/ had hysterectomy', 'difficult to get pregnant', or 'health does not permit'	21	28	19
Method problem	Reason for not intending to use contraception in the future is 'lack of knowledge', 'doesn't like existing methods', 'afraid of sterilization', 'worry about side effects', 'can't work after sterilization', 'inconvenient', 'cost too much', or 'hard to get methods'	16	14	16
Opposition to family planning	Reason for not intending to use contraception in the future is 'against religion', 'opposed to family planning', 'husband opposed', or 'other people opposed'	9	9	9
<b>Predictor variables</b>				
<b>Age group</b>				
13–24	Woman is in the age group 13–24 years	40	32	42
25–34	Woman is in the age group 25–34 years	28	29	28
35–49	Woman is in the age group 35–49 years	32	39	30
<b>Residence</b>				
Urban	Woman lives in an urban area	20	100	0
Rural	Woman lives in a rural area	80	0	100
<b>Education</b>				
Illiterate	Woman is illiterate	75	49	81
Literate, < middle complete	Woman is literate with less than a middle school education	14	20	12
≥ middle school complete	Woman is literate with at least a middle school education	12	31	7
<b>Religion<sup>a</sup></b>				
Hindu	Woman lives in a household whose head is Hindu	80	69	83
Muslim	Woman lives in a household whose head is Muslim	16	24	13
Other religion	Woman lives in a household whose head is neither Hindu nor Muslim	4	6	4
<b>Scheduled caste or scheduled tribe<sup>b</sup></b>				
SC/ST	Woman lives in a household whose head belongs to a scheduled caste (SC) or a scheduled tribe (ST)	23	13	26
Non-SC/ST	Woman lives in a household whose head does not belong to either a scheduled caste (SC) or a scheduled tribe (ST)	77	87	74
<b>Exposure to media</b>				
Exposed	Woman is regularly exposed to electronic mass media (radio or television at least once a week or cinema at least once a month)	42	73	34
Not exposed	Woman is not regularly exposed to radio, television, or cinema	58	27	66

Table 9, continued

Variable name	Variable definition	Mean value of variable expressed as percentage		
		Total	Urban	Rural
<b>Predictor variables</b>				
<b>Region</b>				
North	Woman lives in Delhi, Haryana, Himachal Pradesh, Jammu region of Jammu and Kashmir, Punjab, or Rajasthan	10	10	10
Central	Woman lives in Madhya Pradesh or Uttar Pradesh	32	26	33
East and Northeast	Woman lives in Bihar, Orissa, West Bengal, Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, or Tripura	27	18	30
West	Woman lives in Goa, Gujarat, or Maharashtra	12	21	9
South	Woman lives in Andhra Pradesh, Karnataka, Kerala, or Tamil Nadu	19	26	18
<b>Number of women<sup>c</sup></b>	Weighted number of currently married women age 13–49 who are not using any contraception (and whose husbands are not using contraception) and who do not intend to use contraception in the future	28,022	5,718	22,304

a. The 'other religion' category includes Christian, Sikh, Buddhist, Jain, and other religions.

b. Scheduled castes (SC) and scheduled tribes (ST) are those castes and tribes identified by the Government of India as socially and economically disadvantaged and in need of protection from social injustice and exploitation.

c. Actual number of women varies slightly for individual variables depending on the number of missing values.

for not intending to use contraception is highest at ages 25–34. The proportion reporting opposition to family planning is also much higher for women age 25–34 than for the other two age groups. Controlling for socioeconomic variables does not change these findings, which indicates that the effects of age on reasons for not intending to use contraception are largely independent of the other variables considered in this analysis. The relatively high proportions reporting method problems and opposition to family planning in the 25–34 age group are worrisome because this age group has the highest fertility levels.

Urban women are somewhat more likely than rural women to report 'can't have children' as a reason for not intending to use contraception in the future. A woman's education does not seem to have a large effect on her reasons for not intending to use contraception, except that women who have completed middle school or higher are somewhat less likely to report opposition to family planning than are women with less education. Religion has a large effect, mainly because of opposition to family planning among Muslims. As shown in Figure 8, Muslims are four to five times more likely than Hindus or women of other religions to report opposition to family planning as their main reason for not intending to use contraception. Controlling for other demographic and socioeconomic factors has virtually no influence on this effect, indicating that religion has an independent influence on women's intention not to use contraception.

**Table 10 Unadjusted and adjusted effects of selected demographic and socioeconomic factors on reasons for not intending to use contraception among currently married women age 13–49 who were not using any contraception (and whose husbands were not using contraception) at the time of the survey and who did not intend to use contraception in the future, India, NFHS, 1992–93**

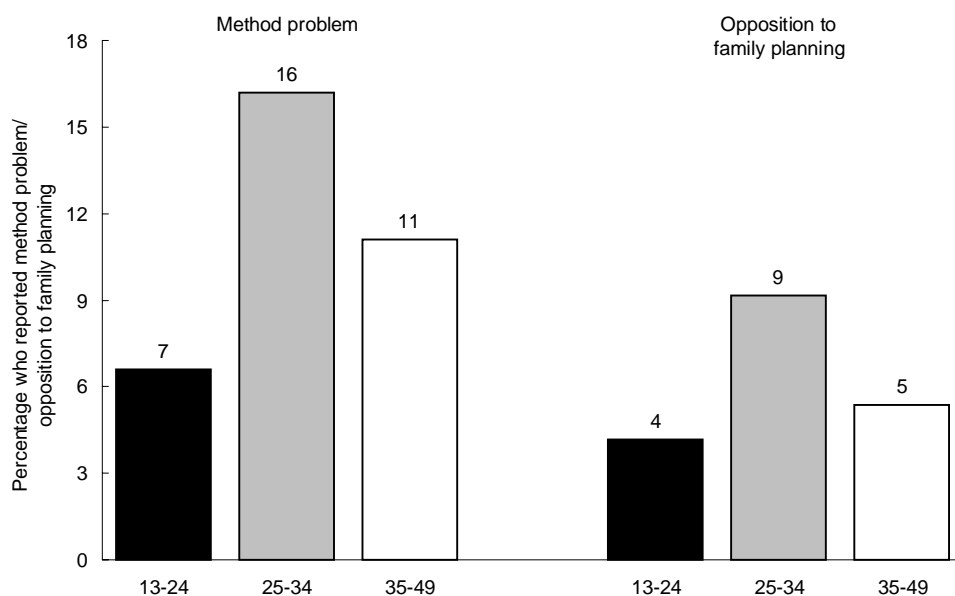
Variable	Percentage giving specified reason							
	Unadjusted				Adjusted			
	Wants more children†	Can't have children	Method problem	Opposition to family planning	Wants more children†	Can't have children	Method problem	Opposition to family planning
<b>Age group</b>								
13–24†	86	3	7	4	87	3	7	4
25–34	55	19*	16*	9*	55	19*	16*	9*
35–49	8	76*	11*	5*	7	76*	11*	5*
<b>Residence</b>								
Urban	48	29*	14	9*	52	24*	16	7*
Rural†	56	20	16	9	55	20	16	9
<b>Education</b>								
Illiterate†	53	21	17	9	54	21	17	9
Literate, < middle complete	54	24*	12*	10	53	23*	14*	10*
≥ middle school complete	62	22*	12*	5*	59	21	14*	7*
<b>Religion</b>								
Hindu†	56	21	16	7	56	21	16	7
Muslim	39	17*	11	33*	39	16	11	33*
Other religion	48	30*	14	8*	54	23	15	8
<b>Scheduled caste or scheduled tribe</b>								
SC/ST	58	19*	17	6*	54	20	16	9
Non-SC/ST†	53	22	15	10	54	21	16	9
<b>Exposure to media</b>								
Exposed	57	23	13*	7*	59	20*	13*	8*
Not exposed†	52	20	18	10	51	22	18	10
<b>Region</b>								
North	58	23*	13*	6	59	22*	12*	7
Central	59	15*	16*	9*	62	14*	15*	9
East and Northeast	50	23	16	11*	52	24	15*	9*
West	48	26	15	10*	37	34*	18*	11*
South†	52	26	16	6	51	24	18	7
<b>Number of women</b>	28,022				28,019			

Note: For definitions of variables see text and Table 9. Both unadjusted and adjusted percentages shown in this table are estimated by multinomial logistic regression. Unadjusted percentages are based on separate multinomial logistic regressions for each predictor variable, with that variable as the only predictor variable. Adjusted percentages are based on a single multinomial logistic regression consisting of all the predictor variables in the table. For any given predictor variable in the adjusted column, the set of control variables consists of all the other predictor variables in the table.

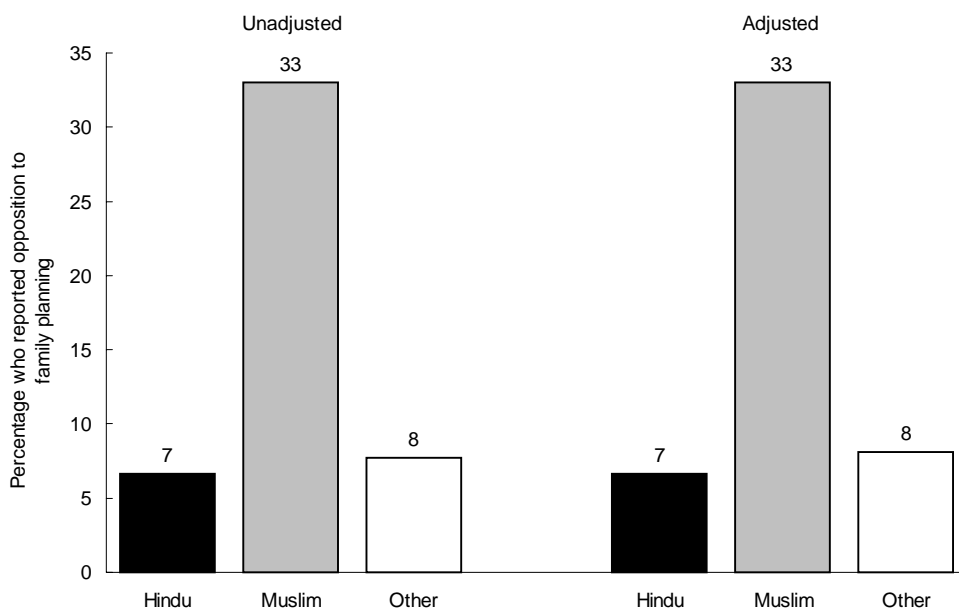
† Reference category

\* The coefficient in the underlying multinomial logistic regression differs significantly from 0 at the 5 percent level.

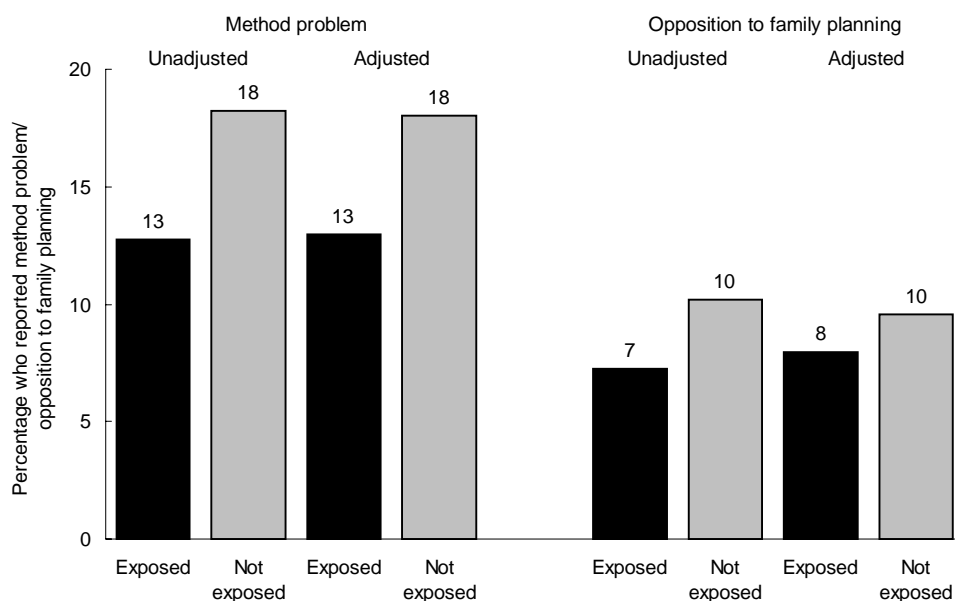
Membership in a scheduled caste or tribe does not have a noticeable effect on reasons for not intending to use family planning. Exposure to electronic mass media does have an effect, however. Women who are regularly exposed to the electronic mass media are less likely than other women to report method-related problems or opposition to family planning as their main reason for not intending to use contraception. Controlling for other factors reduces this effect very little, as shown in Figure 9. There are some regional variations in the proportions of women reporting various reasons for not intending to use contraception.



**Figure 7 Adjusted effects of age on method problem and opposition to family planning as main reasons for not intending to use contraception in the future, India: NFHS, 1992-93**



**Figure 8 Unadjusted and adjusted effects of religion on opposition to family planning as main reason for not intending to use contraception in the future, India: NFHS, 1992-93**



**Figure 9 Unadjusted and adjusted effects of exposure to electronic mass media on method problems and opposition to family planning as main reasons for not intending to use contraception in the future, India: NFHS, 1992–93**

Table 11 shows the adjusted effects of the predictor variables on reasons for not intending to use contraception separately for urban and rural areas. The adjusted effects when urban and rural areas are considered separately are quite similar to the effects when they are considered together, except that religion has a somewhat stronger effect on opposition to family planning in rural areas than in urban areas.

## CONCLUSIONS AND POLICY RECOMMENDATIONS

Programme managers and policymakers responsible for developing and implementing effective family planning services need to understand why some couples stop using contraception or do not intend to use contraception in the future. Because sterilization is the most widely used contraceptive method in India, there has been limited scope for contraceptive discontinuation. This situation is now changing, however, as more Indian couples choose temporary methods and as the government places greater emphasis on spacing methods as part of its family planning, reproductive health, and child survival programmes.

Results from this analysis indicate that women do not perceive availability, accessibility, or cost as major impediments to using contraception. Only 1% of currently married, non-pregnant women who have discontinued contraceptive use report 'hard to get method' as their main reason for discontinuation. Only 0.4% report 'cost too much', and only 1% report 'inconvenient' or 'hard to get methods' as their main reasons for not intending to use contraception in the future.



**Table 11 Adjusted effects of selected demographic and socioeconomic factors on reasons for not intending to use contraception among currently married women age 13–49 who were not using contraception (and whose husbands were not using contraception) at the time of the survey and who did not intend to use contraception in the future, by residence, India: NFHS, 1992–93**

Variable	Percentage giving specified reason							
	Urban				Rural			
	Wants more children†	Can't have children	Method problem	Opposition to family planning	Wants more children†	Can't have children	Method problem	Opposition to family planning
<b>Age group</b>								
13–24†	88	3	5	4	86	3	7	4
25–34	55	21*	14*	10*	55	19*	17*	9*
35–49	9	76*	10*	5*	7	76*	11*	5*
<b>Education</b>								
Illiterate†	47	28	15	10	55	19	17	9
Literate, < middle complete	43	32	13	12*	56	21	14*	9
≥ middle school complete	54	26*	14*	7*	59	20	13*	7*
<b>Religion</b>								
Hindu†	50	29	15	6	57	19	17	7
Muslim	41	23	12	25*	38	15*	11	36*
Other religion	45	32	17	6	56	21	14	9
<b>Scheduled caste or scheduled tribe</b>								
SC/ST	48	29	13	10	56	19	17	9
Non-SC/ST†	48	28	14	9	56	20	16	9
<b>Exposure to media</b>								
Exposed	50	29	13*	9*	61	18*	13*	8*
Not exposed†	44	27	19	11	53	20	18	9
<b>Region</b>								
North	50	35	10*	5	61	18*	12*	8
Central	59	16*	15	10	62	13*	15*	9
East and Northeast	45	29	15	11*	54	22	16*	9
West	34	42*	13*	11*	38	31*	19*	12*
South†	49	29	14	8	51	23	19	7
<b>Number of women</b>		5,716				22,304		

Note: For definitions of variables see text and Table 9. Adjusted percentages shown in this table are estimated by multinomial logistic regression. Each set of adjusted percentages by residence is based on a single multinomial logistic regression consisting of all the predictor variables in the table. For any given predictor variable, the set of control variables consists of all the other predictor variables in the table.

† Reference category

\* The coefficient of the underlying multinomial logistic regression differs significantly from 0 at the 5% level.

Replacing a dead child does not play a significant role in contraceptive discontinuation in India, at least not at the aggregate level. Only 0.5% of women who have discontinued contraception report this as their main reason.

A large proportion of women (38%) report method problems and method failure as major reasons for discontinuing contraception. This proportion is considerably higher in urban areas (44%) than in rural areas (35%), perhaps because urban women may be more aware of method-related problems than rural women. If this is the case, a larger proportion of rural women may be experiencing method-related problems than indicated here. The proportion of women reporting method problems or failure is uniformly high across all socioeconomic categories, both within each state and in the nation as a whole.

There are, however, large variations among states. In Uttar Pradesh and Madhya Pradesh—large states with high fertility—about one-half of all women who have discontinued contraception reported a method problem or failure as their main reason. This proportion is even higher in Orissa and in some northeastern states. No doubt many of these women would have continued using contraception had they not faced such problems. These findings indicate a need to improve the quality of family planning services in many states.

In India as a whole, about one-fourth of women who do not intend to use contraception in the future report method problems or opposition to family planning as their main reason. This proportion varies widely among states. Women age 25–34 are much more likely than women in other age groups to report a method problem or opposition to family planning as their main reason for not intending to use contraception. The strong effect of age is independent of any of the socioeconomic variables included in the analysis.

Women who are regularly exposed to the electronic mass media are less likely than other women to report method problems or opposition to family planning as their main reason for not intending to use contraception in the future. Muslim women are four to five times more likely than Hindu women or women of other religions to report opposition to family planning as their main reason for not intending to use contraception. As with age, the strong effect of religion is independent of any of the other socioeconomic variables.

India's family planning programme needs to pay special attention to those states where the proportion of women reporting method problems or opposition to family planning is relatively high. The programme also needs to focus on women age 25–34 and on Muslim women. With better information and motivation campaigns and improvements in the quality of family planning services, it may be possible to persuade a large proportion of these women to adopt contraception.

The NFHS did not collect data on reasons why women were not using contraception at the time of the survey. Neither did the survey collect adequate data on the quality of family planning services, which is often the root cause of women's problems with methods and opposition to family planning. The second National Family Health Survey (NFHS-2), which is currently in progress, will address some of these information gaps. The new survey asks currently married, non-pregnant women who are not using contraception why they are not using family planning. Also, the NFHS-2 is collecting more accurate information on the main reason women give for not intending to use contraception in the future. Finally, the new survey has added a number of questions that measure the quality of family planning services. This new information, when it becomes available, will shed more light on why women discontinue contraception, why they are not current contraceptive users, and why they do not intend to use contraception in the future.

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