Short Report

Experience of non-scalpel vasectomy in a rural area of Tamil Nadu

K. SIVAGNANAM, SONALI SARKAR, GANESH KUMAR, SITANSHU SEKHAR KAR

ABSTRACT

Background. Only 0.7% of men participate in the sterilization programme in Tamil Nadu. Various strategies were adopted to achieve a target of 10%. We aimed to assess the motivational strategies adopted by the health staff of Sathya Vijayanagaram block of Thiruvannamalai district in Tamil Nadu to improve the acceptance of non-scalpel vasectomy among the beneficiaries and to describe the sociodemographic characteristics of the acceptors of the technique.

Methods. This qualitative study, conducted in November–December 2010, involved in-depth interviews of the health staff of Cheyyar Health Unit district. All those who accepted non-scalpel vasectomy between 2007 and 2010 were interviewed.

Results. Early identification of targets and sustained motivation through a team approach, supported by administrative arrangements and intense information–education–communication activities, resulted in non-scalpel vasectomy contributing to 13% of all sterilizations. Acceptors were men from lower socioeconomic strata.

Conclusion. The strategies adopted by the health system have contributed to the acceptance of non-scalpel vasectomy in the remote villages of a block in Tamil Nadu. This endeavour may be replicated in other districts of Tamil Nadu and others states of India to achieve the goals set for population control.

Natl Med J India 2014;27:311–13

INTRODUCTION

The National Family Welfare Programme was launched in India in the year 1952. Vasectomy and tubectomy were introduced in the programme in the 1950s and 1960s, respectively. However, the acceptability of conventional vasectomy declined due to complications related to the incision and the fear of loss of libido and potency.[1] Forceful implementation of conventional vasectomy coupled with social and cultural beliefs, health and sexual misconceptions, a rather aggressive approach and an unprepared and unmotivated community, led to vasectomy not being accepted widely.

Government of Tamil Nadu, Tamil Nadu, India
SIVAGNANAM K. Department of Health and Family Welfare
Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, India
SONALI SARKAR, GANESH KUMAR, SITANSHU SEKHAR KAR Department of Preventive and Social Medicine
Correspondence to SONALI SARKAR; *sarkarsonaligh@gmail.com*

An improved technique—the no-scalpel vasectomy (NSV)—was developed in China in 1974[2] and introduced in India in 1991. In 2000, the national population policy (NPP) articulated demographic goals and balanced the twin objectives of reducing fertility and promoting reproductive health. NPP 2000 recommends active participation of men in permanent sterilization. However, sterilization users are still overwhelmingly women.[3] Studies show that men's role varies widely according to the cultural and social context.[4] Low acceptance of vasectomy may also be due to lack of availability of the service and its awareness.[5]

The Government of India provides those undergoing vasectomy with postoperative counselling and offers an incentive of ₹1100.[6] A project funded by the United Nation's Population Fund (UNFPA) with a contribution of ₹9.15 crore (91.5 million) was set up for this purpose. The Government of India provides infrastructural support such as centres and materials for training.[7] Despite special camps for NSV at primary health centres (PHC), the participation of men in the sterilization programme in Tamil Nadu was an abysmal 0.7%. An objective of 10% of total sterilization through participation of men has been proposed.[8] We assessed the motivational strategies adopted by health authorities and workers of Sathya Vijayanagaram (S.V. Nagaram) block, Thiruvannamalai district, Tamil Nadu to improve the acceptance of NSV in the population and to describe the characteristics of the acceptors.

METHODS

Setting

Most of the villages of S.V. Nagaram block are remote with poor access. The block PHC (akin to a community health centre) caters to 84 villages of Sathyavijayanagaram, Mullindiram, Agrapalayalm and Nesal PHCs covering a population of more than 124 000. The block PHC provides services for family planning procedures under the National Family Welfare Programme. The block PHC also maintains a register with details of those who have undergone a tubectomy or NSV.

We obtained permission from the Deputy Director of Health Services, Cheyyar Health Unit district to conduct this study. Ethical clearance was obtained from our institutional ethics committee. In-depth interviews using an interview guide were conducted with the Deputy Director of Health Services of Cheyyar Health Unit district and the Deputy Director of Family Welfare, Thiruvannamalai, and medical officers and health workers of all the PHCs to ascertain strategies used to motivate acceptance of NSV between 2007 and 2010.

The sociodemographic characteristics of NSV acceptors in S.V. Nagaram block during the study period were collected by interviewing them using a structured questionnaire in November–December 2010. To increase participation of men in the family welfare programme by popularizing NSV, a sum of ₹67.20 lakh (6.72 million) was sanctioned from the National Rural Health Mission and NSV camps were conducted in the districts.[8]

RESULTS

Information collected from the office of the Deputy Director of Family Welfare, Thiruvannamalai, revealed that the acceptance of NSV during the study period was 13%. Starting in 2007, a number of strategies were adopted to motivate people to accept NSV. These included orientation workshops for healthcare providers at

regular intervals, during which they were briefed about the objectives of the project, interventions to be implemented and the role of medical officers and other medical staff in implementing the strategies.

Discussions were also held about the necessity of involvement of men in the family planning programme. At the workshops, printed information–education–communication (IEC) materials were given to participants with instructions on how to use them and whom to distribute to. The District Collector and Deputy Director, Family Welfare, Thiruvannamalai district, Deputy Director of Health Services, Cheyyar Health Unit district, and all medical officers of Thiruvannamalai district attended the workshop. During the workshop, block-wise progress of NSV was reviewed. The need for training in the technique of NSV was identified and refresher training was done at the field level.

Administrative arrangements were made with the District Family Welfare unit for procurement of instruments necessary for NSV. At monthly meetings, competition was encouraged between health workers. The performance between and within blocks was compared and reviewed, and workers who had performed better were asked to describe how they were able to achieve such results.

Motivational strategies adopted by health workers

Identification of target groups. Health workers identified the beneficiaries. All second and multi-gravid antenatal women were motivated to adopt any type of permanent family planning method to limit family size during their antenatal check-up. All postnatal mothers stayed in the ward for a minimum of 3 days following delivery. Initially, women were motivated for tubectomy, and then their health condition was explained to them such as haemoglobin level, difficulties of tubectomy and the need for anaesthesia. This was followed by motivation for NSV for their husbands. Its availability and simplicity was explained to the couple. The men were counselled at the PHC and at their homes regarding the condition of their wives, importance of population control, availability of NSV and the importance of men participating in family planning.

Planned team approach and continuous motivation of the client for NSV. During home visits, health workers gave importance to developing good interpersonal relations with the clients. Regular follow-up, and information, education and motivation (IEM) was adopted by all the health workers who worked as a team to encourage eligible clients for NSV through IEC materials such as pamphlets and flash cards, and continued their motivational efforts by giving the example of persons who had had NSV.

NSV Ratham (chariot)

A team headed by the block medical officer converted a vehicle into an NSV Ratham. Posters about NSV were displayed on both sides of the vehicle and IEC was done through loudspeakers and distributing printed materials about NSV. The NSV Ratham went through all the service villages. However, the health staff expressed the need to launch an intensive IEC campaign to address various sociocultural stigmas affecting the acceptability of NSV.

Impact of the strategies

The impact of the above-mentioned strategies was seen in acceptance of the method by men in the area. Compared to pre-2007, when there were no NSVs in S.V. Nagaram block with a population of 111 970, 16 NSVs were done in 2007 (1.42/10 000 population). In 2008, 2009 and 2010, the number of NSVs were 4, 7 and 4, respectively with NSV rates of 0.35/10 000, 0.62/10 000 and 0.35/10 000, respectively. The effect of motivational strategies was highest in the initial year and decreased in the subsequent year.

NSV acceptors

The hospital registers confirmed that there were 36 NSVs between 2007 and 2010. Among those, 31 people could be interviewed. Five were not available—1 had died and 4 had migrated from the service area. The NSV acceptors had a mean age of 40.1 years, with almost a quarter <35 years of age (7) . None of them had more than secondary level of education and 7 of 31 had never attended school. All of them were labourers, 21 of 31 (67.7%) being unskilled labourers and 23 of 31 (74.2%) earning <₹900 per month (Table I). Twelve of the 31 acceptors belonged to joint families. Three of them underwent NSV after only one child and 5 had only girls (Table I).

DISCUSSION

As a consequence of the motivational methods adopted, 13% of all permanent sterilization procedures in this district were NSV. The acceptors of NSV were from the lower socioeconomic strata. This is similar to the reports that vasectomy in India has been concentrated among men who are 'poor, illiterate and of low caste'.[9] Though Nigam *et al*. reported from a hospital-based study in New Delhi that NSV attracted more educated men (63%),[10] almost a quarter of this group were illiterate and all were labourers. The study among NSV acceptors in Andhra Pradesh showed that >50% were illiterate and the majority were involved in hard physical labour indicating that illiteracy, low income, heavy work were not barriers to acceptance of sterilization by men.[11] The efforts of the health system need to be recognized in this regard.

TABLE I. Sociodemographic characteristics of acceptors of non-scalpel vasectomy (*n*=31)

Characteristic	*n (%)*
Age (years)	
25–30	3 (9.7)
31–35	4 (12.9)
36–40	8 (25.8)
41–45	10 (32.3)
46–50	6 (19.4)
Educational status	
Not attended school	7 (22.6)
Up to primary level	14 (45.2)
Up to secondary level	10 (32.3)
Occupation	
Unskilled labourer	21 (67.7)
Skilled labourer	10 (32.3)
Monthly income (₹)	
300–550	3 (9.7)
551–900	20 (64.5)
901–1000	7 (22.5)
1001–1500	1 (3.4)
Type of family	
Nuclear	19 (61.3)
Joint	12 (38.7)
Number of children	
1	3 (9.7)
2	11 (35.5)
≥3	17 (54.8)
Gender distribution of children	
Only female children	5 (16.1)
At least one male child	26 (83.9)

The beneficiaries were motivated enough to undergo NSV after one child and even with only girl child.

However, our study has limitations. We did not study a control group and therefore cannot be sure that the higher rate of NSV acceptance was only because of the interventions from the health system. The availability of an appropriate control group is difficult as all the districts in the state have some strategies in place to achieve the target of 10% of total sterilization through participation of men.

Conclusion

The strategies adopted by the health system have contributed to the acceptance of NSV in the remote villages of S.V. Nagaram block of Thiruvannamalai district in Tamil Nadu. This endeavour may be replicated in other districts of Tamil Nadu and others states of India to achieve the goals set for population control.

REFERENCES

1 Rajoura OP, Meena GS, Kaza RC, Bhasin SK. Acceptability of no-scalpel vasectomy at a male family welfare centre in Delhi. *J Fam Welf* 2003;**49:**10–13.
2 Rich B. Male contraception and no scalpel vasectomy. *BCMJ* 2001;**43:**560–6.
3 Khan ID. KAPB study on contraceptives among married armed forces personnel. *Indian J Practicing Doctor* 2008;**5.** Available at *http://www.indmedica.com/journals.php?journalid=3&issueid=125&articleid=1663&action=article* (accessed on 11 Jul 2012).
4 Landry E, Ward V. Perspectives from couples on the vasectomy decision: A six-country study. In: Sundari Ravindran TK, Berer M, Cottingham J (eds). *Beyond acceptability: Users perspectives on contraception*. Geneva:WHO; 1996. Available at *http://whqlibdoc.who.int/publications/0953121003.pdf* (accessed on 11 Jul 2012).
5 Rajalakshmi M. Male contraception: Expanding reproductive choice. *Indian J Exp Biol* 2005;**43:**1032–41.
6 Haws JM, McKenzie M, Mehta M, Pollack AE. Increasing the availability of vasectomy in public-sector clinics. *Fam Plann Perspect* 1997;**29:**185–6, 190.
7 India: Feature stories. Reducing reproductive health burden of women—A relentless effort! January 17, 2008. Available at *http://www.pathfind.org/site/PageServer?pagename=Programs_India_Stories_Reducing_Reproductive_Burden_Women* (accessed on 11 Jul 2012).
8 Pannerselvam MRK. *Policy note 2010–11, Demand no.19.* Health and Family Welfare Department, Government of Tamil Nadu; 2010:80-1. Available at *http://www.investingintamilnadu.com/tamilnadu/.../policy/Health_Family_welfare.pd...* (accessed on 11 Jul 2012).
9 Vicziany M. Coercion in a soft state: The family-planning program of India. Part 2: The sources of coercion. *Pacific Affairs* 1983;**55:**568.
10 Nigam SK, Malik SK, Das HC. A profile of acceptors of non-scalpel vasectomy. *J Fam Welf* 1994;**40:**19–21.
11 Ram Murthy S, Dharma Rao M. An analysis of factors influencing the acceptability of vasectomy in Andhra Pradesh. *Health Popul Perspect Issues* 2003;**26:**162–82.