

MEETING UNMET NEED FOR CONTRACEPTION: Validity Assessment and Designing New Strategy in Indian Context

Dr. Uma C. Saha*¹, Dr. Kalyan B. Saha and Dr.T.K.Roy*****

Abstract:

*The study is to understand the unmet need for contraception among the rural women of central India. The data from NFHS-I (1992-93) and resurvey of 744 ever married women examined after seven years **in order to access the quantum and magnitude of inconsistencies in behaviour w.r.t. intention among the women in unmet need.** The estimated unmet need for contraception in NFHS-I was 24 percent, which has reduced by 14 percent during resurvey. However, restricting the concept to nonuser of contraception and those who are at risk of unplanned pregnancy and do not intend to have further births hides the true extent of women's need for family planning information and services in a high fertility zone. Thus need has been felt to redefine the concept in Indian context. The new estimates for unmet need are slightly elevated and give better picture of the latent demand for family planning and also fertility reduction than earlier measures.*

Keyword:

Resurvey, reproductive and contraceptive behaviour, unmet need, inconsistencies, strategies, discrepant behaviour, significant gap, postpartum amenorrhea, In fecund.

Introduction

When a woman mentions that she is not practicing contraception even though she does not want to become pregnant (she is at some risk), she can be said to have an unmet need for family planning. The “need” in this case is defined not by the woman herself, but the researcher who deduces it from the apparent inconsistency between her contraceptive behaviour and her stated preferences (Dixon-Mueller et al., 1992). In a situation like this if the woman does not wish to have a child at all she is said to have an unmet need for limiting her family and if she wants to postpone the birth of her child she is denoted as having an unmet need for spacing.

*¹ Lecturer, Xavier Institute For Development Action And Studies, 4th Mile, VIA RFRC, PO Goraiyaghat, Tilhari, Jabalpur-482 021, Madhya Pradesh, India.

** Senior Research Officer, Regional Medical Research Centre for Tribals (ICMR), Nagpur Road, Garha, Jabalpur- 482 003, Madhya Pradesh, India.

*** Consultant , NFHS project, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai-88. India

The extent of unmet need in a population is measured by the proportion of currently married women exposed to the risk of pregnancy but neither wants children nor use contraception at the time of interview. The unmet need for spacing is the percentage of currently married women exposed to the risk of pregnancy but do not use a method and wish to postpone the next birth. Unmet need for limiting is the percentage of currently married women, exposed to the risk of pregnancy but do not use a method and wish to stop child bearing.

However, it is not easy to capture the elusive unmet need (Dixon-Mueller et al., 1992) as its estimate depends on the definition and measurement of the three key concepts namely contraceptive status, exposure to risk of pregnancy and the desire to limit or space children (De Silva, 1992). Thus, variations in the definitions and measurement of any of these three concepts may result in variations in the estimates of unmet need. Moreover, it often tends to change its size and shape depending on how survey questions were asked, what criteria were used, and what assumptions were made. It can grow or shrink quite dramatically from one survey to the next as the proportions of women hoping to delay or avoid pregnancy rise in response to a change in the family size norm or if the response regarding contraceptive use deviates. Moreover, individual women take on the appearance of having an unmet need one time but not the next time and vice versa which may be because of various reasons like child loss, deterioration of economic condition and other reasons. Another characteristic of the unmet need concept is that its estimates are usually too small. Many women escape it because of the way the concept is defined and the survey questions are asked. Thus, in order to obtain the true extent of unmet need, it is vital to obtain a more comprehensive measure, which may help in framing appropriate policies and programme strategies for population covered in the study (Dixon-Mueller et al., 1992).

Resurgence of the concept of unmet need and its measurements: The concept that eventually became unmet need for family planning was first explored in the 1960s, when data from surveys on contraceptive knowledge, attitudes and practices (KAP) showed a gap between women's reproductive intentions and their contraceptive behaviour. The term that came into popular use to describe this group reflecting the source of data-was "KAP-gap" (Bogue, 1974).

In 1972, based on an analysis of women's responses to three KAP surveys in Taiwan, Ronald Freedman and colleagues first identified a specific group of women who might be expected to adopt contraception-even without changing their desired family size-because they said that they wanted to have no more children but were not using contraception (Freedman et al., 1972). In 1974 Freedman and Coombs for the first time used survey data to identify the size of this group in several countries and they found it to be substantial. They coined the term "discrepant behaviour" to describe the status of such women (Freedman et al., 1974). Similar evidence of "discrepant behaviour" came from surveys among young people in the United States in early 1970s, when Morris found "a significant gap" between the need for family planning and its use (Morris, 1974).

One of the first published uses of the term "unmet need" appeared in 1977, when Stokes, citing both the evidence from KAP studies in developing countries and fertility surveys in the US, wrote that "in disparate ways, the number of ill-timed pregnancies and widespread reliance on abortion among all social classes and groups signal an unmet need for contraception" (Stokes, 1977; 1978).

In 1978, based on world fertility survey (WFS) data from five Asian countries, Westoff published the first comparative estimates of unmet need for limiting births (Tsui, 1985). The WFS questionnaire did not ask women about their desire to space births. Also, at that time Westoff excluded pregnant and amenorrheic women because they did not currently need contraception (Westoff, 1978).

In 1981 Westoff and Pebley, using WFS data from 18 countries, showed that different definitions of unmet need produced widely differing estimates of the size of the unmet need group. Also, they recommended that the unmet need concept be extended to cover the desire to space births as soon as the data could be collected (Westoff et al, 1981).

The contraceptive prevalence surveys (CPS), from the mid 1970s to 1984, made it possible to further refine and measure the concept of unmet need. The CPS added questions about women's interest in postponing, or spacing future births. Thus it became possible to

calculate unmet need for spacing births as well as for limiting births helping to distinguish potential interest in temporary methods from that for permanent and long term methods.

In 1982 Nortman raised a new point about defining and measuring unmet need (Nortman, 1982). She argued that women who were pregnant, breastfeeding, or amenorrheic should be included in the definition of unmet need because they would soon need contraception again. Nortman and Gary Lewis developed a model that estimated unmet need for contraception, not just at the moment of the survey, but over the year following the survey (Nortman et al., 1984).

The Demographic and Health Surveys (DHS) have further improved measurement of unmet need. The DHS asked pregnant women whether their current pregnancies were intentional, mistimed, or unwanted and also whether they were using contraception at the time of conception. Also, the DHS questionnaire asked women directly about postpartum amenorrhoea, thus avoiding the necessity of using breast-feeding as a proxy, as done in past surveys. This approach made it possible to classify some pregnant women as those having an unmet need for family planning and those who did not. Thus, Westoff revised the standard definition of unmet need to include pregnant or amenorrheic women whose pregnancies were mistimed or unwanted (Westoff et al., 1988). The revised measurement of unmet need with new terminologies, i.e., the union status, fecundity status and pregnant and amenorrheic women, where the following women were considered not to be in need,

- ❑ Women who are not currently in union,
- ❑ Women who are currently using contraception,
- ❑ Currently pregnant or amenorrheic women who were using contraception at the time they became pregnant,
- ❑ Currently pregnant or amenorrheic women whose pregnancy was reported as intentional,
- ❑ In fecund women, and
- ❑ Fecund women who want their next child in less than two years.

In 1999, Becker proposed a definition of unmet need where he considered women who were declared fecund, who were not practicing contraception and who wanted to either limit or space their births (by more than two years), and those who intended to use contraceptives

within 12 months. Becker opined it as a conservative definition, because those who are unsure about their fertility desire are not included in this analysis, whereas they would be included in the traditional definition of unmet need. Additionally, among individuals who want to limit or space births and intend to practice contraception within a year should be counted as having an unmet need, as for several years men had been virtually ignored in many Family Planning programs; and it is also clear that husbands play a crucial role in fertility decision-making in most of the world. He further attempted to expand the concept of unmet need by including the husbands or rather including the couples who are in unmet need. Although there are some problems regarding measurement of such data if one spouse reports wanting no more children but the other disagrees, providing contraception may meet an individual's need but may, at the same time, be problematic for the couples. Moreover, in patriarchal societies, women often must submit to their husbands' childbearing desires or risk violence and divorce.

Stash (1999) added an additional aspect to the existing definition of unmet need for contraception by Nepalese women. He categorized the fecund women into two categories, viz. women who were cohabiting with the husbands, and those who were not (i.e., husband were away for six months prior to the survey), because migration of laborers in Nepal is common and this long-term migration affects the risk of pregnancy of the women.

More recently, Klyzing (2000) estimated the proportion of individuals with an unmet need using Fertility and Family Survey (FFS) data in Europe. He included the women who had a current unwanted pregnancy or who were fecund, sexually active, want no more births but were not using contraceptives. Here the authors had not considered marital status which was considered by earlier researchers and it was assumed the percentage of women having extra marital relationship is quite negligible and may not significantly affect the percentage of unmet need.

Although it has been observed that there has been vivid fluctuation in the definition of unmet need in different circumstances, an estimate of the unmet need category helps programme managers to develop appropriate and targeted strategies to meet the contraceptive needs of the couples. An understanding of the reasons why women have unmet need would surely be of help to service providers at the grass-root level and they can respond to the concerns of women in a meaningful way. With this background the present paper makes an

attempt to explore the extent of inconsistencies in contraceptive behaviour with resurvey data among the rural Indian women in unmet need and tries to develop new strategies to modify the definition in Indian context.

Data and Methodology

The National Family Health Survey (NFHS) was conducted in India for the first time during 1992-93 covering the parameters like fertility, knowledge and practice of family planning methods, family size preferences, the potential demand for contraception, level of unwanted fertility, utilization of antenatal services, breastfeeding etc. The present study attempted to re-explore the data pertaining to fertility and family planning as obtained in the NFHS to examine the changes in reproductive behaviour over a period of time of seven years through a resurvey in Madhya Pradesh among some selected households and women who had been interviewed in the aforesaid NFHS.

Considering the Indian condition where average birth interval is nearly 3 years, a follow up after 7 years seems to be appropriate to understand the dynamics of actual realization of women's intentions to have or not to have children. In case of intentions to use, higher the inter survey period, greater is the chance of memory lapse in reporting of short episodes of reversible contraceptive use. In India, most of the women rely on sterilization and switching among the methods is minimal and, therefore, seven years of interval for the resurvey was considered adequate.

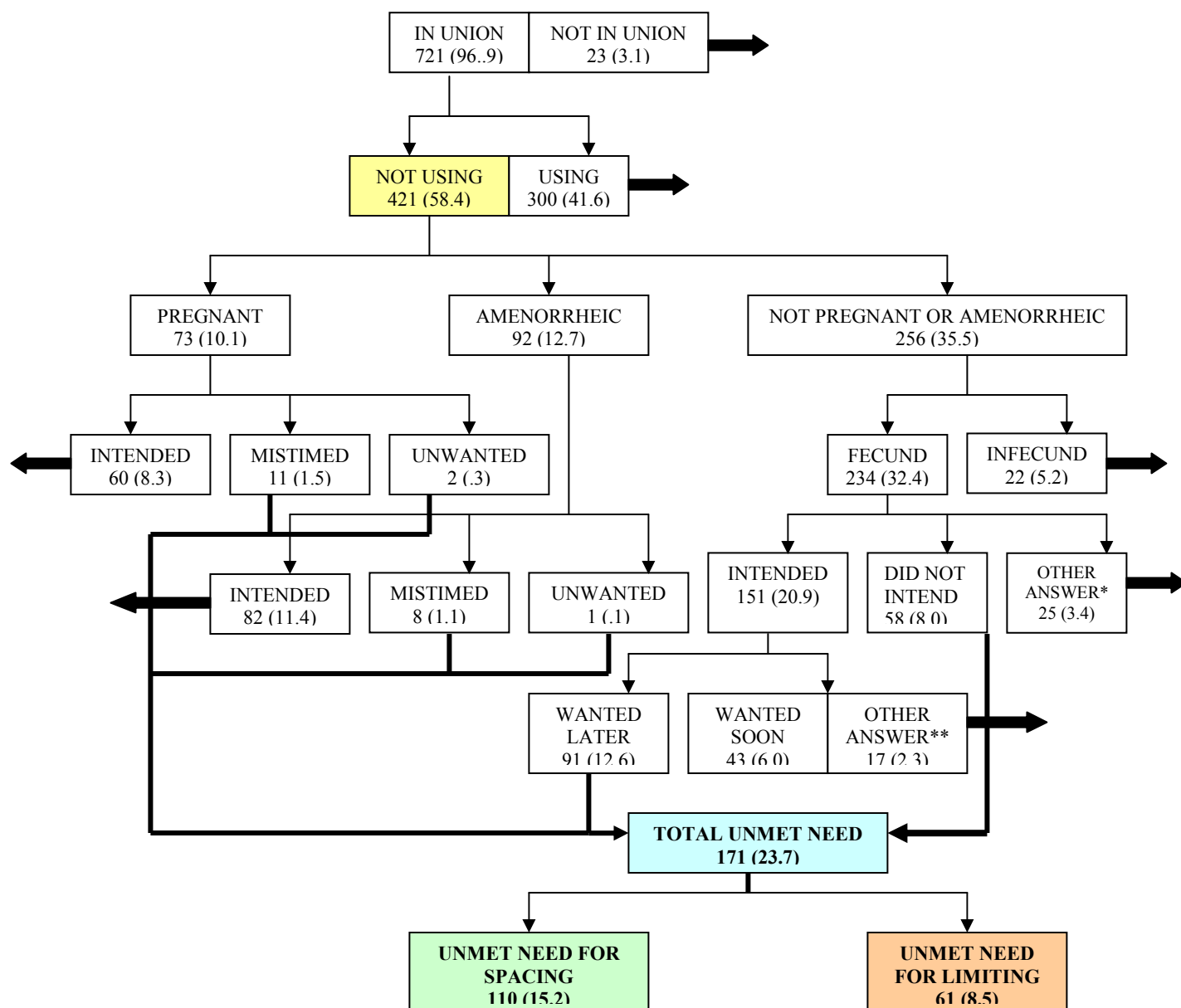
The present study is conducted in Madhya Pradesh (MP) in central India, which falls in the high fertility region of the country. The total fertility rate (TFR) of MP is 3.9, which is almost 18 per cent higher than national average (NFHS, 1995). The comparative data suggest that besides TFR, the age at marriage, female education, and contraceptive prevalence rate are also lower in MP whereas, infant mortality rate (IMR) and preference for additional children, particularly sons are quite high compared to the national average. Considering these factors, the state of Madhya Pradesh is selected as study area for understanding the change in reproductive and contraceptive behaviour of the respondents during the period 1992 and 1999.

The NFHS in Madhya Pradesh (MP) gathered information from 6,254 ever-married women in the age group 13 to 49 living in 5,857 households, out of which rural sample consisted of 4,778 ever-married women in 4,398 households. In the resurvey a sub-sample of 1,333 cohorts of ever-married women (all women in the sample in 49 selected villages in the NFHS) is followed up. Out of 1,333 women, who are supposed to be interviewed, 744 (56 percent) could be interviewed. Nineteen percent women were not at home at the time of resurvey either because they had gone out for some work or were temporarily out of station or refused to respond or were mentally retarded. As we did not have the provision of call back in the survey we could not minimize this category (not at home) of women. In NFHS-1, 13 percent women in the sample area were visitors in different households during the resurvey these visitors were not present in their respective households. Besides this, seven percent had migrated out of their villages, two percent died, and two percent could not be traced.

Results

Estimation of unmet need in NFHS: The unmet need in NFHS was estimated among the respondents who did not want children and were not using contraception, and also among the pregnant and amenorrheic women whose pregnancy or last birth was claimed to be either mistimed or unwanted. It is schematically presented in the figure 1. It yielded a potential demand of overall contraception of about 24 percent among 721 currently married women, with a demand for spacing (15 percent) and limiting (nine percent) as against 21 percent of overall unmet need, 13 percent need for spacing and seven percent for limiting, in Madhya Pradesh.

Fig. 1
Estimates of unmet need for family planning in NFHS, 1992-93 (n=744 ^ψ)



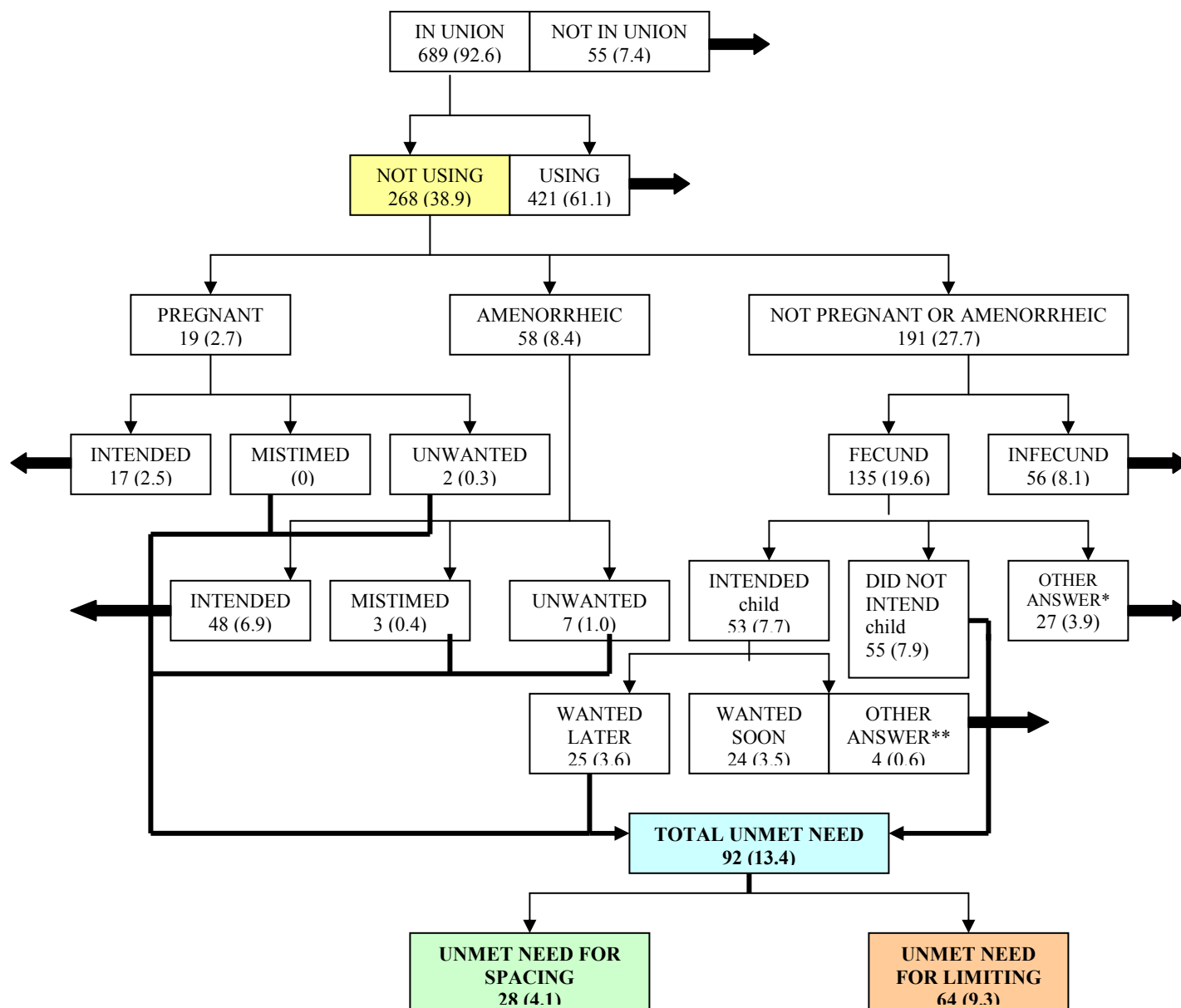
^ψ denotes the ever married women in 13-49 age group,

* Other answers includes the answer like up to god, don't know and can't get pregnant category,

** It includes the categories like cant get pregnant and other answer recoded verbatim in NFHS

Estimation of unmet need in resurvey: The same cohort of women of NFHS was followed in the resurvey and unmet need was again estimated as there were many changes in the life cycle of the respondents in the six years of inter-survey period, i.e., age, duration of marriage, which were, of course, universal to all the respondents, but some specific changes occurred to some selected women, such as change in marital status, number of surviving children, fecundity status or change in the contraceptive use status. There were 23 respondents who were not in union in NFHS and this number increased to 55 respondents in resurvey, i.e., there was a change of 4.3 percentage points in this category. In NFHS, 300 women (42 percent) out of the total selected women were using contraception, and the number had increased to 421 (61 percent) in resurvey. Unmet need for contraception of the respondents was estimated in the same way as estimated in NFHS and is shown in figure 2. It was found to decrease by 14 percent among the cohort, with a decrease in unmet need for spacing by 11 percent and increase in unmet need for limiting by about one percent. The results of this analysis are in the expected direction, as the same cohort of women was followed to estimate the unmet need and many of them had used contraception in the inter-survey period and there was a decrease in the percent women with an unmet need. Moreover, as the cohort became older during the inter-survey period and most of the women had completed their family size and some of them had attained menopause, the unmet need for spacing decreased significantly, whereas, there was a marginal increase in unmet need for limiting as observed in the resurvey.

Fig. 2

Estimates of unmet need for family planning in Resurvey, 1999(n=744 ^ψ)

^ψ denotes the ever married women in 13-49 age group,

* Other answers includes the answer like up to god, don't know and can't get pregnant category,

** It includes the categories like cant get pregnant and other answer recoded verbatim in NFHS

Consistency in response of women in unmet need: Since the emergence of the concept of unmet need it has been noted that unmet need was a statistical construct, in the sense that surveys do not directly ask respondents if they have felt need for a contraceptive method or assistance in obtaining one when they intend to check their unwanted fertility. In most of the fertility surveys, two separate questions regarding reproductive intention and contraceptive intention are collected in two sections of the questionnaire and often researchers found the respondents themselves were inconsistent about their reproductive behaviour, i.e., they are not sure or they are not intending to use contraception in order to check their unwanted fertility. Radha Devi et al. (1996) while studying the unmet need for family planning in Uttar Pradesh with NFHS (1992-93) data found that among the currently married women with an unmet need for limiting, 46 percent intended to use contraception and rest did not intend to do so. Among the remaining 54 percent respondents who did not intend to use contraception, a subset of 11 percent attributed the main reason as the desire to have more children. Thus, these women were themselves inconsistent and gave contradictory responses to these two separate questions. Therefore, unmet need for limiting does not totally focus on the respondent's intention to use contraception in future. It is observed that further improvement of family welfare services might convert only about half of the respondents with unmet need and the rest need to change their contraception intention by having proper awareness of and accessibility to family planning services. In the present study as the data regarding reproductive and contraceptive intention and outcome are available, we are in a position to identify the consistency of reproductive intention of respondents in unmet need and their outcome in the inter-survey period, i.e., whether they were having children inspite of not intending to have them or they were using contraception to check their unwanted fertility.

Table1 presents the reproductive outcome in the inter-survey period among the respondents with/without unmet need. It reveals that among the respondents in unmet need, 57 percent were inconsistent, i.e., they had a child in the inter-survey period, whereas among the respondents who were not in unmet need, 38 percent did not have a child and, therefore, were inconsistent. Statistically, there was no significant difference between the respondents regarding their reproductive outcome whether they had unmet need or not.

Table 1 Reproductive Outcome of the Respondents in Unmet Need			
Percent distribution of the respondents according to their reproductive outcome in the inter-survey period by their unmet need status			
Respondents in NFHS	Reproductive outcome in the inter-survey period		Total
	Had child	Did not have child	
In unmet need	97 (56.7)	74 (43.3)	171 (40.6)
Not in unmet need	155 (62.0)	95 (38.0)	250 (59.4)
Total	252 (59.8)	169 (40.1)	421 (100.0)

From the earlier discussion it is evident that the concept of unmet need for contraception has passed through a series of stages and each one being an outgrowth of the one conceptualized before. In a study conducted by Sinding et al. (1994) it was found that by the usual definition, the number of couples with an unmet need was so large that if these couples became users, contraceptive prevalence would rise to exceed the targets of most countries. This finding considerably strengthened the case against local recruitment quotas for family planning workers and may have contributed to India's decision in April 1996 to discontinue its target approach for family planning.

However, other researchers have found that substantial proportions of women who were defined as having an unmet need said they did not intend to use a method either (Robey et al., 1996), and these women cited a great variety of reasons in answer to superficial survey questions (Westoff and Bankole, 1995). The women with unmet need are predominantly in the active childbearing years and some of them are relatively young and have small or medium sized families and more frequently encounter unwanted pregnancy before they adopt a method (Robey et al., 1996). On the other hand, women without unmet need are a more complex group as some are already using contraception or they are infecund and some have no reason to practice contraception, yet some of them are young and want to have children and often intend and use a method after completing their desired births in the near future. Thus, in this context refinement of unmet need issues becomes very difficult but still necessary after estimating the extent of inconsistencies in the two groups.

Table 2 reveals the contraceptive intention and outcome of the respondents, who were either with or without unmet need. About 39 percent of the respondents in unmet need intended to use contraception in comparison to only 24 percent respondents who intended to

use but were not in unmet need. The extent of use in the two categories was found to be almost the same i.e., a little more than one-third of the respondents of the respective groups had used contraceptives. Among the respondents in unmet need, almost half of those who intend to use contraception had actually used it, whereas, among the respondents who did not intend to use contraception only 24 percent of them had actually used. Regarding respondents not in unmet need, among those who intended to use contraception exactly half the respondents had used, whereas among the respondents who did not intend to use contraception almost one-third had used it in the inter-survey period. Thus, the table reveals that the extent of use of contraception among the respondents in unmet need or not was more or less the same (one-third), but it was much more consistent (half had used) when intention to use contraception was incorporated along with their unmet need status.

Table 2 Contraceptive Intention and Use of the Respondents by Unmet Need Status				
Percent distribution of the currently married non-users (either in unmet need or not) by their contraceptive intention and use in the inter-survey period				
Respondents in NFHS	Contraceptive intention in NFHS	Contraceptive use in the inter-survey period		Total
		Used	Not used	
In unmet need	Intended to use	33 (49.2)	34 (50.7)	67 (39.2)
	Did not intend to use	25 (24.0)	79 (76.0)	104 (60.8)
Total		58 (33.9)	113 (66.1)	171 (23.7)
Not in unmet need	Intended to use	30 (50.0)	30 (50.0)	60 (24.0)
	Did not intend to use	60 (31.6)	130 (68.4)	190 (76.0)
Total		90 (36.0)	160 (64.0)	250 (34.7)

Overall inconsistency among the respondents either in unmet need or not in unmet need: The main target of unmet need is to estimate the demand for family planning services and project the future contraceptive prevalence rate on the basis of fulfillment of unmet need. But a remarkable proportion of women in unmet need are found to deviate from their reproductive intention, i.e., they do not opt for contraception rather go for unwanted childbirths. On the other hand, fecund married women of reproductive ages who are not practicing contraception and say they want a child within the next two years or they are unsure of their future child birth or birth of their child is “up to god” are typically not classified as having unmet need for contraception. The 1993-1994 Bangladesh Demographic and Health Survey (DHS) showed that they could even outnumber women classified as having an unmet need who did not intend to use a method (Barket et al., 1996). Thus,

substantially a large market for family planning products exists among women who have been overlooked by programmes while trying to address only the women with unmet need. Figure 3 reveals the consistency of reproductive and contraceptive intention and outcome of the respondents in unmet need and those not in unmet need during the inter-survey period.

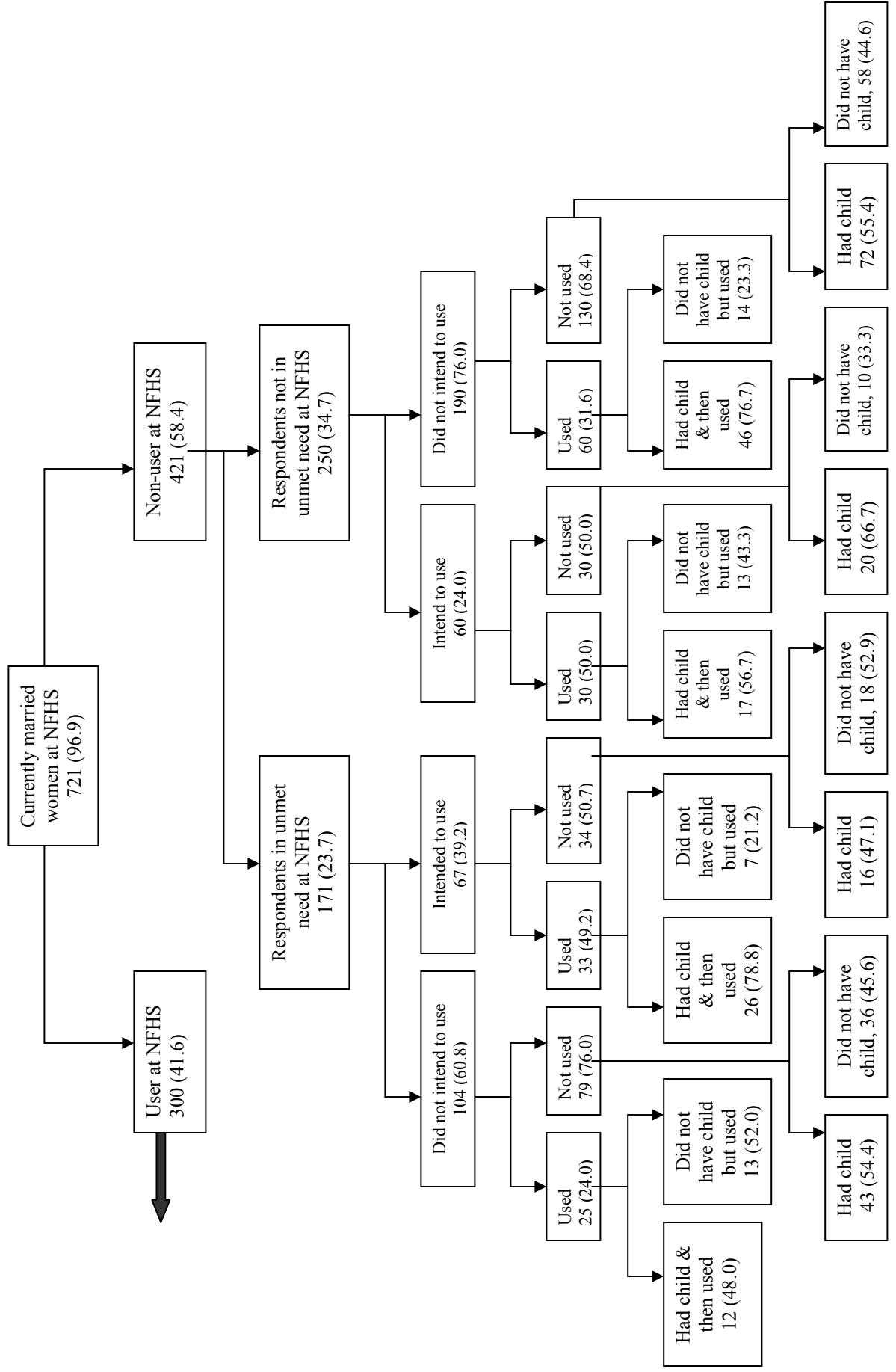
Reproductive performance of the respondents in unmet need

who did not intend to use contraception: Figure 3 depicts that among the respondents in unmet need, a majority (61 percent) did not intend to use contraception but when they were followed up in resurvey it was found that about one-fourth of the women had actually used and the remaining were consistent with their intention of not using contraception. When further probed, it was found that among the women who used contraception, a little less than half had children before they used the method and only 13 women (52 percent) although they did not intend to use contraception, but had done so in the inter-survey period without having unwanted births. Among the respondents, who inspite of being in unmet need did not intend to use contraception and had not used it, 54 percent had a child and the rest, however, managed to avoid any unwanted births.

Reproductive performance of the respondents in unmet need

who intended to use contraception: The respondents who were in unmet need and intended to use contraception are thought to be the core group of future acceptors of contraception; among them half of the women were found to have used contraception and rest did not. Among the respondents who had used contraception in the inter-survey period, 79 percent could not avoid unwanted births before using contraception. Among the respondents who intended to use but did not use in the inter-survey period, about 47 percent had a child and rest 53 percent somehow managed to avoid unwanted births.

Fig. 3 Percent distribution of currently married, non-user women, by unmet need status and contraceptive intention in NFHS and use in resurvey



Reproductive performance of the respondents not in unmet need

but intend to use contraception: Among the respondents who were not in unmet need group, about 24 percent intended to use contraception in future and rest did not. Among the intended group about half of them were consistent with their intention, i.e., they used it. However among this consistent group, about 57 percent had used it after having children in the inter-survey period and the rest without having children. Of the remaining 50 percent respondents who did not use in spite of their intention and among them 67 percent had had a child and rest did not. Again, among 250 respondents who were not in unmet need, only 13 respondents intended to use contraception and had used contraception without having a child in the inter-survey period.

Reproductive performance of the respondents not in unmet need

and who did not intend to use contraception: The respondents who were neither in unmet need nor intended to use contraception can be treated as the group, which may never use contraception in the near future. But, in reality it was found that among them, a little less than one-third of the women (32 percent) had used in the inter-survey period, although 77 percent among them used it after completing their family size. Finally, 14 respondents, who were neither in unmet need nor intended to use contraception, had used contraception without having children in the inter-survey period. Among the respondents who did not intend to use and did not use it, 55 percent had a child and the rest did not have a child in the inter-survey period.

Thus, in the entire complex phenomenon, among the unmet need group, 43 percent women did not have child in the inter-survey period and were considered to be inconsistent. Among them only 12 percent respondents did not have children as they used contraception and 32 percent respondent did not have children even without using contraception.

Among the respondents who were not in the unmet need group, 38 percent respondents did not have children in the inter-survey period, 11 percent did not have children due to use of contraception and 27 percent did not have in spite of intending to have a child.

Discussion

The findings suggest that the two groups who intend to use a method – i.e., those with and without an unmet need – are similar enough, that is, they are more likely to do so. Thus the programme can seek out both, using similar strategies. However, women without an unmet need

are generally less motivated to use and may misguide the policy makers. Some women were not in need temporarily as they were pregnant or in postpartum amenorrhoea or they could not decide about their future births or had the notion that birth of child is up to god before beginning to use - this section was found to be the most inconsistent group and was often found to use contraception but escapes from the estimates of unmet need. Thus, for the service programs, not only women in unmet need but women who intend to use a method should be the main focus of interest as many of them may not be classified as having an unmet need for contraception but may be important candidates for method adoption for spacing purposes.

Need for change in the concept: Thus, in visualizing the slipperiness of the concept of unmet need and the reproductive outcome of the respondents in a longitudinal frame, a need has been felt to refine the concept in the Indian context. Although, it has been propounded by different researchers in the past and it is not necessarily a problem unless the results are misinterpreted. Each of these measures is useful for specific research and planning purpose as long as its limitations are clearly noted. Here the complaint is that restricting the concept to nonusers of contraception and those who are at risk of an unplanned pregnancy and do not intend to have further births hides the true extent of women's need for family planning information and services in a high fertility zone like Madhya Pradesh. The women, who expressed the desire to use family planning in future, were more likely to do so than others who did not express such a desire. Thus, if the intention to use contraceptives is also considered along with unmet need and not in unmet status, it might be helpful and serve as a guideline to plan the activities in a program. Excessive emphasis on only the unmet need group, without giving sufficient attention to those who are not in need but intend to use contraception somewhere in the near future after completion of their family size might be detrimental to the program, because a sizeable proportion of these women had actually used a method.

The proposed new conditions for estimating unmet need in Indian context: The unmet need in population may be measured by the percentage of

- Currently married women who are exposed to the risk of conception and want no more children but not using contraception although they intend to use in near future,

- Currently married women who are not exposed to the risk of conception being either pregnant or amenorrheic and say their last birth was mistimed or unwanted and intend to use contraception in near future,
- Currently married women who are exposed to the risk of conception and want more children but intend to use in the near future after completion of their family size.

Advantages of the new conditions pertaining to reproductive outcome: It would be worthwhile to compare whether the proposed new conditions of unmet need gives a better estimate of latent demand for family planning in the study population and also fertility reduction than the earlier measures. According to the earlier estimates as shown before, of 171 women in unmet need, 34 percent used contraception, whereas according new estimate, the women in unmet need has reduced to 127, who intended to use contraception (either, not wanted children or wanted children). Among this new group of women in unmet need, about half of them had used contraception. Regarding reproductive outcome, according to earlier estimates of 171 women in unmet need, 43 percent did not have child, whereas according to the later or new estimate, 38 percent did not have a child. The later or new estimates may be little elevated as it takes into consideration both women not wanting children (i.e., in unmet need) or wanting children (i.e., not in unmet need). Further 12 percent of the earlier unmet need group averted births as a result of use of contraception whereas 16 percent of the new unmet group averted births with the use of contraception. Hence the new conditions refined the measure of unmet need for contraception and gives better estimates than earlier methods.

It is believed that the new strategy to capture the unmet need for contraception by studying the required parameters in one of the high fertility zone of India, will help the planners to design effective means to satisfy the actual need for the methods not only in central India, but also in other regions of the country.

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