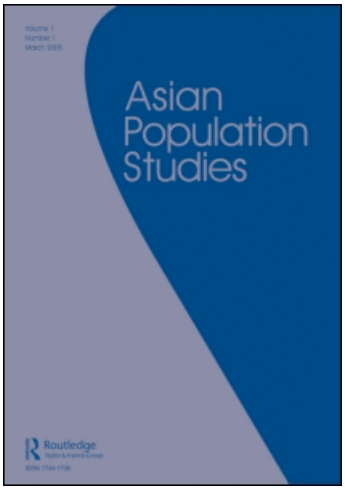

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ULTRAMODERN CONTRACEPTION
Social class and family planning in India

Alaka Malwade Basu

The measured success of family planning policy in the developing world rests on increases in the 'modern' methods of contraception. By extension, 'traditional' methods of contraception are equated with traditional mentalities and insufficient motivation to control fertility. But contraceptive use differentials in India suggest that in fact it is the most 'modern' women (those with a college education and living in urban areas) who are the most likely to use these traditional methods of birth control and to use them very efficiently as well. The paper locates this counter-intuitive preference among urban, educated women in what may be called 'ultramodern' attitudes to the body and to modern medicine and tries to situate such modernization in the contemporary developmental paradigm. Finally, the paper implies that population policy and contraceptive research may be unduly attributing contraceptive ineffectiveness to the users of traditional birth control today.

KEYWORDS: family planning; India; traditional methods; modernization, population policy

Background

Every academic discipline has what in legalese are called 'terms of art'. A 'term of art' is, in essence, an ordinary-sounding word or phrase that has a specific technical designation related to the ordinary definition but more precise than the ordinary definition. Thus the word 'damages' in law means the monetary quantification of the harm that someone might suffer because of a breach of contract or injury due to negligence, as opposed to 'damage' in the descriptive sense of the affected body part etc. The two concepts are related but one is more particularized. The 'art' is in effect the legal art into which the term has been subsumed, so that (at least as a lawyer) you cannot use the term in its naive sense any longer.

Like all disciplines, social demography has appropriated several such terms of art from everyday language. This has caused more than a little confusion for the numerous lay groups and persons who now use a demographic argument to lobby for a variety of social and political ends (see Basu 1998, on this renewed public role of demographic research in areas that are far removed from matters of fertility and mortality). For example, a term such as 'natural fertility' has a very precise meaning in demography, and the *Oxford English Dictionary* is not the right place to seek this meaning. A misunderstanding of such terms among lay people (and one can think of several examples of this) is regrettable but understandable—we cannot have the whole world of social activism trained in technical demography. What is less justifiable is the tendency for demographers themselves to forget that many innocuous sounding words or terms in demography have a more

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restricted meaning than that implied by a lay dictionary or by common usage in the everyday world.

This paper looks at demographers' interest in 'traditional methods' of contraception to illustrate this kind of semantic confusion. The term 'traditional methods' is a demographic term of art—strictly speaking it refers to the non-invasive and non-material ways of preventing pregnancy; more specifically, to periodic abstinence (or rhythm), withdrawal and terminal abstinence. Sometimes, the term is also used to include unproven methods like the use of charms and amulets, which rest upon folk beliefs.

But increasingly, the literature uses the term in a normative way to indicate behaviours that are inefficient, unmotivated and somehow ignorant. By extension, those women or couples who persist in using traditional methods of contraception are seen as somehow being inefficient, unmotivated or otherwise backward. The implicit dismissal of traditional methods of birth control is also reflected in the changing vocabulary associated with them. In the 1970s they were often referred to as 'natural' methods of contraception; then the term 'traditional methods' got more firmly entrenched; in more recent times, demographers have gone as far as to label these as 'unreliable methods' and 'ineffective methods', thereby damning them with one stroke. 'Unreliable' is what they are called in a paper on contraceptive use in Germany and Britain (Oddens 1997), two countries whose falling birth rates indicate very reliable birth control. And 'ineffective methods' is the term used in the tables (see, for instance, p. 109) in Zachariah *et al.* (1994), which is a book on the demographic transition in Kerala, the one state in India in which presumably women know what they are doing when they choose their method of birth control.

Given this attitude and this confusion of a term of art with normal everyday language, it is not surprising that the literature has gone to some lengths to equate the success of family planning programmes in developing countries with their success in pushing 'modern' methods of birth control, that is, the pill, the IUD, sterilization, injections, and now, though more out of the need to worry about HIV/AIDS than with any real faith in its contraceptive powers, condoms. That this measure of success is taken seriously is also evident from attempts in the literature to add some measure of traditional contraceptive use to our calculations of unmet need for contraception (see, for example, DeGraff & de Silva 1991, 1996). In these attempts, it is suggested that estimates of unmet need should include those couples who say that they do not want another child but are not using a 'modern' form of contraception, that is, it is advisable to also include in this calculation those women who are using traditional methods of birth control.

This line of reasoning is not entirely unjustified of course. The conventional use-effectiveness studies do find that traditional methods of birth control have high failure rates (that is, a larger proportion of their users ends up pregnant than do users of more modern methods). But this is partly because, at least at the start of a fertility transition, the users of traditional forms of birth control seem to be those least motivated to actually control their fertility or else those least able to access more efficient forms of birth control.[1]

However, this anxiety about traditional methods of contraception is unwarranted as family planning programmes become more securely embedded in societies and as fertility transitions proceed. In many parts of the world today, it is not the poorest or the least motivated or those with the least access to 'modern' birth control that seem to prefer the less invasive traditional forms of contraception. Incidentally, to periodic abstinence and withdrawal, I would add condoms as a form of 'traditional' contraception, not only because condoms have existed and been in use for centuries, but also because they are

non-invasive and because they are among the most 'inefficient' methods of pregnancy prevention in all the standard evaluatory models of family planning programmes.[2]

It is true that when modern contraception first appeared on the scene, traditional methods were used most frequently by those who resisted these modern methods or otherwise had poor access to them and this is still the case in some parts of the developing world, especially in Africa. But as the fertility transition has progressed, we have had quite an inversion of preferences. Now it is increasingly the most modern and the lowest fertility groups that seem to practise these supposedly inefficient forms of birth control.

Tables 1 and 2 illustrate this point for India with data from the National Family Health Survey of 1992–93. India's overall contraceptive prevalence is 40.6 per cent. For the country as a whole, as well as for the major states, prevalence levels of traditional methods are much higher in urban than in rural areas, and much higher for the highest educated groups. Indeed, the range is quite remarkable and adds an important nuance to the overall figures on contraceptive use (in which female sterilization and all sterilizations account for 67 per cent and 76 per cent respectively of all contraceptive use) which give the impression that sterilization is the overwhelming method of choice for *all* women.

The ranges become even more striking when one disaggregates women a little further, both by age and by education. Table 3 looks at educational differences in the current use of traditional methods by currently married women aged 20–29 years (that is, women at the peak childbearing ages) and those aged 30–34 years (that is, women nearing the end of the period of voluntary reproduction). In the former group, traditional methods account for as much as 62 per cent of total contraceptive use among urban women with a college degree, compared to a low of 13 per cent among rural women with no schooling. For 30- to 34-year-old married women, the differences are as stark: 52 per cent versus 7 per cent. Incidentally, *absolute* levels of use (that is, not merely as a proportion of all use) of these methods are also higher among the urban and the more

TABLE 1
India: Percentage of currently married women aged 15–49 years, currently using non-invasive contraception by urban–rural residence (International Institute for Population Studies 1995).

	Urban			Rural		
	Traditional (T)	Condoms (C)	T+C	Traditional (T)	Condoms (C)	T+C
All India	5.8	5.8	11.6	1.2	3.8	5.0
Kerala	10.9	3.9	14.8	2.5	8.1	10.6
Karnataka	2.9	2.9	5.8	0.3	1.2	1.5
Andhra Pradesh	1.0	2.0	3.1	0.2	0.3	0.5
Tamil Nadu	6.3	3.0	9.3	0.8	3.7	4.5
Haryana	9.3	13.3	22.6	2.3	3.9	6.2
Punjab	8.5	14.4	22.9	6.8	7.0	13.8
Madhya Pradesh	1.5	6.8	8.3	0.9	0.9	1.8
Rajasthan	0.3	5.1	5.4	0.6	1.0	1.6
Bihar	3.3	4.5	7.8	0.7	1.2	1.9
West Bengal	25.3	4.0	29.3	0.9	18.2	19.1
Orissa	2.3	2.2	4.5	0.3	1.5	1.8
Maharashtra	2.2	4.4	6.6	2.2	0.5	1.7
Gujarat	3.7	3.7	7.4	0.8	1.7	2.5

TABLE 2

India: Percentage of women currently married women aged 15–49 years using traditional contraceptive methods, by level of education (International Institute for Population Studies 1995).

	Illiterate				Less than middle school				High school plus			
Education	Trad	Cond	T+C	(T+C as % of all users)	Trad	Cond	T+C	(T+C as % of all users)	Trad	Cond	T+C	(T+C as % of all users)
All India	2	1	3	9	6	1	7	14	10	11	21	38
Kerala	3	1	4	6	5	1	6	9	16	7	23	36
Karnataka	1	0	1	2	1	1	2	4	6	6	12	21
Andhra Pradesh	0	0	0	0	0	0	0	0	2	4	6	12
Tamil Nadu	3	0	3	6	4	2	6	12	12	5	17	33
Punjab	6	5	11	19	9	11	20	33	9	22	31	53
Madhya Pradesh	1	1	2	6	1	2	3	26	2	14	16	32
Rajasthan	1	1	2	7	1	2	3	7	2	12	14	30
Bihar	1	0	1	6	2	2	4	10	5	8	13	28
West Bengal	13	0	13	27	20	4	24	39	43	11	54	72
Orissa	1	0	1	3	2	1	3	7	5	5	10	21
Maharashtra	0	0	0	0	1	2	3	6	4	10	14	24
Gujarat	1	1	2	4	2	1	3	6	7	8	15	27

Trad = Traditional; Cond = Condoms; T+C = Traditional + Condoms.

TABLE 3
India: Percentage of currently married women using non-invasive methods of contraception (International Institute for Population Studies 1995).

	Urban				Rural			
	Traditional	Condom	Trad+condom	Ratio of T+C/ all users	Traditional	Condom	Trad+condom	Ratio of T+C/ all users
(A) Women aged 20–29 years								
Illiterate	2.1	2.6	4.7	14.9	2.6	0.9	3.5	13.0
Literate, not primary	6.5	3.6	10.1	22.6	7.8	0.9	8.7	20.1
Primary complete	3.6	4.8	8.4	18.8	5.8	3.2	9.0	22.3
Middle school complete	9.1	7.1	16.2	32.1	10.9	3.8	14.7	31.9
High school complete	8.4	13.0	21.4	41.4	7.9	6.5	14.4	34.3
University degree	8.6	24.8	33.4	62.1	10.9	10.3	21.2	45.2
(B) Women aged 30–34 years								
Illiterate	3.0	1.9	4.9	9.5	2.8	0.7	3.5	7.4
Literate, not primary	2.9	1.3	4.1	6.6	7.0	1.6	8.6	13.3
Primary complete	3.7	5.1	8.8	13.3	5.1	2.6	7.7	11.4
Middle school complete	8.7	6.1	14.7	20.8	8.1	2.9	11.0	15.6
High school complete	10.9	12.4	23.3	31.6	10.4	6.4	16.8	24.0
University degree	14.1	21.6	35.7	51.8	17.5	13.4	30.8	46.3
(C) Women aged 35–39 years								
Illiterate	3.4	1.6	5.0	8.6	2.8	0.6	3.4	7.1
Literate, not primary	6.2	0.9	7.1	10.0	6.6	0.7	7.3	10.7
Primary complete	5.0	3.0	8.0	11.9	6.3	1.7	8.2	11.2
Middle school complete	12.0	2.9	14.0	19.1	10.6	1.7	12.3	16.9
High school complete	11.7	8.3	20.0	28.3	14.6	5.1	19.7	26.6
University degree	13.8	16.7	30.5	39.5	24.5	7.0	32.0	40.0

educated, whereas absolute levels of use of 'modern' methods of contraception (pills, IUDs, sterilization) tend to rise a little with education and then fall rapidly for the highest educated urban women. Thus high levels of use of traditional methods are not merely a reflection of high levels of use of 'any' methods by urban, highly educated women.

One possible objection needs to be addressed here. This is the fact that urban college-educated women also marry later than other women and therefore are at an earlier stage of their childbearing experience than other women and may therefore be less concerned about 'effective' contraception. Part C of Table 3 therefore looks at women aged 35–39. These women are potentially fertile but are really at the tail end of their childbearing lives—the Indian NFHS for example finds that age-specific fertility rates drop from 0.097 for women aged 30–34 to 0.044 for women aged 35–39. The drop is even more precipitous for urban women—from 0.071 to 0.027. And we still get the same pattern of contraceptive use.

In such a situation, it requires some stretch of the imagination to equate 'traditional methods' of birth control with 'traditional' attitudes or ignorance.

As for efficiency of use, using the Indian NFHS once more, Table 4 presents the mean number of children ever born for women in these two age groups. Looking in particular at women aged 30–34, who are in principle nearing the end of voluntary reproduction but are nevertheless fecund, for urban degree holders, the mean number of children ever born (CEB) is 1.9 for all women, 2.5 for sterilized women and 1.6 for users of rhythm and withdrawal. That is, the users of traditional methods end up with *lower* fertility than the average for their group as a whole *as well as* users of the more 'effective' methods like sterilization. On the other hand, for rural illiterate women of similar age, the mean CEB is 3.8, that for sterilized women is 4.1 and that for users of traditional methods is *higher* than both at 4.2. Efficiency of method therefore is very much a function of the nature of the user.[3]

What does one make of this? Are the IUD, the pill and sterilization increasingly the poor woman's methods, while her rich, educated, urban counterpart prefers to trust withdrawal, rhythm and perhaps a combination of these in conjunction with the condom? That seems to be the case in Tables 1–3. But the upper class (as proxied by her college education and urban residence) woman can hardly be basing her choice on the monetary costs of other kinds of contraception or on the social difficulty of finding contraceptive services. In the Indian case, she can also not be suspected of having religious reasons for preferring these non-invasive and non-chemical methods, an argument that has often been made to explain why rhythm and withdrawal account for a quarter of all contraceptive use in developed countries today (United Nations 1999)—unlike Catholicism, Hinduism has no direct proscriptions on modern contraceptive use.[4]

One might argue that upper class women face more 'facilitating' conditions for such traditional contraceptive use. For example, they may have better access to the 'husband–wife communication' that KAP surveys consider so important for effective birth control and so much more important when the method of choice requires the kind of spousal[5] co-operation that these traditional methods do. More importantly, they may be better able to deal with contraceptive failure because they have both a higher capacity to afford an additional child (though this is debatable) and better and easier access to abortion.

But these are all classic 'demographic' explanations (and in any case, they are not explanations based on the 'traditionalism' of users of traditional contraception). And while they are certainly plausible, they need not be complete explanations. From a reading of

TABLE 4
India: Mean number of children ever born by current method (International Institute for Population Studies 1995).

	Method								
Level of education	**Pill**	**IUD**	**Condom**	**Female sterilization**	**Male sterilization**	**Traditional methods**	**Current non-users**	**Never used contraception**	**All women**
(A) Women aged 20–29 years									
Urban									
Illiterate	3.5	2.6	2.6	3.4	(2.9)	2.6	3.0	2.1	2.5
Literate, not primary	(2.0)	(1.8)	(2.7)	3.1	(2.9)	(1.7)	(2.7)	1.6	2.2
Primary complete	(2.2)	2.1	2.4	3.1	(3.8)	2.1	2.4	1.6	2.2
Middle school complete	2.1	2.0	2.0	2.7	(2.4)	1.6	1.9	1.3	1.9
High school complete	1.9	1.6	1.6	2.7	(2.7)	1.3	1.7	1.2	1.6
University degree	(1.3)	1.5	1.2	(2.2)	(2.0)	1.1	1.2	0.8	1.1
Rural									
Illiterate	3.1	2.6	2.7	3.3	2.8	2.6	2.9	(2.3)	2.5
Literate, not primary	(2.9)	(2.1)	(2.3)	2.9	(2.9)	2.5	2.6	1.9	2.3
Primary complete	2.5	2.2	2.1	2.9	(2.8)	2.0	2.3	1.7	2.1
Middle school complete	(2.2)	1.6	2.0	2.6	(2.8)	1.7	2.0	1.4	1.8
High school complete	1.8	1.6	1.7	2.6	(2.5)	1.4	1.6	1.2	1.6
University degree	(1.3)	(1.6)	(1.0)	(2.3)	—	(1.0)	(1.11)	1.0	1.2
(B) Women aged 30–34 years									
Urban									
Illiterate	(4.9)	(3.6)	4.3	4.1	(3.9)	4.2	3.9	3.6	3.8
Literate, not primary	(3.4)	(2.5)	(2.6)	3.8	(2.7)	(3.6)	(3.4)	2.6	3.3
Primary complete	(3.4)	(3.0)	(3.9)	3.5	(2.9)	(3.4)	3.3	2.7	3.2
Middle school complete	(3.5)	(2.7)	(3.3)	3.4	(2.8)	2.4	2.8	2.2	3.0
High school complete	(2.4)	2.4	2.3	2.9	(2.4)	1.9	2.5	1.9	2.4
University degree	(1.8)	2.3	1.9	2.5	(2.5)	1.6	1.7	1.4	1.9

TABLE 4 (*Continued*)

Level of education	Method								
	Pill	**IUD**	**Condom**	**Female sterilization**	**Male sterilization**	**Traditional methods**	**Current non-users**	**Never used contraception**	**All women**
Rural									
Illiterate	4.8	4.3	4.8	4.1	3.6	4.5	4.4	4.2	4.2
Literate, not primary	(5.2)	(4.7)	(4.2)	3.8	(2.8)	4.4	4.3	3.3	3.8
Primary complete	(3.8)	(3.5)	(3.3)	3.6	(3.1)	3.5	3.7	2.9	3.4
Middle school complete	(2.7)	(2.9)	(3.0)	3.2	(2.8)	2.9	2.8	2.6	3.0
High school complete	(2.4)	2.3	(3.2)	2.9	(3.0)	2.5	2.5	2.2	2.7
University degree	(1.0)	(2.0)*	(1.9)	(2.4)	(3.5)	(1.7)	(1.8)	(2.0)	2.0

Figures in parentheses are estimates based on less than 50 cases.

the (slowly emerging) anthropological and psychological literature on women's attitudes towards their bodies, one is tempted to speculate on another kind of differentiation between upper and lower class women that may account for this dichotomy in contraceptive preferences. From this literature, it appears that these different groups of women differ in (a) what they define as 'normal' in their reproductive and sexual bodies and (b) levels of what might be called the 'medicalization' of the body.

Both these groups of women are affected by modernization processes in the responses that they display towards different kinds of birth control. Some of these modernizing influences are global but often they are nationalistic in a particular way (that is, 'modernization' is not simply a proxy for what is commonly known as 'westernization'). More relevantly, these processes are rather different for the upper and lower social groups as the following sections discuss. In turn, these differences are completely compatible with the differences in contraceptive methods used as described above.

To articulate these speculations is a large undertaking, given the great paucity of the kind of research literature one would need to make a strong case, but in the following paragraphs I attempt such an articulation. The next section looks at both categories of somewhat unexpected contraceptive behaviour: that of 'traditional' women who use modern methods of birth control, and that of 'modern' women who use traditional methods of contraception.

'Traditional' Users of Modern Contraception

As already mentioned, at the present time in India, users of modern (temporary and permanent) methods of contraception are more likely to be the otherwise traditional sections of Indian society—that is, more likely to be rural, unschooled or just slightly educated, and poor. But they are nevertheless different from the 'traditional' women of the 1950s, 1960s and 1970s. These latter inhabited what may be called a 'pre-medicalized' state of the world in which notions of the body were determined more by the perception of others than by the experience of the self; thus, for example, there was a strong menstrual taboo, whereby the menstruating status of a woman was publicly visible because she was restricted from normal activities. Birth control in such a situation had to be practised almost clandestinely (and therefore, often ineffectively, being concentrated on traditional methods). Related to this were attitudes to health and illness, which involved primarily the use of no treatment, home remedies or a plurality of treatments.

But today's poor are greatly changed in all these regards. Birth control is much more easily talked about, much more likely to be accessed and much more likely to be 'modern' when used.

What accounts for this new 'modernity' of preferences? The simplest and most common explanation is that it is the Indian family planning programme that is entirely responsible for this. The bulk of the acceptance of birth control among the poor has been attributed to the family planning programme, both as a source of supplies and services and as a frequently coercive force for motivation and information.

Globalization too is believed to play a strong hand in all this. India's family planning programme is undoubtedly much more than an Indian effort. Right from its beginning there has been enormous international pressure to develop an aggressive family planning programme, most of the contraceptive technologies and supplies adopted came from

outside the country, and, even after the disastrous setback to the programme after the Emergency, international support to the programme has continued.

These are contentious matters and open to much discussion. But, for the purposes of the present paper, there is also the other side of the picture. The image of an aggressive family planning programme pushing itself onto an unwilling and passive population is too simplistic. One of the reasons that the programme has been relatively successful over time is that other kinds of changes have occurred in people's lives, even in poor lives, that the programme has been able to exploit. Indeed, this is where the real danger of the programme now lies—its ability to exploit these changes somewhat irresponsibly.

Two such changes in the lives of poor women merit particular attention and are now outlined.

Changing Definitions of the 'Normal' Female Body

An emerging body of qualitative work on the changing circumstances of women comments on the increasing physical pressures on poor women's lives today. Anthropological accounts of poor women's use of space for example comment on how much of their interest in space and in free movement is centred on being able to get on with the tasks of survival and family maintenance that take up so much their time (see, for example, Niranjana 1997). The female body in this perspective is not so much a 'female' (that is, sexual or reproductive) body as a functional or working body that needs to be allowed to function in peace. And two of the factors inhibiting such functioning are menstruation in the non-pregnant woman and pregnancy in the non-menstruating woman. Once a desired family size is achieved, both these processes—pregnancy and menstruation—become burdensome in a number of ways that did not operate in the past.

Efficient, easy-to-use contraception is welcomed in these circumstances and the large numbers of women who express a willingness to practise such contraception are no longer much of an exaggeration of the truth. The next sub-section discusses how 'modern' contraception fits in with these desires; here it may be added that openly acknowledged contraceptive use is often also useful because it makes movement so much easier: a non-reproducing woman is seen as less of a threat to family honour than one whose infractions can become visible through an illegitimate pregnancy (see, for example, Saavala 1999). Contraception that is coitus independent and self-controlled is thus seen as efficient also for reasons that do not have anything to do with secrecy.

Modern contraception is also welcomed if it lessens the cumbersomeness of menstruation (which, for example, the IUD did not do in India). Research is only beginning to point out this cumbersomeness in the lives of poor women who have completed childbearing. It is far from something to be preserved at all costs. Indeed, as long as 'modern medicine' or its practitioners can convince women that amenorrhoea and lighter bleeding have no other significance for health, such a lessening of the menstrual burden is actually welcomed and even sought out. In George (1994) therefore it is not surprising that women expressed that they were very satisfied with the lessening of the duration of menstruation that sometimes accompanied sterilization.

Several pieces of research support these suggestions. Thus, for example, many poor urban women describe menstruation as a 'bother' and a 'vexation' (George 1994). In particular, once they have attained their desired family size, these women are emphatic in wishing that menstruation would cease; 'if there is a magic to stop periods, that magician

should be brought here (respondent cited in George 1994)[6] (on all this, see also Vatuk 1980; Patel 1994; Uberoi 2001).

Such interference with the menstrual period, and indeed unusually early menopause too (as long as desired family sizes have been obtained) is not seen as something 'abnormal'; instead it is welcomed and seen as contributing to the betterment of the physical self. There is thus, for example, little emotional distress associated with menopause (once more, as long as the woman is not barren), often the only regret it occasions is the belief that it causes weakened eyesight!

Menstruation is seen as often physically painful, difficult to manage in crowded conditions, inconvenient when it requires the maintenance of even the minimum taboos related to matters such as cooking or participating in religious rituals. Indeed, Wyshak's (1999) finding of a marked negative relationship between availability of domestic water and the total fertility rate, independent of infant mortality, GNP and education, suggests that qualitative research might do well to explore the intriguing possibility that frequent childbearing and prolonged breastfeeding might be one way of dealing with the bother of menstruation.

But, of course, even better than non-menstruation due to pregnancy is the state of easy or light or absent menstruation combined with non-pregnancy, once family size desires have been fulfilled. Contraception that achieves this double state has much to recommend it. This is different from studies in some other parts of the world (see, for example, Garcia, Snow & Aitken 1997 on Mexico) where women might strongly prefer contraceptive methods that maintain regular bleeding, seeing this as confirmation of non-pregnancy. On the other hand, it appears that women in India, even poor, uneducated women, are quite amenable to methods that curtail bleeding. The injectable contraceptive therefore might find willing clients who would ignore possible ill-effects if these were not sufficiently highlighted to them.[7] An importance part of such acceptance rests on what may be called the 'medicalization' of the Indian population, especially among the poor and poorly educated.

Medicalization of the Normal Body

In addition to treating the body as a functional unit, there is the increasing medicalization of the body in general that has swept the country and that has made the task of family planning programmes so much easier. By medicalization, I refer to the greatly increased interest and faith in modern medicine and in the institutions of modern medicine.

This is much more than a faith in modern 'medicine'. It is really a growing familiarity with modern institutions in general, a fallout of the nature of planning and development since independence. Indeed the process of what one historian (Prakash 1999) calls 'engineering modern India into existence' began well before independence, with the British colonial government beginning the 'policing and regulation of the population' through the collection of statistics, through public programmes, through the entire machinery of bureaucratic planning. Post-independence governments were eager to continue this tradition, beginning with the first Prime Minister Jawaharlal Nehru, who had a definite vision of industrialization and centrally planned development for the country and continuing today even in a climate that pays greater (at least in its rhetoric) attention to decentralization.

From the standpoint of the present paper, the operational result of this 'modernization' project is that the Indian villager and the Indian slum-dweller today are very familiar with the state as a provider of services, however shoddy. They are convinced about the virtues of 'modern' behaviour, whether in health or in birth control or in employment, as well. This familiarity goes hand-in-hand with an often naïve belief in the power of the bureaucratic state and an often naïve pride in belonging in some way to this modern bureaucratic world. In other words, Foucault's (1979) surveillance and disciplining of the body by the state are no longer merely matters of state enforcement; there is much societal welcoming of these intrusions by the state (on this theme, see also Lacombe 1996).

There are several accounts of what some anthropologists and sociologists (see, for example, Gupta 2000) call this 'misplaced modernity' among the lower and middle groups of India. This modernity usually co-exists with the most unmodern forms of patriarchy and oppression, and is often a desire for the material trappings of the modern life without an interest in the ideological change that true modernization requires. All these matters are debatable; for present purposes, what is worth highlighting is a specific kind of modernization that is now all-pervasive—a modernization that involves an increasing medicalization of life and an increasing (though often inefficient and indeed counter-productive) resort to modern medicine.

The anecdotal and empirical literature is full of examples of such increasing medicalization that are consistent with modern birth control. Several studies report for example on the high levels of use of private money for medical care—this reflects not merely insufficient or poor public services but also a determination to seek modern medical care for any illness. And it reflects a determination to seek such services from a 'doctor'. Thus women with gynaecological ailments would much rather visit a scientific-looking private practitioner who costs money, than go to the public health sector which is manned primarily by lower level health auxiliaries (see, for example, Rani and Bonu 2003).

There is also growing evidence that self-medication is common, though this self-medication and the use of 'home remedies' does not mean a recourse to grandmothers' recipes. Instead, it means the use of antibiotics and other western medications routinely kept at home even in rural areas, and routinely administered for a range of childhood and adult symptoms (for a detailed exploration of this practice in rural Vietnam, see Okumura, Wakai & Umenai 2002).

This low interest in traditional systems of medicine is also demonstrated in the Indian 1992 NFHS. For example, more than 60 per cent of fevers and coughs in children were taken to a 'doctor'; barely 6–7 per cent received home or traditional remedies (IIPS 1995). The declining faith in traditional systems of medicine in the general population is reflected in the multiplicity of health care providers providing 'modern' medicine. Besides the officially trained medical practitioner, there is the RMP (Registered Medical Practitioner), the pharmacist and a variety of physicians with qualifications that no one has heard of (acronyms made up of any combination of letters adorn the nameplates of private clinics in urban slums, see Basu 1992). In addition, allopathic medication is routinely delivered by the practitioners of traditional medicine, as several studies attest to in this region. Thus, for example, indigenous practitioners in Sri Lanka report that they attract more patients and can charge higher fees when they dispense western rather than traditional medicine (Wolffers 2002).

Another casualty of medicalization is the impatience with what may be called a 'watch and wait' attitude to illness, even though, as Das (2001) remarks in a report on the experience of running a clinic in rural India, most ailments that present themselves to a clinic are the kind that will go away without treatment. A faith in modern medicine among the poor seems to go with an inordinate love of powders, pills and (especially) injections; indeed patients feel cheated if such medication is not forthcoming and it is quite common for medical practitioners to preserve their practice by including the cost of an injection in the consultation fee, and to give a patient a water or vitamin injection if something stronger is simply not warranted (Basu 1992; Wyatt 1992; Das 2001). In the 1992 NFHS, more than half of those children who went to a doctor got an antibiotic or injection (IIPS 1995). And as Table 5 demonstrates, this resort to 'modern' injections is higher among the officially traditional (that is, in this case, those with least education).

Modern contraception fits well into this paradigm. Aside from the methods it offers, the bureaucratic nature of the family planning programme in a perverse way aids this process because it is seen to promote a medical, scientific, rational approach to the body. Indeed, as Rele and Kanitkar (1980) discuss with reference to the great popularity of sterilizations among lower middle-class women in urban areas in the 1970s and 1980s, even the terminology of modern contraception seems to give these women a sense of well-being and control. Sterilizations are not called sterilizations or tubectomies or vasectomies; instead they are referred to by the generic English word 'operation' whatever the language of discourse (see also Ramasubban & Rishyaringa 2001), and are seen as belonging to the world of modern medicine and rational behaviour which the modern individual aspires to. Moreover, talk of these 'operations' is safe because it does not require any mention of sexual or reproductive parts or activities in the way that 'traditional' methods such as withdrawal or rhythm do.

TABLE 5
India: Resort to injections for child ailments: Percentage injected among children aged 1–47 months suffering from certain illnesses in last two weeks (International Institute for Population Studies 1995).

	Illness		
Level of education of mother	**Diarrhoea**	**Fever**	**Cough**
Urban			
Illiterate	12.9	23.1	24.1
Literate, not primary	5.9	15.0	16.5
Primary complete	8.9	21.3	22.1
Middle school complete	12.2	24.8	29.9
High school complete	15.7	14.7	26.6
University degree	12.0	13.5	5.4
Rural			
Illiterate	15.1	24.4	24.6
Literate, not primary	11.3	17.7	19.4
Primary complete	17.6	20.8	19.6
Middle school complete	15.6	20.6	19.9
High school complete	12.6	17.5	20.7
University degree	1.8	9.8	10.8

To summarize, it is a combination of *two* things that aid the use of modern contraception in general and terminal contraception in particular among lower socio-economic status women—a faith in the 'science' of modern medicine, as well as a concern with convenience and the need to get on with their daily lives with as little trouble as possible. Just as the 'wait and watch' approach for fever is not scientific enough in this framework, traditional methods of contraception are not scientific enough; and just as thrice daily doses of a pill or syrup or ORS are a bigger bother than a single antibiotic injection for a cough or diarrhoea, a one-shot sterilization is more convenient than a daily pill or a bleeding-increasing IUD.

An attitude that views the female body in such instrumental as well as 'scientific' terms is naturally more conducive to family planning programme interventions and may be called 'modern' in this narrow sense.[8] But at some point in this move to modernity, the linearity seems to disappear and we get what may conveniently be called a post-modern[9] or ultra-modern woman who can again be the family planning programmers' nightmare if they measure programme success merely by the levels of modern birth control practice.

'Modern' Users of Traditional Contraception

With even more education and more money, the definition of what constitutes a 'normal' reproductive and sexual body becomes what I call 'ultra-modern'. The sociology of the body is still a new discipline (see Synnott 1992), newer still in India and even newer in the case of studies among upper class women in India. But several leads in the anthropological and sociological literature allow one to speculate on the meaning of the 'normal body' and the nature of medicalization in this group of women.

The most important distinction is that for the upper class woman in India, as elsewhere, the body is a consumer and not a producer. So no longer is a medicalization that tells women to trust unhesitatingly in western modern modes of treatment, either of illness or of unwanted fecundity, to be trusted blindly. Instead, the female body is a temple[10] to be nurtured and saved from the worst ravages of modern life, including modern medicine, except in the immediate short-term (for example, western technologies are very handy to treat an acute infection or to abort a second female pregnancy). For the longer term, that is, for more chronic conditions (and, unless one opts for a one-step procedure like an irreversible sterilization with all its attendant assaults on the normal body, birth control can be viewed as the treatment of a chronic condition—the condition of being at risk of having an unwanted pregnancy), it makes much more sense to rely on non-invasive, 'natural' therapies that require more effort but do not harm bodily integrity.

The high levels of use of traditional methods of birth control among educated women and among urban women are not surprising in this framework. They are also consistent with what we know about the determinants of alternative therapies in general—that these tend to be adopted most easily for chronic conditions, by the higher educated, and by the economically better-off all over the world (see, for example, Thomas *et al.* 1991; Eisenberg *et al.* 1993; Eisenberg *et al. 1998*; Astin 1998).[11] And that one of the greatest factors promoting such 'traditional' methods of prevention and treatment is not the perceived ineffectiveness of modern methods but the their unwholesome side-effects—a finding consistent with the most common reason given for discontinuing contraception in family planning surveys (Bongaarts & Bruce 1995).

In the Indian context, this change in what constitutes normality in upper class women and the greater 'body-consciousness' (see Uberoi 2001) that it entails is also visible in the booming interest in beauty. But here too, the greatest emphasis is on beauty products that are in some way 'natural'—virtually every street in the large cities of India now boasts of a 'herbal' beauty salon. A book on herbal remedies for women which was produced by an NGO to help 'traditional' women (Shodhini Collective 1997) surprised its producers by being sold out in the cities in no time. Also, according to newspaper reports, traditional sex experts in the country (who base their medication on *ayurvedic* medicine) are unperturbed by the advent of Viagra in India; they believe (probably rightly) that their customers will remain loyal to the 'safer' technologies that they offer.

As several anthropologists have pointed out (see, for example, Puri 1999; Uberoi 2001), this heightened interest in the 'natural' is not really an outcome of a straightforward westernization (indeed, it may be the women in the previous category above who are more simply westernized in this sense). Instead it may well be seen as a growing nationalism in the post-modern Indian woman—much publicity is now given to all the Indian origins of these herbal and other systems of beauty and medicine. The 'holistic' approach to health and beauty is believed to be the foundation on which traditional systems of medicine in India are built.

As such, these post-modern and ultra-modern behaviours are justified in nationalistic traditional terms. And indeed, there may be a real harking back to the past that much of this new behaviour involves, even if it might also be a more recent past than the past of the *Vedas*. Elite interest in more 'Indian' conceptions of modernity, not just ideologically, but also behaviourally, was common in colonial India. In this conception, modernity was to combine the best of what the West had to offer with the best of Indian tradition. Thus, for example, in 1911, Jadu Nath Ganguly wrote 'A National System of Medicine in India', which sought to apply a mixture of allopathy, ayurveda and yunani to the treatment of Indian health problems. Other Indian doctors called for combining allopathy with homeopathy, a field that is now incredibly popular among the better-off in urban India. Magazines and journals in pre-independence India were also full of advice (especially to women) on how to combine the best practices of East and West for healthier, happier lives.

Magazines and journals today have returned to this tradition of the early twentieth century. All the health and beauty and lifestyle advice they offer is geared to such an Indianized westernization.[12] Traditional methods of birth control fit well into this new paradigm in which a concern for the body is combined with an interest in 'nature' and in the 'authentic' as the body's best friend. Full-bodied and regular menstruation is also seen as a part of this emphasis on 'nature'.[13] The menstrual taboo is no longer important because, in the words of Puri (1999), menstruation now enters 'an individualized, privatized domain of experience and concern' (p. 44). If concepts of pollution still exist, there has been a shift from the idea of ritual purity to that of personal hygiene,[14] a shift that is nurtured by the medical and semi-medical (for example, the advice columns of magazines) information that is now available to these women.

Needless to say, both in the past as well as currently, such magazines and books are addressed to those who are educated and well off enough to be able to read them in the first place. For the others, it is the bureaucratic advice of the modern medical system that must do.

Curiously, the back-to-nature attitude to the reproductive and sexual self in upper class women breaks down when it comes to menopause (Uberoi 2001). Increasingly,

menopause is viewed as a problem rather than a welcome stage of life and is medicalized in the same way as it is in the West[15]—hormone replacement therapy is becoming increasingly popular and there is less patience with the idea that the menopausal woman is also a non-sexual being. Indeed, it is interesting that the few studies of upper class women in contemporary India find a new definition of sexual and domestic violence. For these women, sexual violence is not merely an unwanted sexual encounter. It is just as likely to be a withholding of sexual encounters by the aggrieved or violent husband or partner (Thapan 1997).

Perhaps, it is the post-ultra-modern Indian woman who will find her traditional roots in this area of life.

Conclusion

In his Presidential address to the Population Association of America, Thornton (2001) described a developmental paradigm that places the modern western system (social, economic, cultural) as the inevitable culmination of human progress. Furthermore, he proposed that a 'sideways' reading of history (that is, using cross-sectional information to deduce the progress of social change historically) has helped to make this paradigm self-fulfilling. Intellectual scholarship on this paradigm has fed into ideological and policy prescriptions that have pushed non-western societies towards this (western) developmental ideal in the twentieth century.

The worldwide propagation of modern family planning programmes and modern methods of birth control is consistent with this developmental ideal. When these work in conjunction with direct and indirect inducements to smaller family size as well, large segments of non-European populations become acceptors of the idea and the fact of the 'modern' small family, an idea that is comfortable with, and indeed often proud of, modern institutions such as the bureaucratic state and western medicine.

However, as Thornton (2001) also allows, at least some of this 'modernization' is negotiated and modified to fit into already existing cultural and social arrangements. That is, there is not an immediate and wholesale giving up of the old ways.

The present paper would add to Thornton's (2001) formulation that as the old ways are in fact abandoned on a mass scale, new forms of resistance to the developmental ideal rear their heads. There is more and more of what may be called cultural dissent, the attempt to combine 'modern' ideas of autonomy and individuality with a valorization of some of the traditional cultural and religious practices of and in non-western societies.

In a world in which the developmental ideal has become widely and popularly accepted, this kind of cultural dissent constitutes innovative behaviour and it is not surprising that it is now the elites that practise such dissenting behaviour, as compared to the early stages of development in which the larger population is resistant to change while the elites lead the drive to westernization.[16]

This paper has tried to illustrate these two stages of 'modernization' by describing two groups of Indian women, one belonging to the relatively low socio-economic class and using 'modern' contraception, the other belonging to the upper classes and preferring 'traditional' methods of birth control. Both these groups consider themselves 'modern' and 'nationalist', but do so by subscribing to two distinct sources of nationalistic modernity. The former owes its ideology to the Nehruvian vision of westernized science and has a strong faith in the idea of an industrializing, bureaucratic state. The latter, on the other hand,

would stand tradition on its head and claim allegiance to a glorious Indian past that is the true representative of what is 'modern' in the best sense of the word (Chatterjee 1989).

This paper also tries to illustrate several points. It tries to reach out for non-demographic explanations to explain demographic behaviour. But more than this, it expresses a concern with semantics. Words and terms have a meaning that must be located in time and space. The definition of 'normality' is the central part of the paper's exercise in this area.

But there may also be some more direct implications for population policy. First, it suggests strongly that it might be unduly discouraging to judge the progress of a family planning programme by a rise in the prevalence rates of 'modern' contraceptives alone. Some stagnation in the use of these methods may nevertheless reflect effective contraceptive use and continuing falls in fertility. In the 1960s and 1970s, there was much concern in India about the mismatch between the CBR and the CPR (the Crude Birth Rate and the Contraceptive Prevalence Rate)—fertility was much higher than reported contraceptive use levels would lead one to expect. This led to much agonizing in the literature on the artificial inflation of contraceptive acceptance levels by corrupt officials of the family planning programme as well as by its clever clients.

Now, we might have another kind of mismatch, with reported contraceptive use being *lower* than anticipated from fertility levels. This kind of mismatch has been recorded for other countries earlier, Sri Lanka for example (see Gajanayake 1989; Gajanayake & Caldwell 1990). Perhaps a similar pattern of rising levels of use of traditional methods with development exists in other parts of Asia too (see, for example, Freedman, Khoo & Supraptilah 1981, on Indonesia; Goodkind & Phan 1997, on Vietnam).

On the other hand, it may well be that 'traditional' methods will continue to remain the preserve of the 'elites' in a society; indeed their use may well become a marker of elite status. And if the 'masses' begin to imitate this behaviour, the upper classes may well revert to the new generation of 'modern' methods of birth control, once more to distinguish themselves from the others.

A second policy implication is cautionary. It suggests that for the general population, 'modern' methods of contraception offer the most convenient and effective way to control fertility and that the demand for these will rise as fertility desires continue to fall. The projections for contraceptive demand made by Bongaarts and Johansson (2000) may be more valid in this respect than the projections of the Futures Group (Ross, Stover & Willard 1999), which expect the global use of traditional methods to rise from a current level of 9 per cent to 14 per cent by 2015. But this also means that this rising and real demand for modern birth control demand can be exploited and acceptors short-changed. The onus is now on the providers of contraceptive services to improve access to safe and effective modern contraception.

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NOTES

1. But this is only the case for contemporary high-fertility populations. As historical demographic research has consistently pointed out, fertility declines in the developed world proceeded almost entirely through the use of traditional contraception when they involved the deliberate control of marital fertility (see, for example, Santow 1993).
2. It is true though that condoms have now been re-incarnated as a modern response to AIDS and sexually transmitted diseases. However, as a means of pregnancy prevention, they continue to be classed as ineffective.
3. For a paper on the semantics of research, it is only right to acknowledge that words like method 'efficiency' and 'effectiveness' are also more ambiguous than they appear. It is quite likely that educated women who use traditional methods 'want' fewer children than users of other methods; and vice versa for illiterate women. Even if that is the case, it is still quite remarkable that these fewer births are achieved with supposedly primitive methods of birth control. It is also true that these tables look at 'current' use and thus some low fecundity women might have selected themselves into the users of traditional methods. But given the high proportions of traditional users among the educated and urban, such self-selection can be at best partial.
4. As for the Muslim population in India, its numbers are not significant enough to affect national contraceptive use rates. In any case, Islamic injunctions against modern birth control seem to be less effective in India—even sterilization levels are as high as 20 per cent among currently married women (International Institute for Population Studies 1995).
5. This terminology is but a convenient shorthand for other kinds of markers, such as education, income, urban–rural resources, all the variables that in turn go to differentiate the 'modern' from the 'traditional' woman.
6. Incidentally, it is interesting that one of the few good things that the women had to say about menstruation once its reproductive role was over was that it provided them with one of the few legitimate reasons to avoid sexual relations.
7. Analogous findings have been reported from other parts of Asia. For example, Sadana and Snow (1999) found poor Cambodian women interested primarily in contraceptives that were longer acting methods, and were less concerned about a rapid return to fertility upon discontinuation of a method.
8. Post-colonial India may be special in this respect. This version of 'modernity' may be less visible in countries that do not have this particular kind of history of bureaucratic development.
9. I use the word 'post-modern' deliberately, if somewhat inaccurately. I am trying to suggest a behaviour that is in some sense beyond the modern as defined in this section. This behaviour is also post-modern in the sense of it being impossible for us to interpret without reference to context. But perhaps I should be using the word neo-modern or ultra-modern to describe the contraceptive behaviour of the upper class, well-educated, autonomous woman whose modernism has gone far enough to question long-entrenched notions of scientific, rational, westernized behaviour.
10. Or, to use a more vivid analogy, the body is no longer a machine to be fixed when it fails, but a garden to be tended at all times, in sickness and in health (see Le Shan 1982).
11. They are also associated with a greater tendency to eat organic foods in general and to (but not always) be environmentally conscious. Seen in this larger framework, perhaps

the great resort to 'traditional' birth control in Western Europe is also not surprising and perhaps we may be misinterpreting the causes by focussing so greatly on the religious reasons for eschewing modern contraception.

12. Indeed, it is the West that is proudly seen as becoming 'easternized' in this respect. The rocketing popularity of New Age and 'holistic' medicine in the developed world are occasion for much smug satisfaction in the nationalistic discourse in India.

13. There is much upper class empathy for the rallying cry of 'We are women and we are proud of being women' in the Boston Women's Collective's *Our Bodies Our Selves* (1984). Incidentally, this publication is extremely popular in this class in India.

14. And all that this in turn implies for the marketing of products to aid this personal hygiene.

15. And in this, India is not alone. Menopause as a problematic state has come to define many traditional cultures in which it was scarcely noticed earlier; so much so that the articulation of the 'problem' may bear no relationship to the incidence of physical discomfort that it seeks to explain (see Lock 1988 on this in the context of Japan).

16. Elites as innovators is a common theme in the demographic literature that tries to identify what Livi-Bacci (1986) calls the 'forerunners of fertility control'.

REFERENCES

ASTIN, J. A. (1998) 'Why patients use alternative medicine: results of a national study', *Journal of the American Medical Association*, vol. 280, no. 19, pp. 1548–1553.

BASU, A. M. (1992) *Culture, the Status of Women and Demographic Behaviour: Illustrated with the Case of India* , Clarendon Press, Oxford.

BASU, A. M. (1998) 'The politicization of fertility to achieve non-demographic objectives', *Population Studies*, vol. 50, no. 1, pp. 5–18.

BONGAARTS, J. & BRUCE, J. (1995) 'The causes of unmet need for contraception and the social content of services', *Studies in Family Planning*, vol. 26, no. 2, pp. 57–75.

BONGAARTS, J. & JOHANNSON, E. (2000) *Future Trends in Contraception in the Developing World: Prevalence and Method Mix*, Working Paper No. 141, The Population Council, New York.

BOSTON WOMEN'S HEALTH BOOK COLLECTIVE (1984) *Our Bodies*, *Ourselves*, Touchstone, New York.

CHATTERJEE, P. (1989) 'Colonialism, nationalism and the colonialized woman: the contest in India', *American Ethnologist*, vol. 16, no. 4, pp. 622–633.

DAS, S. (2001) 'Epidemic proportions', *The American Prospect*, vol. 12, no. 13, 29 Jul.

DEGRAFF, D. S. & DE SILVA, V. (1991) 'Unmet need for contraception in Sri Lanka', *International Family Planning Perspectives*, vol. 17, no. 4, pp. 123–130.

DEGRAFF, D. S. & DE SILVA, V. (1996) 'A new perspective on the definition and measurement of unmet need for contraception', *International Family Planning Perspectives*, vol. 22, no. 4, pp. 140–147.

EISENBERG, D. M., DAVIS, R. B., ETTNER, S. L., APPEL, S., WILKEY, S., VAN ROMPAY, M. & KESSLER, R. C. (1998) 'Trends in alternative medicine use in the United States', *Journal of the American Medical Association*, vol. 280, no. 18, pp. 1569–1575.

EISENBERG, D. M., KESSLER, R. C., FOSTER, C., NORLOCK, F. E., CALKINS, D. R. & DELBANCO, T. L. (1993) 'Unconventional medicine in the United States: prevalence, costs and patterns of use', *New England Journal of Medicine*, vol. 328, no. 4, pp. 246–252.

FOUCAULT, M. (1979) *Discipline and Punish: The Birth of the Prison*, A. Sheridan (trans.), Vintage Books, New York.

FREEDMAN, R., KHOO, S.-E. & SUPRAPTILAH, B. (1981) 'Use of modern contraceptives in Indonesia: a challenge to conventional wisdom', *International Family Planning Perspectives*, vol. 7, no. 1, pp. 3–15.

GAJANAYAKE, I. (1989) 'Traditional contraception in Sri Lanka, in *Choosing a Contraceptive: Method Choice in Asia and the United States*, eds R. A. Bulatao, J. A. Palmore & S. E. Ward, Westview Press, Colarado, pp. 168–190.

GAJANAYAKE, I. & CALDWELL, J. (1990) 'Fertility and its control: The puzzle of Sri Lanka', *International Family Planning Perspectives*, vol. 16, no. 3, pp. 97–102.

GANGULY, J. N. (1911) *A National System of Medicine for India*, Beni Madhav Ganguli, Calcutta.

GARCIA, S. G., SNOW, R. & AITKEN, I. (1997) 'Preferences for contraceptive attributes: voices of women in Ciudad Juarex, Mexico', *International Family Planning Perspectives*, vol. 23, no. 2, pp. 52–58.

GEORGE, A. (1994) 'It happens to us: menstruation as perceived by poor women in Bombay', in *Listening to Women Talk About Their Health: Issues and Evidence from India*, eds J. Gittelsohn, *et al.*, Har-Anand Publications, New Delhi, pp. 168–183.

GOODKIND, D. & PHAN, T. A. (1997) 'Reasons for rising condom use in Vietnam', *International Family Planning Perspectives*, vol. 23, no. 4, pp. 173–178.

GUPTA, D. (2000) *Mistaken Modernity: India Between Worlds*, HarperCollins Publishers India, New Delhi.

INTERNATIONAL INSTITUTE FOR POPULATION STUDIES (IIPS) (1995) *National Family Health Survey 1992–93*, IIPS, Bombay.

LACOMBE, D. (1996) 'Reforming Foucault: A critique of the social control thesis', *British Journal of Sociology*, vol. 47, no. 2, pp. 332–352.

LE SHAN, L. (1982) *The Mechanic and the Gardener*, Rinehart & Winston, New York.

LIVI-BACCI, M. (1986) 'Social group forerunners of fertility control in Europe', in *The Decline of Fertility in Europe*, eds A. J. Coale & S. C. Watkins, Princeton University Press, Princeton, pp. 182–200.

LOCK, M. (1988) 'New Japanese mythologies: faltering discipline and the ailing housewife', *American Ethnologist*, vol. 15, no. 1, pp. 43–61.

NIRANJANA, S. (1997) 'Femininity, space and the female body: an anthropological perspective', in *Embodiment: Essays on Gender and Identity*, ed. M. Thapan, Oxford University Press, New Delhi, pp. 107–124.

ODDENS, B. J. (1997) 'Determinants of contraceptive use among women of reproductive age in Great Britain and Germany II: psychological factors', *Journal of Biosocial Science*, vol. 29, no. 4, pp. 437–470.

OKUMURA, J., WAKAI, S. & UMENAI, T. (2002) 'Drug utilization and self-medication in rural communities in Vietnam', *Social Science and Medicine*, vol. 54, no. 12, pp. 1875–1886.

PATEL, T. (1994) *Fertility Behaviour: Population and Society in a Rajasthan Village*, Oxford University Press, Delhi.

PRAKASH, G. (1999) *Another Reason: Science and the Imagination of Modern India*, Princeton University Press, Princeton.

PURI, J. (1999) *Women, Body, Desire in Post-Colonial India*, Routledge, New York.

RAMASUBBAN, R. & RISHYARINGA, B. (2001) 'Weakness ('*ashaktapana*') and reproductive health among women in a slum population in Mumbai', in *Cultural Perspectives on Reproductive Health*, ed. C. M. Obermeyer, Oxford University Press, Oxford, pp. 13–37.

RANI, M. & BONU, S. (2003) 'Rural Indian women's care-seeking behavior and choice of provider for gynecological symptoms', *Studies in Family Planning*, vol. 34, no. 3, pp. 173–185.

RELE, J. R. & KANITKAR, T. (1980) *Fertility and Family Planning in Greater Bombay* , Popular Prakasan, Bombay.

ROSS, J., STOVER, J. & WILLARD, A. (1999) *Profiles for Family Planning and Reproductive Health Programs: 116 Countries* , The Futures Group International, Glastonbury, CT.

SAAVALA, M. (1999) 'Understanding the prevalence of female sterilization in rural South India', *Studies in Family Planning*, vol. 30, no. 4, pp. 288–301.

SADANA, R. & SNOW, R. (1999) 'Balancing effectiveness, side-effects and work: women's perceptions and experiences with modern contraceptive technology in Cambodia', *Social Science and Medicine*, vol. 49, no. 3, pp. 343–358.

SANTOW, G. (1993) 'Coitus interruptus in the twentieth century', *Population and Development Review*, vol. 19, no. 4, pp. 19–43.

SHODHINI COLLECTIVE (1997) *Touch Me, Touch-Me-Not: Women, Plants and Healing* , Kali for Women, New Delhi.

SYNNOTT, A. (1992) 'Tomb, temple, machine and self: the social construction of the body', *British Journal of Sociology*, vol. 43, no. 1, pp. 79–110.

THAPAN, M. (1997) 'Images of the body and sexuality in women's narratives on oppression in the home', *Economic and Political Weekly*, 28 Oct., pp. 72–80.

THOMAS, K. J., CARR, J., WESTLAKE, L. & WILLIAMS, B. T. (1991) 'Use of non-orthodox and conventional health care in Great Britain', *British Medical Journal*, vol. 302, no. 6770, pp. 207–210.

THORNTON, A. (2001) 'The development paradigm, reading history sideways, and family change', *Demography*, vol. 38, no. 4, pp. 449–465.

UBEROI, P. (2001) *The Woman's Body in Mid-life: Sociocultural and Medical Perspectives from South Asia*, Occasional Papers in Sociology No. 4, Institute of Economic Growth, New Delhi.

UNITED NATIONS (1999) *Patterns of Contraceptive Use* , UN Population Division, New York.

VATUK, S. (1980) 'The aging woman in India: self-perceptions and changing roles', in *Women in contemporary India and South Asia*, ed. A. D'Souza, Manohar, Delhi, pp. 287–309.

WOLFFERS, I. (2002) 'Traditional practitioners' behavioral adaptations to changing patients' demands in Sri Lanka', *Social Science and Medicine*, vol. 29, no. 9, pp. 1111–1119.

WYATT, H. V. (1992) 'Mothers, injections and poliomyelitis', *Social Science and Medicine*, vol. 35, no. 6, pp. 795–798.

WYSHAK, G. (1999) 'New insights into the determinants of the total fertility rate, infant mortality rate and life expectancy', *International Journal of Sustainable Development and World Ecology*, vol. 6, no. 1, pp. 12.

ZACHARIAH, K. C., IRUDAYA RAJAN, S., SARMA, P. S., NAVANEETHAM, K., GOPINATH NAIR, P. S. & MISRA, U. S. (1994) *Demographic Transition in Kerala in the 1990s* , Centre for Development Studies, Trivandrum, India.

Alaka Malwade Basu, Department of Sociology, Cornell University, Uris Hall, Ithaca, NY 14853, USA. Tel: 607-255-1247; E-mail: ab54@cornell.edu