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Social and Cultural Considerations of Sterilization : A Case Study of Patna

DURING the last three decades much interest has been shown in the study of family planning in India, which has given rise to an enormous body of literature on the subject. Mostly, these studies suggest that there is a marked gap between the knowledge of and attitude towards family planning measures and their practice. People generally show a good deal of knowledge about family planning and are found to be favourably disposed towards it, but their level of adoption is much lower than the level of knowledge and favourableness of attitude. The present study makes an attempt to explain the reason why there is a gap between knowledge and practice of family planning measures, especially sterilization. In this connection, we intend to examine two hypotheses here: First, people belonging to the higher socio-economic status (herein after SES) are more likely to undergo sterilization than others. Secondly, the higher the level of awareness of family planning and the more favourable the attitude towards it, the greater is the chance of adoption of sterilization. In addition to these hypotheses, we also propose to discuss the relationship of variables, such as the age of couples, number of children and their sex, preference for sons and attitude towards sterilization to the actual practice of sterilization.

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Methodology

This study is based on a sample size of 200 couples drawn from 900 Hindu families spread over three localities of Patna. Out of 900 couples, 372 were either vasectomized or tubectomized and the rest were not sterilized. But the majority of them were practising one or the other method of birth control. Having followed the principles of purposive sampling, 100 couples were selected from each of the two groups of sterilized and non-sterilized people, giving nearly an equal representation to all the three localities. All the respondents were in the reproductive age-group whose ages varied from 20 to 40 for females and 25 to 50 for males. The fieldwork was undertaken during 1979-80.

A questionnaire comprising 35 major questions, both open-ended and closed, was devised to ensure the comprehensive nature of information relating to the subject-matter of the study. Before the questionnaire was finally administered to gather the data, its validity and reliability were tested and a few questions modified and further standardized in accordance with the result of the pilot study. The data are believed to be of cross-sectional nature, representing all the socio-economic strata of the population. The information has been sought from both sterilized and non-sterilized people because the analysis of adoption of sterilization is proposed to be made against the background of non-adoption and vice-versa.

The discussion is not only based on the quantitative data gathered through the questionnaire but also on the qualitative nature of information based on in-depth interviews. Barring 15 per cent illiterate respondents, who were covered through interview schedules, everybody completed questionnaires by himself or herself. In most cases, respondents who filled in questionnaires by themselves were interviewed with a view to verifying the doubtful nature of responses and obtaining more detailed information about certain issues involved in the adoption and non-adoption of sterilization.

The three localities of Patna covered for this study are Rajendra Nagar, Kankarbagh and Mahendru. The first two localities are well planned colonies which have developed recently and, by and large, they are inhabited by upper and middle class people. While the third one (Mahendru) is one of the oldest localities which has grown in an unplanned manner. It is more or less a slum. Though the population of this area is dominated by the poor, there is a good number of middle class people who are the original inhabitants of this locality. Since the socio-economic structures of these three areas approximate to that of the city of Patna in general, it is believed that the data fairly represent the characteristics of the entire city. Patna is not only known for being the scat of the Government of Bihar but also for being the biggest city in the province and also for being the second largest city in north-eastern India after Calcutta. At present, its population is nearly 550,000.

A couple of facts relating to our field experience deserve a special mention at the outset. First, in general, movies, newspaper, radio, family planning posters and hospital served as the primary source of information about family planning. In some cases friends, neighbours and relatives were more important sources of information than the mass communication media. As to women, their husbands were the principal source of information. They could not learn such matters from their friends and kinsmen. Females were found to be quite reserved in discussing matters pertaining to their personal life with their friends and relatives. The human or inter-personal source was found to be more effective in influencing the decision-making process than other sources, for knowledge based on the personal experience of close kins and friends was treated as highly reliable.

Secondly, we did not encounter any great difficulty in collecting data about sterilization; it was, however, not as easy to get the data about the practice of other methods. The sterilized people were generally quite open with us when they were asked questions concerning sterilization, but the non-adopters practising some other measures were very hesitant to state so openly about the measures they were using. The main reaction was : 'I am not supposed to say anything about it.' A feeling of shame seemed to be associated with the use of condoms and other such techniques, while sterilization appeared to be an open-secret affair in the sense that it involved almost all the adult members of the family. In a few cases, directly or indirectly, it involved the neighbours too when the respondents—irrespective of sex— were hospitalized for operation. In 25 cases, even the decision for sterilization was taken at the family level.

Discussion

Generally, females underwent the operation at ages 30-35, while males at ages 35-40. Over 20 per cent of the total respondents were vasectomized at ages 45-50. In most cases belated sterilizations resulted from some sort of social and psychological constraints. For instance, couples whose son or daughter had started conjugal life after marriage were either practising some method of birth control or were already sterilized. Many people felt ashamed of continuing the reproduction process. It is also to be noted that the majority of adopters had already completed the desired family size at the time of sterilization.

Tubectomy, surprisingly enough, was found to be more common in practice than vasectomy, although a good number of male respondents had a feeling that tubectomy might make their wives unfaithful. The government, as a matter of policy, has been encouraging vasectomy rather than tubectomy. Nearly 70 per cent of the adopters reported that they had undergone tubectomies. The decision about tubectomy was taken mostly by the husband in consultation with his wife.

A general misconception was noticed among females that vasectomy would be detrimental to their husbands' health, sexual potency and mental equilibrium. As the male is the main bread-winner of the family and the lineage continues from his side, females preferred sterilization of themselves rather than of their husbands. In a few cases, it was the husband who wanted his wife to be sterilized rather than himself, knowing well that tubectomy was more complicated and expensive than vasectomy.

In a majority of cases, women were sterilized just after delivery or abortion because that did not require additional hospitalization. Nor was it necessary to take additional rest or to incur any extra expenses on medicine, special diet or care. On the other hand, men had to go to a hospital for the specific purpose of vasectomy and desired a rest for about a month from their work, despite the fact that the prescribed period of rest was about a week.

A woman, especially of the so-called high castes, is not supposed to remarry on the demise of her husband, even if she is young or issueless. Widow remarriage is yet to be institutionalized. In contrast, a man, irrespective of his caste or age, can remarry in the event of the death of his wife or when all issues die and the childbearing period of his wife is over. A male can enjoy the opportunity of having children by his second wife only when he is not vasectomized- These were the main reasons why the majority of the respondents preferred tubectomy to vasectomy.

Findings with regard to the association between SES and adoption of measures of birth control are varied. Some studies have revealed that the people belonging to both lower and higher social strata are more inclined to practise birth control measures than those belonging to middle class (Poti *et al*, 1959; Shaktawat *et al.*, 1974). On the other hand, studies of Sanyal (1962) and Agarwala (1962) suggest a positive correlation between adoption and high SES. Considering these facts, an analysis of the association between SES and adoption of sterilization is made here. In this study, the SES has besn taken to comprise three independent variables, viz. education, income and occupation, and the relationship of each of the constituent variables to the adoption of sterilization (dependent variable) is examined separately. The result would, therefore, be an indication of the nature of the association between SES and sterilization.

It is contented that sterilization is not influenced by education in that both illiterates and educated were found equally likely to undergo sterilization (Kaur, 1976). This cannot be accepted without doubt, because it is education through which knowledge of modern techniques of family planning is gained. Education makes a person aware of advantages and disadvantages of limiting the size of family. Several studies have indicated that highly educated people have a more favourable attitude towards the practice of birth control than illiterate and merely educated ones (Morrison, 1961; Sarupria, 1964; Pareek and Kothandapani, 1969).

TABLE 1-SOCIO-ECONOMIC STATUS AND ADOPTION OF STERILIZATION

Respondents $N = 200$	*Level of Education*		
	Below Matriculation	*Matriculation and above*	
			$\phi = 0.4$
			$x^2 = 34.6$
Adopters	21	79	$d.f. = 1$
			$p < 0.001$
Non-adopters	62	38	

	Monthly Income (in Rupees)		
	Mean	*S. D.*	
			$t = 2.5$
Adopters	565	277	$d.f. = 198$
			$p < 0.05$
Non-adopters	471	246	

	Occupation			
	High	*Middle*	*Low*	
				$c = 0.23$
Adopters	28	66	6	$x^2 = 10.8$
				$d.f. = 2$
Non-adopters	38	45	17	$p < 0.001$

The value of chi-square test in Table 1 suggests that education is significantly related to sterilization. The fact that educated people are more likely to undergo sterilization than illiterate or uneducated people is further reinforced by the high phi-coefficient value. This is in conformity with the findings of previous studies mentioned before. Two factors largely account for the positive association between education and adoption. As the flow of communication of all types—more particularly related to techniques of birth control and its advantages—

increases, the practice of birth control measures tends to increase among the educated people. Secondly, in order to enjoy a greater amount of leisure and happiness in family life educated people generally do not want to bear the burden of several children.

Another constituent variable is income. In order to ascertain the relationship between income and sterilization, the income score of 200 respondents are put into two groups : adopters and non-adopters. Since there is a significant difference between the value of mean and standard deviation scores for adopters and non-adopters, it can be inferred that respondents belonging to the higher income group are more inclined to sterilization than those belonging to the lower group (Table 1). This is further supported by the significant value of *t* ratio (2.5). The finding also implies that the difference between adoption and non-adoption of Sterilization in respect of income is real, and not owing to the chance factor. Thus, the hypothesis that the higher the income, the higher the rate of adoption of sterilization is retained. Our finding is in conformity with that of a few previous studies (Sarupria, 1964; Jesudason, 1974). But the positive association between income and adoption is not always necessary.

A higher level of income usually means a higher standard of living. Once the people, particularly belonging to the middle class, attain a higher standard of living, they tend to maintain it by limiting the number of their children. Many adopters considered more than two or three children a liability and hindrance to personal development. Those who had a limited economic resource and wanted to provide the best possible facilities for their children, say for instance, the best health care, best schooling, best food, clothing and the like, were opposed to the notion of a large family.

Finally, we are concerned with the relationship of occupational status to sterilization. For the purpose of analysis, different occupations have been arranged in three broad classes—high, middle and low. The first category of high occupation covers professions like higher-order bureaucracy, medicine, engineering, college and university level teaching, management and the like, while the middle order occupations include lower-level bureaucracy, technical and semi-technical professions, petty trade and business, etc. The third category of low occupations comprises low paid semi-professions, unskilled work and wage labour. In order to know the strength of association between the type of occupation and adoption of sterilization, Pearsonian coefficient of contingency has been applied. The result bears a significant correlation between the two variables. This implies that the higher the level of occupation, the higher the rate of adoption (Table 1). Here it is not to be taken to mean that it is the nature of social prestige attached to an occupation that determines adoption; rather, it is the level of understanding and consciousness of life's problems coupled with the education that usually goes with a particular kind of occupation and partly the social milieu of the work determine attitudes towards sterilization. Occupational differences, however, do

not necessarily result in the differential level of practice of family planning measures. Morrison (1957) and Kaur (1976), for instance, have found no relationship between occupation and sterilization or other measures of birth control. On the other hand, Pareek and Kothandapani (1969) contend that the two variables are significantly associated with each other.

TABLE 2—LEVEL OF AWARENESS OF F. P. AND STERILIZATION

Respondents $N = 200$	*Level of Awareness*		
	Mean	*S.D.*	
Adopters	8.56	1.90	$t = 0.2$
			$d.f. = 198$
Non-adopters	7.16	2.30	$p > 0.05$

From among the psychological variables, we are concerned with awareness of the family planning programme and attitude towards family planning. At first we analyse the nature of association between level of awareness of family planning programme and adoption of sterilization. Since the variation between adopters and non-adopters with regard to the level of awareness is insignificant, one might say that the difference is not real (Table 2). Rather, it is merely due to some chance factors. But this is not the case here. Our finding has not been affected by chance factors. It is believed to be real because a good deal of well-informed non-adopters did not choose to be sterilized. This is natural, for awareness or knowledge of sterilization does not always lead a person to its practice. Studies in support of this fact are too numerous to be mentioned here. One such study is that of Poffenberger and Poffenberger (1965). They have found that out of 40,000 women in Madras State who were given adequate information about contraceptives only 4 per cent used contraceptives (1965). Recently a similar observation has been made by Kaur (1976) in her study of family planning among the workers of two industrial units of north India.

So far as the question of association between attitude towards family planning and adoption of sterilization is concerned, a positive relationship is expected, since formation of a favourable attitude is one of the most important preconditions for adoption. Table 3 suggests a sufficiently large difference between the value of mean and standard deviation between adopters and non-adopters. It means that these two groups are not of homogeneous nature. The difference between the two groups is of 3.4 which is quite significant. In order to ascertain whether the difference is significant t test has been applied. The t value obtained is highly significant at the 0.01 level of confidence. The difference bet-

ween adopters and non-adopters in respect of attitude, therefore, is not owing to chance; rather, it is a real one. And thus our null hypothesis is rejected which implies a positive relation between attitude and adoption.

TABLE 3—ATTITUDE TOWARDS FAMILY PLANNING AND ADOPTION OF STERILIZATION

Respondents $N = 200$	*Attitude Towards F. P.*		
	Mean	*S. D.*	
			$t = 3.5$
Adopters	22.92	2.58	$d.f. = 198$
			$p < 0.001$
Non-adopters	19.74	4.92	

Now we come to the discussion of reasons for the discrepancy between knowledge and practice of sterilization and the forces hindering its practice. The adoption of sterilization is significantly related to the number of male living children. Respondents considered an average of 2.8 sons as ideal, but the majority of them (around 70 per cent) who were sterilized had three sons. Only 20 per cent had two living sons at the time of sterilization, and the rest, 10 per cent, had one son and four daughters. Nearly 25 per cent of the total non-acceptors having two living sons expressed readiness for sterilization provided they would be blessed with one more son, but not a daughter. With three sons they would be safe and secure against any possible unforseen danger of their family coming to an end. Studies relating to urban areas have revealed that the ideal number of sons in a family should be two to three (Dandekar, 1963; Poffenberger, 1968; Lahiri, 1974). In her study of vasectomized men in Rajasthan, Blende (1979) found an average of five children at the time of sterilization-three sons and two daughters.

With regard to the ideal number of children in a family, respondents showed a complete lack of unanimity among themselves. The number of children desired varied from two to five. Similarly, several of the surveys conducted in the early sixties have indicated that the probable range is between three and five (UN, 1961; Agarwala, 1962; NSS, 1963). This suggests that the attitude of people towards the ideal number of children has not experienced any perceptible change during the last two decades.

People with daughters, but no son, would not consider accepting sterilization or other measures of birth control. They desired to continue the reproduction process in anticipation of at least one son even at the cost of a few more daugh-

ters. This appears to be an all-India feature. This fact is evident not only from the studies of Patel (1963) and Poffenberger and Poffenberger (1965) but also from numerous others. A few of the couples without any male progeny were regularly paying visits to temples and taking baths in the nearby holy Ganges river, while others were just worshiping their chosen deities, such as *Shiva, Durga, Kali, Krishna, Hanumana, etc.*, in their own homes. On the other hand, a few of them were heavily dependent on their fate, but expressed no strong faith in the worship of deities. This speaks of the significance attached to a son in the Hindu family.

In Hindu society, a son, besides being a source of personal pleasure as in any other society, carries both ritual and economic significance, while a daughter is ritually defunct and economically a burden. At least one son is regarded as essential to perform *antyesti* (funeral rite) and *sraddha* (the rite of commemorating the ancestors) for his parents with a view to ensuring their safe transit to the other world. An adopted son is but a poor substitute for a true son and his efficacy at *antyesti* and *sraddha* ceremonies is deemed dubious. A sizable number of people still believe that a person devoid of a son is ineligible for heaven on his or her death. A son, in addition to the sacramental function, has a societal role to play. It is the son who continues the lineage of a family and the absence of a son causes the line to cease. A son also acts as a dependable measure of social security for his parents. It is a normative duty of every son to take full care of his parents in their old age. A daughter, on the other hand, is incapable either of helping her parents in the other world or of perpetuating the line, for after her marriage, according to the orthodox practice, she becomes a member of her husband's family. An ever-increasing amount of dowry has also greatly lessened her desirability. These are thus very practical reasons why in a patriarchal and patrilineal Hindu society a girl is unwanted and a Son so highly valued.

A fairly good number of non-sterilized people of the lower socio-economic stratum, no matter whether they were with or without sons, disapproved of the notion of family planning. They had a strong desire for several children in that they would be a big economic asset in their future life. But at the same time, they seemed to be partly apprehensive of having daughters only. They felt that a large family provided far more security and benefits than a small family of one or two children. A large-sized family is still considered a sign of prosperity and prestige in society. In support of their contention they further said that men were born not only with one mouth but also with two hands. In an economically disadvantaged section of society a child as a productive unit is more important than as a source of personal pleasure or even as a performer of ritual obligations for parents. The poor consider a male child more and more in terms of the economic utility or benefit than in terms of cost involved in bringing him up. A son is considered to be a fortune for his parents. The general attitude of the

Hindus towards children is well reflected in the following Kannad saying (UN, 1961) :

> I do not mind poverty
> So let me have many children
> And let the Lord's kindness be on me
> And I know He will take care of my children.

A few more facts apropos of barriers to sterilization are important. First, it was reported by many a respondent that elderly females, particularly mothers and grand-mothers, were opposed to sterilization much more than their male counterparts in the family. The main reason behind this was that the aged-women wanted to have a very busy, noisy, bustling households. They took a great pleasure in being surrounded by several children all the time at home.

Secondly, almost all the non-sterilized respondents knew of one or other techniques of birth control; condom, IUD and rhythm were among the most commonly known ones. About 25 per cent of them were practising these techniques with a view to spacing births. And the other 75 percent of the non-adopters were either indifferent to or strongly opposed to the notion of planned parenthood. Reluctance for sterilization, besides several other reasons as stated above, was due mainly to the irreversible nature of the method. Many people mistook sterilization for castration which they considered injurious to both physical and mental health. Temporary measures, according to them, were comparatively less hazardous and could be used at will. With their use they would be in a comfortable position to restart the reproduction process either in the event of any possible untoward incidence like the death of their offspring or in case they intend to have a few more children at a later stage.

Conclusions

Changes in people's attitude do not necessarily result in changes in actual social behaviour. The non-adopters had a fairly good knowledge about family planning and the majority of them expressed an agreement with its ideal goal, but they did not practise it in their actual life nevertheless. The acceptance of the concept of planned parenthood and readiness for changes in social behaviour are contingent upon several factors and forces, such as the economic condition of family, couples' level of aspiration, need for achievement, education, modernization and religiosity, significance attached to the male progeny, nature of employment and type of family.

Among the many factors which influence the practice of sterilization or other measures of birth control, one of the most important is the desire for sons on the part of parents.or prospective parents. This desire is conditioned by traditional values of Hindu society which are handed down from one generation to

another and buttressed by the existing social and economic structures. Since ancient times, the Hindu society has greatly favoured a large family with several sons. The urban people in general, however, are showing a far more favourable attitude towards family planning than the rural ones (Som and Sengupta, 1960; Rao and Inbaraj, 1970). This is because of the changes that have been occurring in the socio-economic structures and the value system under the constant influence of industrialization, urbanization and modernization. But the relative preference for sons still continues to be the main issue for prospective urban adopters.

Since all the sections of a society do not experience equal or similar kind of change simultaneously, variations in the level of responses are almost inevitable. People belonging to the upper stratum of society are found to be more responsive to the adoption of sterilization than those of the lower socio-economic status. The probable explanation is that the favoured or privileged section of a society is generally more secular and rational in outlook and innovative in behaviour than the disdvantaged ones. So with the improvement in the general socio-economic position of the people, the practice of sterilization is likely to rise. It is believed that the current trend of preference for tubectomy to vasectomy will continue to be a characteristic features of future sterilizations in Patna or other parts of the State of Bihar.

Despite the fact that the adoption of sterilization hinges upon several factors, it is contended that intensification of propaganda machinery, proper persuasion, decline in infant and child mortality, adequate medical facilities and post-operative care and long-term economic incentives to the sterilized couples will make considerable increase in peoples's acceptance of sterilization. Added to this, sterilization is in itself an important factor for further sterilization. The process of adoption goes on in a society slowly and steadily more or less on the lines of acculturation. To begin with, it is practised by the well-off or privileged section, obviously not by all at the same time, and then it gradually trickles down to the lower stratum of society like a new social invention or innovation. This holds good more in the case of a traditional and transitional society, whether rural or urban, than in a modern or industrially advanced one.

References

1. Agarwala, S.N., 1962, *Attitude Toward Family Planning in India,* Bombay, Asia Publishing House.
2. Bhende, Asha, 1979, Decision-making and communication for vasectomy : the findings of a follow-up study in Rajasthan, pp. 362-374. In : K. Srinivasan and S. Mukerji (eds.), *Dynamics ofPopulation and Family Welfare in India,* Bombay, International Institute for Population Studies.
3. Dandekar, K., 1963, Vasectomy camps in Maharashtra, *Population Studies,* 17(1), 147-154.
4. Jesudason, Victor, 1974, An analysis of process of adoption of conventional methods of

family planning by male industrial workers in two factories in India, *Indian Journal of Social Work*, 35(3), 205-219.
5. Kaur, Surjit, 1976, *Family Planning in Two Industrial Units*, New Delhi, Sterling Publishers.
6. Kurup, R. S. *et al*, 1976, Gandhigram, pp. 424-445. In : A.R. Omran and C. C. Standley (eds.), *Family Formation Patterns and Health*, Geneva, World Health Organization.
7. Lahiri, S., 1974, Preference for sons and ideal family in urban India, *Indian Journal of Social Work*, 34(4), 323-336.
8. Morison, William A., 1957, Attitude of females towards family planning in a Maharashtrian village, *Milbank Memorial Fund Quarterly*, 35(1), 67-87.
9. ___, 1961, Family planning attitudes of industrial workers of Ambarnath, a city of Western India: A comparative study, *Population Studies*, 14(3), 234-248.
10. *National Sample Survey*, 1963, Report no. 116/1, Tables with notes on family planning, 16th round, Calcutta, Indian Statistical Institute.
11. Pareek, Udai and Kothandapani, V., 1969. Modernization and attitude toward family size and family planning : analysis of some data from India, *Social Biology*, 16(1): 44-48.
12. Patel, Tara, 1963, Some reflections on the attitude of married couples towards family planning in Ahmedabad, *Sociological Bulletin*, 12(2), 1-13.
13. Poffenberger, Thomas, 1968, Urban Indian attitude response and bshaviour related to family planning, *Population Review*, 12(1-2), 48-52.
14. Poffenberger, Thomas and Poffenberger, Shirley B., 1965, Comparison of factors influencing choice of vasectomy in India, and the U.S., *Indian Journal of Social Work*, 25(4), 339-351.
15. Poti, S. J. *et al.*, 1959, An enquiry into the prevalence of contraceptive practices in Calcutta city, 1956-57. *Report of the Proceedings of the Sixth International Conference on Planned Parenthood*, New Delhi, 52-60.
16. Rao, P. S. S. andlnbaraj, S. G., 1970, Knowledge and attitudes of urban and rural pupolations in North Arcot district towards family planning, *Journal of Family Welfare* 16(4), 18-25.
17. Sanyal, S. N., 1962, Attitude towards contraceptive methods, *Man in India*, 42(1), 126-138.
18. Sarupria, S. L., 1964, Attitude towards family planning in small urban community, *Indian Journal of Social Work, 25(2)*, 79-88.
19. Shaktawat, G. S. *et al.*, 1974, Adoption behaviour towards family planning : a diagnostic analysis, *Journal of Family Welfare*, 21(2), 23-28.
20. Som, R. K. and Sengupta, S., i960, Survey of opinion on optimum number of children and attitude toward family planning, West Bengal, *Studies in Family Planning*, New Delhi, Directorate General of Health Services, Government of India, 45-5?.
21. United Nations, 1961, *The Mysore Population Study*. Populaiion studies no. 34, New York, Department of Economic and Social Affairs, UN.