



ARUNDHATI CHAR

Male Involvement in Family Planning  
and Reproductive Health  
in Rural Central India



ACADEMIC DISSERTATION

To be presented, with the permission of  
the board of the School of Health Sciences  
of the University of Tampere,  
for public discussion in the Auditorium of  
School of Health Sciences, Medisiinarinkatu 3,  
Tampere, on December 15th, 2011, at 12 o'clock.

UNIVERSITY OF TAMPERE

## ACADEMIC DISSERTATION

University of Tampere, School of Health Sciences  
International Postgraduate Programme in Epidemiology  
Finland

*Supervised by*

Teija Kulmala, MD, PhD  
University of Tampere  
Finland  
Professor Suvi Virtanen  
University of Tampere  
Finland

*Reviewed by*

Docent Elina Hemminki  
University of Helsinki  
Finland  
Docent Maili Malin  
University of Helsinki  
Finland

Copyright ©2011 Tampere University Press and the author

Distribution  
Bookshop TAJU  
P.O. Box 617  
33014 University of Tampere  
Finland

Tel. +358 40 190 9800  
Fax +358 3 3551 7685  
taju@uta.fi  
www.uta.fi/taju  
<http://granum.uta.fi>

Cover design by  
Mikko Reinikka

Acta Universitatis Tamperensis 1687  
ISBN 978-951-44-8657-9 (print)  
ISSN-L 1455-1616  
ISSN 1455-1616

Acta Electronica Universitatis Tamperensis 1153  
ISBN 978-951-44-8658-6 (pdf)  
ISSN 1456-954X  
<http://acta.uta.fi>

*To the memory of my late father Shri C. Narasimha Char*



# Table of Contents

Summary .....	9
Tiivistelmä.....	11
List of Original Publications.....	13
Abbreviations.....	14
1 Introduction .....	17
2 Impact of the International Conference on Population and Development on the Global and National Policies.....	21
2.1 Evolution of India’s Population Policy During 1946–2000.....	21
2.2 Issues around Male Involvement in Reproductive Health.....	24
2.3 The Evolution of “Male Involvement” .....	26
2.4 Current Use of Contraceptive Methods in India.....	26
3 Literature Review.....	28
3.1 Scope of the Literature Review.....	28
3.2 India’s Implementation of ‘Male Involvement’ Interventions.....	28
3.3 Dependency on Female Sterilisation.....	30
3.4 Intra-family Communication on Family Planning and Contraceptives ..	31
3.5 Provider Attitudes and Perceptions Towards Male Involvement.....	32
4 Justification of the Present Research .....	34
5 Theoretical Framework .....	35
6 Aim and Objectives of the Study.....	39

7	Study Setting .....	40
8	Methods .....	42
8.1	Overall study design .....	42
8.2	Study subjects and methods .....	43
8.3	Ethical approval.....	49
9	Main Results.....	50
9.1	Conceptualisation and views on Family Planning (I, II, III).....	50
9.2	Perceptions of male sterilisation (I, IV) .....	51
9.3	Access to sexual and reproductive health information (I, III) .....	51
9.4	Access to contraceptives (III) .....	53
9.5	Why are men neglected by the health care providers (IV) .....	53
9.6	Family planning decision-making (I, II) .....	55
9.7	Factors affecting adoption of female sterilisation among men (I) .....	55
10	Discussion.....	57
10.1	Strengths and limitations of the study.....	57
10.2	Conceptualisation of family planning .....	60
10.3	The popularity of female sterilisation today .....	61
10.4	Determinants of female sterilisation adoption .....	62
10.5	Intra-familial communication on family planning .....	63
10.6	Young, unmarried men and SRH services .....	64
10.7	Health care providers' exclusion of men .....	66
11	Conclusions .....	68
12	Recommendations.....	70
	Acknowledgements.....	72
	References.....	76
	Original Publications.....	91

## List of Tables

<b>TABLE 1.</b> Main policies guiding Indian sexual and reproductive health programme .....	23
<b>TABLE 2.</b> Approaches to involve men in sexual and reproductive health .....	26
<b>TABLE 3.</b> Background socio-economic and demographic indicators for Sehore and Raisen districts, Madhya Pradesh.....	41
<b>TABLE 4.</b> Overall research design – Male Involvement in Family Planning and Reproductive Health in Rural Central India (2005) .....	43
<b>TABLE 5.</b> Profile of health care providers and trainings imparted to them, Madhya Pradesh, 2005 .....	54
<b>TABLE 6.</b> Odds ratios (and 95% confidence intervals) from logistic regression analyses assessing the likelihood of accepting female sterilisation by selected characteristics (N=780) .....	56

## List of Figures

<b>FIGURE 1.</b> Timelines and milestones of the Indian Population Policy .....	22
<b>FIGURE 2.</b> Percentage of current use of Family Planning Methods in India .....	27
<b>FIGURE 3.</b> Community influencers of sexually active couples .....	37
<b>FIGURE 4.</b> Framework for Male Involvement in Family Planning and Reproductive Health (a progression of the de-Bruijn model) .....	38
<b>FIGURE 5.</b> Map of India and the research area.....	41
<b>FIGURE 6.</b> Proportion of young men aged 17–22 years who had heard of family planning methods.....	52





## Summary

Male involvement in reproductive health and family planning has recently been understood as an important area among reproductive health programme designers, policy makers, and population researchers for the overall reproductive well-being of the couple. Non-involvement of males in such areas contributes to major initiatives failing to achieve their desired objectives. To implement effective programmes to include men, it is therefore essential to first understand whether men are at all interested to be part of reproductive health programmes, and the barriers that they face while accessing services and how best can these be overcome. Despite almost two decades since the call to involve men actively in such programmes, men still feel ignored or are missing from such initiatives in India and other developing societies.

The present study was conducted in rural central India in the state of Madhya Pradesh and the **overall objective** of this research was to examine men's family planning and reproductive health needs and constraints in an ideologically patriarchal and patrilineal society. The study investigated major factors that hindered men from seeking reproductive health information and services for enhancing their own and their partner's reproductive health situation.

A **mixed-methods approach** was used, with a combination of qualitative focus group discussions and in-depth interviews, and quantitative Knowledge, Attitude, Practice surveys among different primary and secondary subjects. The primary research subjects were currently married (with wives in the reproductive age group of 15–45 years) and unmarried (aged 17–22 years) men. Secondary audiences included the mothers-in-law, wives of married men and the health care providers in rural India. This thesis is a compilation of four sub-studies.

Sub-study I analysed male conceptualisation and perceptions of family planning, paying special attention to male knowledge, decision making and reliance on female sterilisation. A total of seven focus group discussions and 793 structured interviews among a representative sample of currently married men constituted this study.

In sub-study II, intra-family relationships and communication, and their influence on choice of contraceptive method and timing of use were discussed. Family 'triad' interviews were conducted among currently married men, their wives aged 15–45 years, and their mothers. A total of 60 family triads were conducted using in-depth interviews.

Sub-study III assessed the accessibility of reproductive health information and services, and analysed the vulnerabilities of young, unmarried men aged 17 to 22 years. Four focus group discussions and 316 structured interviews in a representative sample were conducted among this group of respondents.

Sub-study IV examined the extent, motivation and prevalence of village-level health workers' interaction with men concerning reproductive health issues in rural central India and studied the existing public health care system and the reasons for the non-involvement of men in reproductive health care information and services. A total of 52 in-depth interviews among a range of rural health care providers were conducted.

The study **results** bring out the following:

- a. Men conceptualised family planning to mean female sterilisation while contraception connoted spacing methods, and pointed to a clear male preference for female sterilisation as the preferred family planning method.
- b. The mother-in-law's role with regard to female sterilisation acceptance by the daughter-in-law continued to pre-dominate. However, her role with regard to couple's decision to accept reversible methods had considerably reduced.
- c. Young unmarried men lacked information on reproductive health issues and access to condoms, even in their own settings.
- d. Men felt ignored by the government health care providers who were yet not oriented towards involving men in reproductive health and family planning services.

The results indicated that men were indeed interested and willing to be part of the broader reproductive health programme. However, they lacked sufficient knowledge to accomplish the same. Also, they lacked information and access to specific family planning services, for example, inter-personal discussions with health care providers on sexual and reproductive health.

While government policies are in place to encourage male involvement in reproductive health, these policies have failed to be put in practice. A set of guiding principles needs to be developed to support those involved in the health sector to mainstream male involvement into reproductive health strategies in India and in comparable Eurasian developing societies.

## Tiivistelmä

Lisääntymisterveyden parissa työskentelevät tutkijat, terveysalan ammattilaiset ja terveysohjelmien suunnittelijat, sekä päätöksentekijät ovat viime aikoina tulleet yhä tietoisemmiksi siitä, että miehet ovat avainasemassa lisääntymisterveyden edistämiseen tähtäävissä terveysohjelmissa. Miesten jättäminen tämän alueen (mm. perhesuunnitteluohjelmien) ulkopuolelle johtaa siihen, että toivottuja tuloksia ei saavuteta.

Tämä tutkimus toteutettiin maaseutualueella Madhya Pradeshin osavaltiossa Keski-Intiassa. Tutkimuksen tavoitteena on tarkastella miesten erityistarpeita perhesuunnittelu- ja lisääntymisterveysohjelmissa patriarkalisessa ja patrilinearisessa yhteiskunnassa. Tutkimuksessa selvittiin syitä, jotka estävät miehitä parantamaan omaa ja kumppaninsa lisääntymisterveyttä.

Tutkimuksessa käytettiin monitahoista lähestymistapaa, jossa yhdistyivät laadulliset ryhmäkeskustelut ja syvähaastattelut sekä ”tieto, asenne ja käytäntö” (KAP) haastattelulomakeella tehdyt poikkileikkaustutkimukset. Ensisijaisina tutkimuskohteina olivat miehet, jotka olivat naimisissa 18–45-vuotiaiden naisten kanssa, sekä naimattomat 17–22-vuotiaat miehet. Toisena kohdetyhmänä olivat henkilöt, joilla oli olennaisesti vaikutusvaltaa pariskuntien perhesuunnittelu- ja lisääntymisterveysvalintoihin esim. anopit ja terveydenhuollon ammattilaiset Intian maaseudulla.

Tämä väitöskirja on koostuu neljästä osatyöstä. Ensimmäisessä osatyössä analysoitiin miesten käyttämiä käsitteitä, tietoa, näkemyksiä perhesuunnittelusta yleensä ja erityisesti liittyen naisten sterilisaatioon. Tutkimusaineisto koostuu seitsemästä ryhmäkeskustelusta ja KAP-poikkileikkaustutkimuksesta (n = 793), jossa haastateltiin naimisissa olevia miehiä. Toisessa osatyössä haastatteluissa keskityttiin perheen keskinäisiin suhteisiin ja kommunikaatioon, sekä siihen miten nämä vaikuttavat ehkäisy menetelmän valintaan ja käytön ajoitukseen. Syvähaastattelut tehtiin 60 perheessä siten, että samanaikaisesti haastateltiin miehiä, heidän 15–45-vuotiaita vaimojaan, sekä anoppeja (miehen äiti). Kolmas osatyössä arvioitiin lisääntymisterveystiedon ja -palveluiden saatavuutta 17–22-vuotiaiden naimattomien miesten parissa. Aineisto koostui neljästä ryhmäkeskustelusta sekä KAP-poikkileikkaustutkimuksesta (n = 316). Neljäs osatyö kartoitti terveystyöntekijöiden asenteita, vuorovaikutustaitoja ja motivaatiota osallistaa miehet olemassa olevissa lisänty-

misterveysohjelmissa. Yhteensä 52 syvähaastattelua tehtiin maaseudulla toimivan terveydenhoitohenkilöstön keskuudessa.

Intian maaseudulla asuvat miehet ovat kiinnostuneita lisääntymisterveydestä ja motivoituneita käyttämään mm. perhesuunnittelupalveluita jos niiden saatavuutta parannettaisiin. Miehet tarvitsevat lisää tietoa lisääntymisterveydestä ja palvelujen saatavuutta on parannettava erityisesti huomioiden miesten tarpeet ja asema perheen päätöksentekijänä.

Tutkimustulokset osoittavat, että miesten näkemysten mukaan termi “perhesuunnittelu (family planning)” tarkoittaa naisen sterilisaatiota, joka on myös suosituin ja parhaiten tunnettu ehkäisymenetelmä miesten keskuudessa. Miehet liittivät muut tiedossaan olevat raskauden ehkäisymenetelmät vain raskauksien suunnitelmalliseen ajoittamiseen (child spacing). Perheissä anopeilla (miehen äiti) on vahva vaikutus naisten sterilisaation puolustajana. Anopin mielipiteen vaikutus muiden ehkäisymenetelmien käytössä on vähäisempi.

Nuorilla naimattomilla miehillä ei ole riittävästi tietoa ehkäisymenetelmistä ja ehkäisymenetelmien saatavuus (kondomit) oli erityisen huono tässä ryhmässä.

Intian valtion perheiden hyvinvointiin tähtäävät ohjelmat eivät huomioi riittävässä määrin miehiä. Julkisella sektorilla toimivaa terveydenhoitohenkilöstöllä ei ole riittävästi koulutusta ja keinoja osallistaa miehiä perhesuunnitteluohjelmissa. Terveyssektorilla tarvitaan lisää ohjausta, koulutusta ja tukea miesten osallistamiseksi lisääntymisterveysohjelmissa Intiassa ja vastaavissa maissa.

## List of Original Publications

The thesis is based on the following original papers, which will be referred to in the text by their Roman numerals:

- I Char Arundhati, Minna Säävälä, Teija Kulmala. (2009) Men's perceptions on female sterilisation: A community-based study in rural Central India. *International Perspectives on Sexual and Reproductive Health*, 2009, 35(3):131–138.
- II Char Arundhati, Minna Säävälä, Teija Kulmala. (2010). Influence of mothers-in-law on young couples' family planning decisions in rural India. *Reproductive Health Matters*, 2010, 18(35):154–162.
- III Char Arundhati, Minna Säävälä, Teija Kulmala. (2011). Assessing young unmarried men's access to reproductive health information and services in rural India. *BMC Public Health*, 2011, 11:476.
- IV Char Arundhati, Minna Säävälä, Teija Kulmala. (2011). Provider bias or organizational limitations-Why do health care providers ignore men in reproductive health programmes in rural central India? Accepted for publication in *Journal of Family Welfare*, in the December 2011 issue.

All four articles have been appended to this thesis with the kind permission of the respective publishers.

## Abbreviations

AIDS	Acquired Immuno Deficiency Syndrome
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AWW	Anganwadi Worker
BMO	Block Medical Officer
BSS	Behavioural Surveillance Survey
CI	Confidence Interval
CMO	Chief Medical Officer
CPR	Contraceptive Prevalence Rate
DKT	A contraceptive social marketing organization headquartered in Washington D.C and having operations in India
FGD	Focus Group Discussion
FP	Family Planning
FW	Family Welfare
GoI	Government of India
HIV	Human Immunodeficiency Virus
IDI	In-Depth Interview
IEC	Information, Education, Communication
ICPD	International Conference on Population and Development
IIPS	International Institute for Population Sciences
KAP	Knowledge, Attitude, Practice
LHV	Lady Health Visitor
MO	Medical Officer
MoHFW	Ministry of Health and Family Welfare
MPW-M	Multi-Purpose Worker-Male
MS	Male Supervisor
NACO	National AIDS Control Organisation
NDC	National Development Council

NFHS	National Family Health Survey
NRHM	National Rural Health Mission
NGO	Non-Government Organisation
NPP	National Population Policy
NSV	Non-Scalpel Vasectomy
NYP	National Youth Programme
PHC	Primary Health Centre
RCH	Reproductive and Child Health
RTI	Reproductive Tract Infection
RH	Reproductive Health
SPSS	Statistical Package for Social Sciences
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infection
TFR	Total Fertility Rate
UN	United Nations
UNFPA	United Nations Population Fund
WHO	World Health Organisation





# 1 Introduction

For a long time, international family planning and reproductive health programmes focussed exclusively on women (Greene 1998). As a consequence, population policies were implemented almost exclusively through basic family planning programmes serving women. If men were involved, it was in a limited way, often to ensure contraceptive continuation and acceptability (Amatya et al. 1994) or to promote the diagnosis and treatment of sexually transmitted infections (Mbizvo et al. 1996).

Although both men and women have responsibilities and interest in reproductive health and family planning, demographic studies on fertility and family planning have overwhelmingly focused on women. (Berer 1996, Greene and Biddlecom 2000). In practice, the effect that men have on their own and on women's reproductive lives may be more varied. To exclude men from information, counselling, and services is to ignore the important role men's behaviour and attitudes may play in couples' reproductive health choices (Bloom et al. 2000). For example, in some countries, societal norms, religious practices, and even legal requirements provide men great influence over decisions that affect their family's reproductive health. Perhaps most importantly, around the world many women and their partners would like to participate more fully in reproductive health counselling and services (Ringheim 2002). In response to these factors, programmes are increasingly seeking ways to develop strategies that allow men's constructive involvement in family planning and other reproductive health services. Studying male involvement, therefore, is important to understand the multiplicity of forces shaping reproductive decisions among women and men (Clark et al. 2008).

Men are more interested in family planning than often assumed but need communication and services directed specifically at them. Most studies report that men have responded positively to being involved in interventions and that they do in fact care about the welfare of their families (Amatya et al. 1994, AVSC International 1997, Becker and Costenbader 2001, Berer 1996, Chankapa et al. 2010, Clark et al. 2008, Drennan 1998, Finger and Ndong 1998, Greene 1998, Karra et al. 1997, Varkey et al. 2004, Singh and Arora 2008). Critics of male involvement have argued that persuading men to view sexual and reproductive health as important and not just women's responsibility will be very difficult (Nag and Dusa 1988, Narayan et al. 2000a, Narayan et al. 2000b). Some fear that resources earmarked for projects

targeting women will be reallocated into projects that target men, and that the issue of addressing men will possibly reduce female reproductive autonomy as an unintended consequence (Berer 1996, Helzner 1996a).

However, it is also pointed out that couples who talk to each other about family planning and reproductive health can reach better, healthier decisions (Drennan 1998). Also, involving men in reproductive health is crucial to promote gender equality in all spheres of life and encourage and enable men to take responsibility for their sexual and reproductive behaviour and their social and family roles (Bernstein and Hansen 2006, Helzner 1996a, Helzner 1996b).

Successful male involvement is critically dependent on addressing the social and cultural norms that impede health (Benstein and Hansen 2006, Greene et al. 2006, Pande et al. 2006). It is very difficult for men to access accurate, timely and good quality reproductive and sexual health information and services (Pande et al. 2006). More recently, however, male involvement in reproductive health has become a popular area among reproductive health programme designers, policy makers, and population researchers. Still, the meaning of “male involvement” has divergent interpretations. In the patriarchal culture predominantly prevalent in most of India, husbands have the authority to make legitimate decisions on behalf of their wives, and reviews have suggested that they are also involved in making decisions about their wives’ reproductive health, including contraceptive usage, visit to the health facility and family composition and size (Balaiah et al. 1999, Edmeades et al. 2011, Karra et al. 1997, Sharma 2002). Besides the husbands, in the South-Asian context, the influence of family elders, for example, the mother-in-law or the elder daughter-in-law is also significant as decision makers for the young couple on reproductive health issues (Jain et al. 1992, Kadir et al. 2003, Mumtaz and Salway 2007, Senanayake 1994).

The programme to involve men in reproductive health uses many terms, including men’s participation, men’s responsibility, male motivation, male involvement, men as partners, and men and reproductive health (Danforth and Jezowski 1997, Finger et al. 1998, Helzner 1996b, Verme et al. 1996). However, there is no consensus about which term best describes this perspective on men, what these terms mean, and how men can best be involved in reproductive health activities (Danforth et al. 1994, Danforth and Roberts 1997, Verme et al. 1996). Whatever the term used, the purpose is to describe a complex process of social and behavioural change that is needed for men to play more responsible roles in reproductive health. “Men’s participation can be seen as a means to an end, rather than as a goal in itself” (Greene et al. 2006). The goal is good reproductive health for all, including adolescent and young people.

India is called a youthful country with young people (aged 10–24) constituting almost 358 million and representing about 30% of the Indian population (Census of India 2011). Not only does this cohort represent India’s future in the socio-economic

and political realms, but its experiences will largely determine India's achievement of its goal of population stabilization and the extent to which the nation will be able to harness its demographic dividend. While today's youth are healthier, more urbanized and better educated than earlier generations, social and economic vulnerabilities persist. In the course of the transition to adulthood, moreover, young people face significant risks related to sexual and reproductive health, and many lack the knowledge and power to make informed sexual and reproductive choices. In recognition of the importance of investing in young people, several national policies and programmes formulated since 2000, including the National Population Policy 2000, the National Youth Policy 2003, the Tenth and Eleventh Five-Year Plans, the National Adolescent Reproductive and Sexual Health Strategy and the National Rural Health Mission (2006–12), have underscored a commitment to addressing the multiple needs of this group in India (International Institute for Population Sciences and Population Council 2010). Effective implementation of both policies and programmes lacks evidence on young people's situation and needs.

The motivation for this research was largely based on a review of existing literature on the involvement of men in reproductive health programmes, specifically in the South Asian region, and the author's experience in handling a 5-year reproductive health intervention (2001–05) in the study state during her employment with a contraceptive social marketing organisation. Jointly carried out between a Finnish NGO (Väestöliitto) and its Indian partner (DKT India) with financial support from Ministry for Foreign Affairs of Finland, the intervention aimed to improve the reproductive health of both men and women of fertile ages (15–45 years). The main focus of the intervention was on improvement of service provision through training of health service providers, developing a network of community volunteers and sensitizing communities about reproductive health issues through various information, education and communication campaigns. The intervention used diverse methods and channels to reach men, including interpersonal communication and mass media (television and radio). The principle objective of the intervention was to enable people to increase control over their reproductive health by educating them on family planning and contraceptives, as well as improving the accessibility, availability and affordability of contraceptives in their areas, in line with the principles of social marketing programmes.

This thesis expounds what male involvement entails at the community level, and how it has been interpreted in programme and research efforts, specifically focussing on access to family planning information and services. The present cross-sectional research aimed to increase understanding of the socio-cultural factors that affected men's access to, and utilization of reproductive health information and services, from the perspective of community men. In addition, these issues were explored from the perspective of other "influencers" involved in ensuring the

wellbeing of women, namely, the health care providers and mothers-in-law, as well as from the wives of these men. Finally, young unmarried men aged 17–22 years were studied, since men in this age group clearly exhibited a lack of knowledge and information about contraceptives during the intervention, and there was a need to understand their situation and needs with respect to sexual and reproductive health (DKT India) (unpublished).

## 2 Impact of the International Conference on Population and Development on the Global and National Policies

Since the 1994 International Conference on Population and Development (ICPD) in Cairo, (United Nations 1994) international family planning has slowly given way to a different paradigm. Involving men has been a prominent part of the shift from family planning and demographic targets, to the broader reproductive health agenda promoting gender, equality and equity, empowering women and improving family health in society (Bustamante-Forest and Giarratano 2004). Men's participation has been conceptualised in several ways since then, for instance: (1) men's involvement in decisions about family size and family planning; (2) men's responsibility to reduce risky sexual behaviour and prevent spread of sexually transmitted infections; (3) men's support for the reproductive health of women; and (4) men's own reproductive and sexual health needs. However, research is still limited on issues of young men's involvement in reproductive health and how to overcome constraints that make it difficult to reach young men (Pande et al. 2006). Men obviously make up a significant new clientele for reproductive health programmes. They constitute an important asset in efforts to improve women's health and efforts to involve them in ways that transform gender relations and promote gender equity and thus contribute to a broader development and rights agenda. While international family planning programmes were essentially about women's health, reproductive health as it has now been envisaged goes beyond health to broader development issues (Greene et al. 2006).

### 2.1 Evolution of India's Population Policy During 1946–2000

The effect of the aftermath of the ICPD Programme of Action (1994) has been felt in India too, with the government of India taking cognisance of this big shift and factoring it in the population policy of the nation. Several of the policy documents formulated post-1994 have very prudently revised the mandate to include this big shift and work towards the broader reproductive health agenda. Some of the specific policies that have mentioned male involvement in sexual and reproductive health programmes are briefly explained in Table 1.

However, it is necessary to bring into perspective the timelines and milestones of the Indian Population Policy and these are described in Figure 1 below.

1946	Bhore Committee Report laid the foundations of comprehensive rural health services through the concept of primary health care
1952	Launched Family Planning Programme and established primary health care centres in rural areas
1976	Statement of National Population Policy formulated
1977	Policy statement on Family Welfare Programme
1983	The National Health Policy emphasised the need for “securing the small family norm, through voluntary efforts and moving towards the goal of population stabilisation”. Emphasis for a separate National Population Policy was made.
1991	The National Development Council (NDC) appointed a Committee on Population that proposed the formulation of a National Population Policy to take a “long term holistic view of development, population growth and environmental protection” and to “suggest policies and guidelines for formulation of programmes” and “a monitoring mechanism with short, medium and long term perspectives and goals”.
1993	An expert group asked to prepare a draft of a national population policy to be discussed by the Cabinet and then by Parliament.
1994	Report on a draft National Population Policy by the expert group.
2000	The National Population Policy finalised

**FIGURE 1.** Timelines and milestones of the Indian Population Policy  
Source: National Population Policy 2000

TABLE 1. Main policies guiding Indian sexual and reproductive health programme

<b>Indian policies (year) and significant focus areas</b>
<p><b><u>National Population Policy (2000)</u></b></p> <ul style="list-style-type: none"> <li>• Set up to guide the translation of policy to programmes</li> <li>• Objectives include addressing the unmet need for contraception and health system personnel, and to provide integrated service delivery for basic reproductive and child health care</li> <li>• Seeks to address gender issues impinging on women's health by improving quality of care, including the interaction between providers and clients; addressing the needs of neglected population sub-groups like adolescents; organizing gender sensitization training for stakeholders; encouraging male involvement in reproductive health; and facilitating women's and men's involvement in monitoring reproductive and child health through client feedback. (National Population Policy 2000)</li> </ul>
<p><b><u>National Youth Policy (2003)</u></b></p> <ul style="list-style-type: none"> <li>• Multi-sectoral approach to youth, with a focus on 'youth empowerment', notably education, skills building and leadership as well as nutrition and equal opportunity. While it discusses the need for access to health services among young people, and cites the need for reproductive health "guidance," population and family life education, its primary focus is nutrition and education rather than sexual and reproductive health.(National Youth Policy 2003)</li> </ul>
<p><b><u>National AIDS Control Programme and Policy (NACP-III) (2006)</u></b></p> <ul style="list-style-type: none"> <li>• The policy reflects the paradigm shift currently under way, and emphasizes the importance of inter-sectoral coordination, forging partnerships with multiple stakeholders including NGOs and community-based organizations, decentralized planning and implementation, and integration of services. It recognizes that the HIV/Aquired immune Deficiency Syndrome (AIDS) must be seen not only as a public health issue but also as a problem of development. (NACP-III 2006)</li> </ul>
<p><b><u>The Tenth 5-Year Plan (2002–2007)</u></b></p> <ul style="list-style-type: none"> <li>• For the first time, this five-year plan had some contents directing programming towards male involvement. It mentioned the need for a paradigm shift from predominantly women-centred programmes to meeting the health care needs of family with emphasis on involvement of men in planned-parenthood. Participation and cooperation of men in prevention and control of STIs was also mentioned. (Government of India, Planning Commission, New Delhi 2002).</li> </ul>
<p><b><u>The Eleventh 5-Year Plan (2008–12)</u></b></p> <ul style="list-style-type: none"> <li>• The plan specifically encourages working towards male responsibilities in contraception, as well as imparting knowledge to both men and women, thus bringing about gender balance and empowering women too with regard to sexual and reproductive health. (Government of India, Planning Commission, New Delhi 2008)</li> </ul>

## 2.2 Issues around Male Involvement in Reproductive Health

### 2.2.1 Evidence of the need to involve men in sexual and reproductive health

In the 1980s, there was a tacit, if gradual, recognition within health promotion, that men were an important factor in the health of women and children. Research showed that men not only acted as 'gatekeepers', restricting women and children's access to health services, but also through abuse or neglect, men's actions had direct bearing on the health of their partners and their children (Gallen et al. 1986). Initially, the way to deal with what increasingly had come to be regarded as 'the problem of men' was thought to be to foster women's empowerment through working directly with women (Sternberg and Hubley 2004). Men, often identified as uncaring and unconcerned about the well-being of their partners, were ignored, and as a result, many health promoters began working directly with women in the communities as a means to empower them and protect them from the impact of men's behaviour on their lives. This strategy was focused mostly in the area of sexual and reproductive health (Sternberg and Hubley 2004, Stycos 1996).

By the end of the 1980s, the women's empowerment approach became an important driving force within health promotion and, more particularly, within sexual health promotion (Stein 1997). However, this strategy of women's empowerment without the active involvement of men was described as partial solutions which could alienate men further (Sternberg and Hubley 2004). These fears, together with an understanding of the gender power relationships in the society brought about a firm belief about male participation in health promotion (Cornwall and White 2000, Drennan 1998).

Although most would now agree that men's involvement is important, the introduction of programmes that aim to involve men pose some serious questions about the effects of involving men in areas that have traditionally been considered the preserve of women, such as childcare, pregnancy and fertility control (Berer 1996, Helzner 1996b). Moreover, there is a fundamental question, as far as the strategy is concerned, about whether men's involvement actually increases men's power over their female partners or whether it will help empower women. Notwithstanding, several articles were written as justifications for involving men (Cates 1996, Drennan 1998, Green 1995, Greene and Biddlecom 2000, Kuseka and Silberan 1990, Mbizvo and Bassett 1996, Ndong et al. 1999, Raju and Leonard 2000a, Wegner et al. 1998).



### 2.2.2 Gender inequities

The ICPD (1994) recognised that gender roles are strongly reinforced in cultural beliefs and practices, and that the social construction of masculinity and femininity profoundly shapes sexuality, reproductive preferences, and health practices (United Nations 1994). The extensive research on women's subordinate status in most societies that informs the Programme of Action points to widespread patterns of male prerogative and power, visible in social discrimination such as lower levels of investment in the health, nutrition, and education of girls and women (Miller 1997). Unequal gender relations are often associated with early age at marriage of women and large differences in age, education and income between spouses (Narayan et al. 2000a, Narayan et al. 2000b). The degree of imbalance in gender relations in a household is eventually reflected in the status of women in the household in terms of degree of control over, access to, and utilization of information, education, and income and, more generally speaking, over their life and environment, including fertility, sexual and reproductive health.

Acknowledging these realities, advocates have fought for the recognition of women's human rights, including the rights to decide freely whether, when, and with whom to have children, and the rights to determine whether, with whom, and under what circumstances to engage in sexual relations.

### 2.2.3 Researchers' bias against male subjects

Research on population and reproductive health tended to describe women's disadvantaged position without mentioning men's roles, usually because the data used were collected only from women. Incomplete knowledge and self-made assumptions made it possible for the field to avoid addressing gender inequities and expressions such as violence in its work on reproductive health. Until recently even the Demographic and Health Surveys (DHS 2005) around the world captured responses only from women, who also responded as proxy to men in certain male-centric questions, for example, questions about condom use. The demographic research that informed family planning programmes justified the conceptual omission of men by pointing to the difficulties and uncertainties of using men as research subjects or informants. While women in reproductive age was well-defined, researchers had to grapple with the ill-defined span of men's sexual lives, their assumed inability to report on their off-springs, "the unlikely chance that they would be at home to be interviewed by a survey taker, among many others" (Greene and Biddlecom. 2000). In India, for the first time, the National Family Health Survey (Wave 3) in 2005 included men in the demographic survey (IIPS 2005–06).

## 2.3 The Evolution of “Male Involvement”

Greene and colleagues (Table 2) summarise the various approaches that were used in implementing ‘male involvement’ in sexual and reproductive health post 1994.

**TABLE 2.** Approaches to involve men in sexual and reproductive health  
(Adapted from “Involving men in reproductive health: Contributions to development”: Greene et al. 2006)

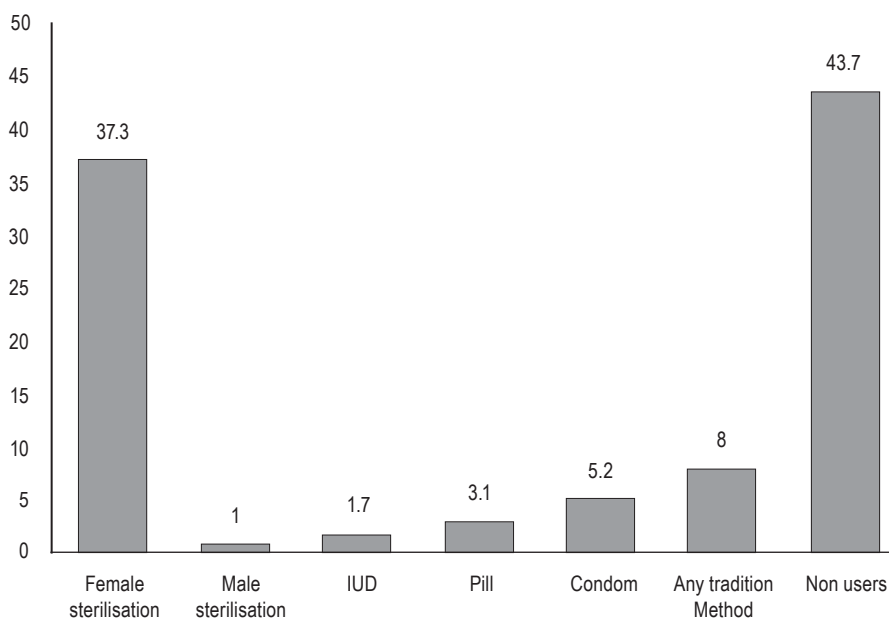
APPROACH	PURPOSE & ASSUMPTIONS	PROGRAMMATIC IMPLICATIONS
<b>TRADITIONAL FAMILY PLANNING FOR WOMEN</b>	Increase contraceptive prevalence; reduce fertility	Contraceptive delivery to women, in the context of maternal and child health Men absent
-----1994 Cairo International Conference on Population and Development -----		
<b>MEN AS CLIENTS</b>	Address men’s reproductive health Needs	Extend same range of reproductive health services to men as to women Employ male health workers
<b>MEN AS PARTNERS</b>	Men have central role to play in supporting women’s health	Recruit men to support women’s health, e.g., teach husbands about danger signs in labour, how to develop transportation plans, the benefits of family planning for women’s health
<b>MEN AS AGENTS OF POSITIVE CHANGE</b>	Promote gender equity as a means of improving men’s and women’s health and as an end in itself  Addressing inequity requires full participation and cooperation of men	Paradigm shift in how programmes are structured and services are delivered, whatever they are  Broader range of activities, working with men as sexual partners, fathers, and community members

## 2.4 Current Use of Contraceptive Methods in India

The contraceptive prevalence rate (CPR), defined as percentage of currently married women aged 15–49 years who are currently using a contraceptive method or whose husbands are using a contraceptive method, is one of the principle determinants of fertility. It is also an indicator of the success of family planning programme (IIPS 2005–06).

The current use of contraceptives in India is shown in the Figure 2 below. Clearly, female sterilisation accounts for two-thirds of total contraceptive use and 77% of modern method use. Among the spacing methods, the most widely used modern method is condoms (5%). The use of the family planning programme’s three

modern spacing methods together accounts for 10% of the CPR (Figure 2). The use of modern male methods contributes around 6% of the overall CPR (IIPS 2005–06).



**FIGURE 2.** Percentage of current use of Family Planning Methods in India (IIPS 2005–06)

## 3 Literature Review

### 3.1 Scope of the Literature Review

The review focussed on studies on male involvement in reproductive health. The search was first at a global level – to identify studies in this area, and later narrowed down to South Asia and India-specific studies. As the 1994 ICPD was an important landmark, searches were restricted from 1990 onwards, to gain perspective on pre and post ICPD scenario. However, the search also yielded some interesting studies from the 1980s and these were also referred.

As there are several issues pertaining to male involvement in reproductive health, a further narrowing down of the search to specific areas of male involvement and family planning was required. Various research articles, books and conference papers which focused on men as partners from a gender equitable and family planning perspective were perused. In the case of young, unmarried men, the search pertained to broader reproductive/sexual health issues. The Popline and Medline Databases were used for the literature search.

### 3.2 India's Implementation of 'Male Involvement' Interventions

In India, the decade after the ICPD call for action saw a number of studies in the area of male involvement (Balaiah et al. 1999, Bloom et al. 2000, Chandhick et al. 2003, Chankapa et al. 2010, Das and Ray 2007, Gupta et al. 2002, Kanitkar and Kulkarni 2002, Karra et al. 1997, Khan and Patel 1997, Moore 1999, Piet-Pelon et al. 1999, Raju and Leonard 2000a, Singh et al. 1998). At the same time, after the emergence of HIV/AIDS, several studies were conducted, initially among the groups at risk of HIV and later among general population mainly focussing on HIV prevention and condom use (Basu et al. 2004, Battala 2001, Bryan et al. 2001, Dhanu and Neogi 2004, NACO 2006, Panda et al. 2000, Paul and Gopalakrishnan 2001, Reed 2001, Thomas et al. 2004).

One of the earliest interventions among Indian men was implemented by Population Council under their Frontiers Project, called Men in Maternity (2000–2002) in India (Varkey et al. 2004) that investigated the feasibility, acceptability

and cost of a new, more comprehensive, model of maternity care that encouraged husbands' participation in their wives' antenatal and postpartum care. Overall, the 2-year intervention resulted in increased family planning knowledge and use, understanding of pregnancy danger signs, increased syphilis testing, enhanced gender roles and decision making among couples in intervention clinics vis-a-vis control clinics. However, STI awareness and knowledge did not increase significantly after the intervention (Varkey et al. 2004).

Overall, the studies from mid-nineties to the end of the last decade covered issues ranging from condom use (Basu et al. 2004, Bradley 2010, Dhanu and Neogi 2004, Khan and Patel 1997, Kumar et al. 1997, NACO 2006, Paul and Gopalakrishnan 2001, Sharma et al. 1996, Thomas et al. 2004, Tiwari and Kumar 2004), sexual and reproductive health (Bloom et al. 2000, Chankapa 2010, Das and Ray 2007, Jejeebhoy and Sebastian 2003, Pande and Astone 2007, Piet-Pelon et al. 1999, Raju and Leonard 2000a, Singh et al. 1998), male sexual health problems (Pelto et al. 1997), sexual behaviour (Chaturvedi et al. 2006, Ghule and Donta 2008, Jaya and Hindin 2009, Savara and Sridhar 1992, Sivaram et al. 2005), spousal communication on reproductive health (Salway 1994, Santhya and Dasvarma 2002) male perspectives on women's autonomy (Jeffrey and Jeffrey 1994, Jejeebhoy 2002, Moore 1999), contraceptive and family planning use (Balaiah et al. 1999, Chandik et al. 2003, Chaturvedi et al. 2006, Ghule and Donta 2008, Hall et al. 2008, Helzner 1996a, Karra 1997, Malhotra et al. 2007, Pradhan and Ram 2009, Sivaram et al. 2005) and gender equity (Chankapa et al. 2010, Gupta et al. 2002, Helzner 1996, Narayan et al. 2000b, Pande et al. 2006, Pradhan and Ram 2010, Rahman and Rao 2004, Singh and Arora 2008).

There is a dearth of research that has focused on cultural, social and economic factors associated with men's sexual and reproductive behaviours in India. Specifically, literature on male understanding or conceptualisation of family planning is currently missing. Studies have discussed inter-spousal communication, much more internationally (Becker et al. 2006, Beckman 1984, Lasee and Becker 1997, Oheneba-Sakyi and Takyi 1997, Omondi-Odhiambo 1997, Oni and McCarthy 1991) and few in India (Salway 1994, Santhya and Dasvarma 2002). There are a few on the influence of other extended family members on the couple's choice of family planning methods in south Asia (Jeffrey et al. 1989, Kadir et al. 2003, Patel 1994, Säävälä 2002).

In India, despite restrictive social norms, there is increasing evidence that youth engage in premarital romantic and sexual partnerships (Abraham 2001, Abraham 2002, Alexander et al. 2006, Alexander et al. 2007, Jaya and Hindin 2009). Many myths and misconceptions about sex exist among both sexes, indicating that the sex education programmes have failed to reach this section of the population (Abraham 2001, Sharma et al. 1996, Tiwari and Kumar 2004).

Few studies on young men and their sexual health acknowledge the need for sex-education and reproductive health information availability among young people (Abraham 2002, Bott et al. (eds.) 2003, IIPS 2005–06, Jejeebhoy and Sebastian 2003, Saha 2000). Two studies report that even if young people report awareness, they possess only superficial information (IIPS 2005–06, Santhya and Jejeebhoy 2007). Reproductive health is a serious concern not only for adults but also for male and female adolescents. A study conducted among adolescent boys aged 15–18 years in the peri-urban and rural areas of West Bengal has shown that the reproductive health awareness among peri-urban boys was more than that of their rural counterparts. However, there was no difference in terms of reproductive health behaviours among the two groups (Das and Ray 2007). Studies both in India and elsewhere have stressed the need for Adolescent Friendly Health Clinics to meet the needs of young people more from the rights approach (Nath and Garg 2008, Sundby 2006).

Studies have mostly focussed on urban, college-going youth (Jaya and Hindin 2007, Jaya and Hindin 2009, Joshi et al. 2006, Rangaiyan and Verma 2005, Samant et al. 2006). Although few studies focus on access to contraceptives among the young people, these are mostly among married adolescents, and especially women (Nema and Sharma 2009, Rani 2005, Santhya 2008). There are few studies on sexual behaviour (Sharma et al. 1996, Tiwari et al. 2004) and condom use (Dhanu and Neogi 2004, Thomas et al. 2004, Tiwari et al. 2004) among young unmarried men. There is, however, a dearth of literature related to young unmarried men's conceptualisation of reproductive health and access to related services.

### 3.3 Dependency on Female Sterilisation

Although about one-third of Indian women use female sterilisation as a method for regulating fertility (IIPS 2005–06), a study (Pradhan and Ram 2009) reveals that people from different socio-economic, religious and demographic strata do not generally opt for sterilisation in equal proportion. Women from poor or rural backgrounds do not have an informed choice. Studies (Basu 2005, Rele et al. 1989) have also shown that it was the very large numbers of lower-class women who relied on female sterilisation, whereas upper-class women used spacing methods such as intra-uterine devices, periodic abstinence, or withdrawal.

It is further argued (Chankapa 2010, Gupta et al. 2002, Jeffrey and Jeffrey 1994, Pradhan and Ram 2009) that programmes that promote female sterilisation while ignoring vasectomy, discriminate against women and violate women's reproductive rights. Some studies (Gupta et al. 2002, Jeffrey et al. 1989, Khan and Patel 1997, Moore 1999, Narayan et al. 2000a, Ram Murthy and Dharma Rao 2003) found that for any family welfare programme to be effective and successful, men should actively participate in it, if they are sincerely concerned with the health and well-being of

their wives and families. A review (Hall et al. 2008) has shown that women find reversible contraception undesirable and believe that modern reversible methods and vasectomy have high physical and social risks, and that fertility goals should be achieved without their use. A study in two urban slums of Bengaluru, India, (Edmeades et al. 2011) explore ways in which women's sterilisation decisions are influenced by the combination of male children preference and a desire for smaller family size among young married women.

### 3.4 Intra-family Communication on Family Planning and Contraceptives

Studies have noted that successful inter-spousal communication is a key strategy to fostering shared decision-making and responsibilities on reproductive health matters (Salway 1994, Santhya and Dasvarma 2002). Globally, the Demographic and Health Surveys report low communication between spouses about family size and family planning in many countries in Asia and sub-Saharan Africa (DHS 2005, IIPS 2005–06). However, where there is communication on these matters, studies have also reported a positive association between spousal communication and contraceptive use, though this association entails problems of causality when cross-sectional data is used, as they often are (Beckman 1984, Lasee and Becker 1997, Oheneba-Sakyi 1992, Omondi-Odhiambo 1997, Oni and McCarthy 1991, Salway 1994).

However, in the Indian context, family planning decision-making goes beyond the couple. This is particularly true in cultures where extended kinship relationship and lineage structures have a socially determining role (Barnett 1998, Hall et al. 2008, Osrin et al. 2002). Few studies have looked at the influence of extended family members and others on the sexual and reproductive health of young couples (Barnett and Stein 1998, Boulay and Valente 2005, Kadir et al. 2003, Säävälä 1999).

While qualitative studies on the family dynamics behind Indian women's reproductive choices have studied the importance of mothers-in-law, there is very little systematic empirical evidence on the extent to which family interactions affect contraceptive method choice (Jeffrey et al. 1989, Patel 1994, Säävälä 1999, Säävälä 2002). Information available, especially from developing countries on intra-household family dynamics regarding decision-making is mainly limited to health and family planning issues, and is often from a gender perspective. Such studies report males as having a greater say in making decisions (Libbus and Kridli 1997, Mahmood and Ringheim 1993, Salway 1994).

A study in north India (Saini et al. 2006) reported that mothers-in-law were the most important persons in the family for taking decisions on health care for a child with acute respiratory infection. Other studies (Osrin et al. 2002, Pachauri 2011) reported that her status in the family gave her the authority to take health care

decisions for the daughter-in-law during post-partum care or treatment-seeking. With regard to the role of mothers-in-law, there is a predominant feeling expressed in few studies (Sabastian et al. 2010, Singh and Bhattacharya 2004) that mothers-in-law influence decisions made by couples or daughters-in-law about adopting family planning or using modern contraceptive methods. A study undertaken in the northern state of Uttar Pradesh (Singh and Bhattacharya 2004) to assess the determinants of care for a sick neonate also showed that the mother-in-law decided with regard to all aspects of handling a sick neonate.

Studies have also reported that there was a higher probability of the couples adopting a modern contraceptive method when the mother-in-law was not living with them (Agha 2010, Hall et al. 2008, Nag and Duza 1988). A Bangladesh study has in fact reported that a positive impact on enhancing the intimacy between husbands and wives and thereby facilitating mutual decision-making in family planning can be attributed to the breakdown of joint families dominated by mothers-in-law (Nag and Duza 1988). Studies have also observed that mothers-in-law influence the number of children that the couples should have (Hall et al. 2008, Moore 1994, Senanayake 1986). Two studies (Qurub 1995, Rutenberg and Watkins 1996) have reported that husbands and mothers-in-law have power over women's lives. The only source of power for the young daughter-in-law is producing offspring, preferably sons (Armitage 1993). Conversely, educated mothers-in-law have been found to be more supportive of family planning as reported by Bhuyan (1991). He reported that adoption of family planning rose as level of education of mothers-in-law and fathers-in-law increased in Bangladesh. Specifically, one south Asian study (Kadir et al. 2003) found, that it was either discussion between daughters-in-law and mothers-in-law, or the mere presence of mothers-in-law in the household that influenced family planning adoption or family size decision among young couples.

### 3.5 Provider Attitudes and Perceptions Towards Male Involvement

There is little empirical information on how the dynamics of interaction change when health care providers are faced with male clients (Ringheim 2002). In an editorial published by Population Council, Raju and Leonard (2000a) have discussed that "involving men" often means including them in counselling sessions, either alone or with their female partners". In an article that examined available literature and empirical data to highlight potential benefits of interaction with the male client (Ringheim 2002), the author concluded that the health care providers need to be culturally sensitised to gender roles and ensure that involving men would in fact encourage joint responsibility, thus improving men's and women's reproductive health. This was also noted in another Indian study (Gupta et al. 2002).



Studies have reported that providers most often have a bias against the male client (Ringheim 1999) or make male clients uncomfortable and unwelcome and fail to give them accurate information about male contraceptive methods such as vasectomy (Piet et al. 1999). Providers are likely to convey to clients that vasectomy causes impotence and weakness and that, contrary to fact, it is less safe and more expensive than female sterilisation (Piet et al. 1999). A study has also established that men's privacy and confidentiality are often violated by the health care providers (AVSC 1997). However, another study (Kim 2001) evidenced that, when both couple were involved in counselling for family planning, providers encouraged more communication among couples, as well as male responsibility for family planning.

An intervention in western India by an NGO that included men in reproductive health in several ways noted that although most young couples were eager to learn more about reproductive health, the health workers themselves were inhibited about discussing such matters, and had more trouble transcending their own preconceived notions about sexual behaviour than did the couples. Specialized training was required before health workers could address sexuality and gender equity (Raju and Leonard 2000b).

## 4 Justification of the Present Research

As described in the above sections, there is enough evidence indicating the unmet need for comprehensive male involvement in community-based Sexual and Reproductive Health (SRH) programmes which is essential for the well-being of the couple, since, in Indian communities, more so in rural India, men are gatekeepers and influencers in all decision making. However, there exist gaps in current Indian literature:

a. Numerous studies have discussed the popularity of female sterilisation in India and identified determinants for the same. However, these studies have been carried out with women as primary respondents. The views of men with regard to female sterilisation have never been studied, leading to a dearth of knowledge on men's role on female sterilisation decision-making and adoption.

b. Besides understanding the determinants of male involvement in family planning and reproductive health from men and women, the attitudes and perceptions of the health care providers is also equally important in order to plan prospective interventions in this regard, where again there is a deficit of studies.

c. While there is evidence of addressing youth and HIV/AIDS and studies on condoms, very few studies address the issue of youth and access to family planning services in rural India. The questions that one is still looking to answer are – 1. Are young men aware of various contraceptives that will assist them against STIs and unwanted pregnancies? 2. Are they aware of where to access these services? 3. Do they have any inhibitions about seeking such services, and if so, what are they? The present study attempts to answer all of these questions which will help programme planners arrive at effective intervention strategies for young unmarried people, and will add to the existing literature.

d. As addressed in the literature review, in the South Asian context, couples are not the sole deciders of family planning adoption. There are other important members, especially the mothers-in-law who are the 'dominant' factors and who influence the young couple's family planning decision-making. However, what is not known is the 'extent' of the mothers-in-law's influence in family planning decision-making. The few studies conducted in the eighties and nineties clearly indicated the dominant role of the mother-in-law in various decision making processes. However, more than a decade later, it is relevant to study whether mothers-in-law still have the same influence on young couples.

## 5 Theoretical Framework

The process-context approach developed by de Willekens (1990) and de Bruijn (1999) has provided the general theoretical perspective for this research. The three basic conceptual theoretical components namely choice, process and context are amalgamated and provide an explanatory framework while aiming to understand the mechanisms involved in people's behaviour in a specific socio-cultural environment. The concept of **choice** (de Bruijn 2004) does not restrict people's behaviour to objectified rationality thereby rendering such behaviour incomprehensible to the outsider. Rather, it provides a tool for identifying the decision frame for people's actions like motivation, representations and self-efficacy that are situation and time-bound process-centric (de Bruijn 1999). Contextually, an individual decision-maker is influenced by social institutions, biological and psychological givens, administrative and political structures and other structural constraints (Giddens 1984, Langlois 1986, Schotter 1981). This approach allows for subjectivity, imperfections and constraints affecting people's decisions and performance. Hence, effective ways can be identified to influence adverse behaviour outcomes at individual and societal levels (de Bruijn 1999). This approach has been used in areas of legislation, family planning and gender systems (McNicoll 1994, McNicoll and Cain 1990).

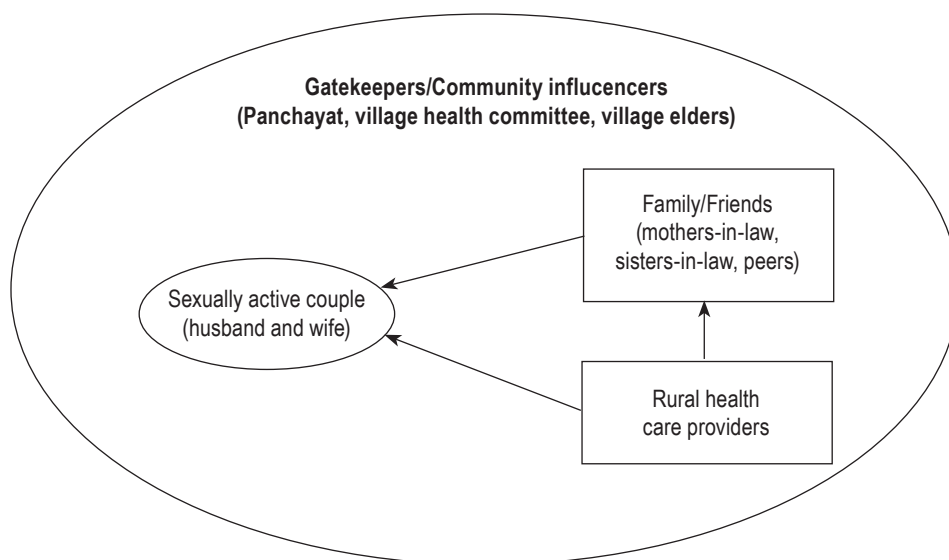
The second dimension of the approach, rooted in **time**, is that people are in a continuous process of development involving varying dynamics and that the stages of development are influenced both by social institutions and cumulative life experiences resulting in an enhanced understanding of behaviour (Levinson et al. 1978, Mayer and Tuma 1990, Sugarman 1986, Säävälä 2001, Willekens 1991).

The impact of the social environment on individual considerations, behaviour and health outcomes, can be substantiated by a combination of quantitative and qualitative research methods (Bruijn 1999, Greenhalgh 1995, Obermeyer 1997), which is one of the key characteristics of the current research. Although de Bruijn's process-context approach incorporates the social dimension to decision-making and choices, it is an individual-centric model. Progressing further from de-Bruijn's proposition, this study starts from de Bruijn's approach but stresses even further the importance of the institutional and social context of an individual actor. In Indian society, the social linkages of an individual are fundamental and hence the

individual's role is very much different in relation to certain other societies (Dumont 1980). In the Indian reproductive health situation, family dependencies and the interplay between needs and constraints are significant. Thus **choice** and **time** find a concrete application to the Indian reproductive health system.

The ICPD Programme of Action (1994) is similar to de Bruijn (1999) model and both are based on the enhanced need of individual autonomy in reproductive decision-making. However, in the Indian context, pre-dominant individual autonomy is never the case (Jeffery et al. 1994). Also, a good life is to be lived when one is maximally related: dependent and most of all, having others who depend on oneself. To have dependants is not to be 'free', because responsibility means obligations that limit the choices one has (Säävälä 2001). This means that male involvement in reproductive health in India has to be examined in a context where the usual taken-for-granted, universal ideas of the individual actor in reproductive health research are questioned. The goal in the field of reproductive health for the rural people is not individual decision-making autonomy but to create an environment in which people can act as a part of the social whole along with their dependencies.

The current research focused on some specific aspects of the process-context model. Figure 3 shows the social influencers of the sexually active couple. In India, the age at marriage is very low and there is an opprobrium associated with premarital and extramarital sex, which ensures that the married couple is a relevant centre of interest in terms of male involvement in reproductive health issues. However, it is borne out by research that men are involved in both pre and extra-marital sex despite the strong normative environment against these practices. Specific quantitative estimate for such behaviour is currently not available in India, but some reports indicate that the former (pre-marital sex) is not uncommon. This research has also included young unmarried men aged 17–22 years in the study population. Studying young unmarried as well as married men, wives and mothers of sexually active men encompasses the time dimension (life course) of the process-context model.

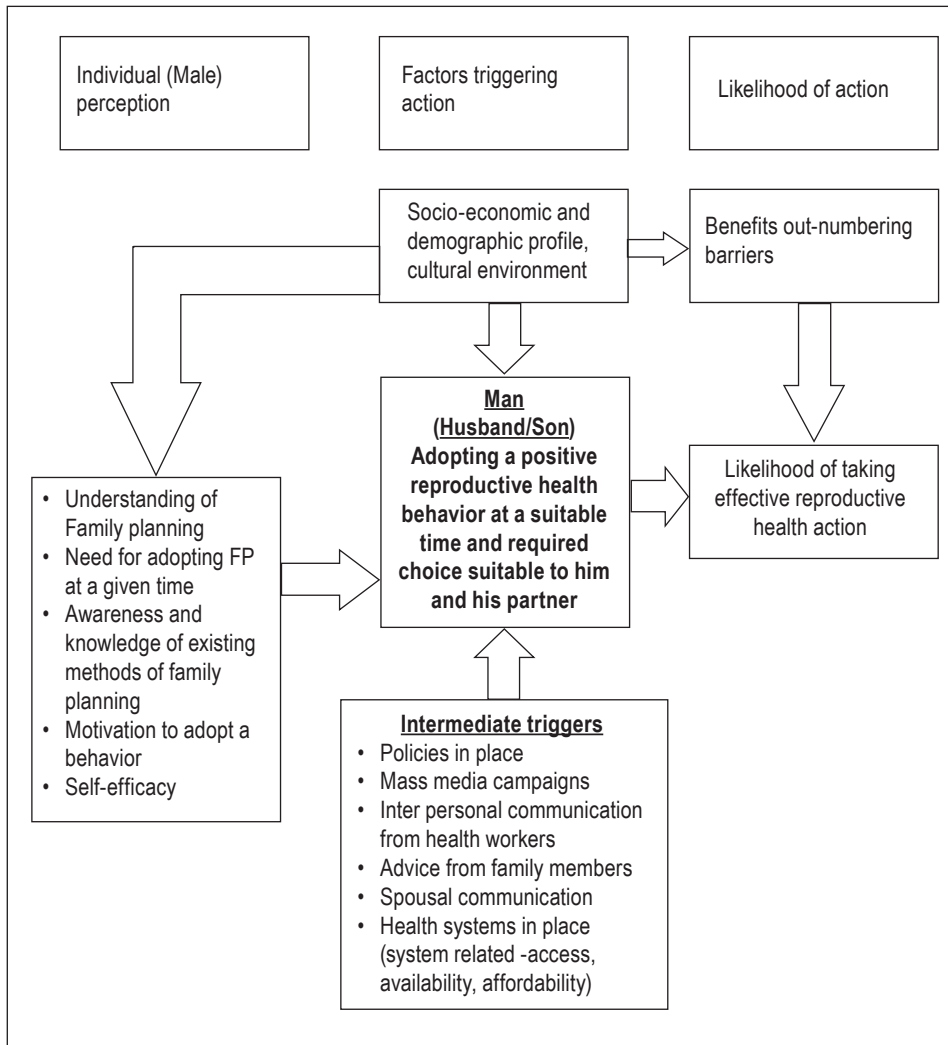


**FIGURE 3.** Community influencers of sexually active couples

The above figure delineates the immediate social environment of the young couple, emphasising the lack of individual autonomy which goes beyond the de Bruijn model. Members of the extended joint family, for example, the mothers-in-law, elder sisters-in-law and peers influence the reproductive health decision-making of young couples. The health care workers, which include the medical officers of the primary health centre, the Auxiliary Nurse Midwife (ANM) and Multi-Purpose Worker (MPW) who are in direct contact with the couple through home to home visits, or during the couple's visits to the sub-centre or primary health centre are the influencers who facilitate the implementation of the couple's choices and are therefore the next core group. The last group of 'indirect influencers' or the 'gatekeepers' constitute the village elders, members of the local village health committee and the local government, 'Panchayat'. This group is significant as they provide the necessary social direction and boundaries within which each community member has to live. Given the privacy and confidentiality that is pervasive with regard to sexual and reproductive health matters in rural India, we assessed that the 'indirect influencers' may not have a role to play with regard to decision-making in the areas that are of concern to this study. Hence the study did not involve this group.

The **time** dimension of the process-context model is about people being in a continuous process of change, with the development process taking place through different life stages, which implies different needs, expectations, constraints and opportunities (Willekens 1991). People's **needs** evolve by interaction with the social and ecological environment (Figure 4). **Constraints** can be natural, social, cultural

or system-related (policy and services). Men's involvement in reproductive health issues is affected by the social constraints and system-related constraints.



**FIGURE 4.** Framework for Male Involvement in Family Planning and Reproductive Health (a progression of the de-Bruijn model) (Bruijn 2004)

## 6 Aim and Objectives of the Study

The overall aim of this research was to examine men's family planning and reproductive health needs and constraints in an ideologically patriarchal, patrilineal society of rural central India. The study investigated major factors that hindered men from seeking reproductive health information and services for enhancing their own and their partner's reproductive health situation.

The specific objectives of the research are described below:

Objective 1: To study how men in rural Madhya Pradesh conceptualise and perceive family planning, paying special attention to male knowledge, perceptions, decision making and reliance on female sterilisation

Objective 2: To study intra-family relationships and communication, and their influence on choice of contraceptive method and timing of use

Objective 3: To investigate the accessibility of reproductive health information and services, and assess the vulnerabilities of young, unmarried men aged 17 to 22 years

Objective 4: To examine the extent, motivation and prevalence of village-level health workers' interaction with men concerning reproductive health issues in rural central India

## 7 Study Setting

Madhya Pradesh, the state where the current research was carried out, has a population of 72.6 million (Census of India 2011), the population density is 236 people per square kilometre which is lower than the all-India level of density (382 persons per square kilometre), and it is a relatively less developed state in India. More than 75% of state population resides in villages whose main occupation is agriculture, major crops being sown in the region include wheat, maize, paddy, oilseeds (soybean, groundnut, mustard) and jowar (millet).

Around 80% are Hindus while Muslims account for about 13% making up the largest minority community. Hindi, which is the national language of India, is also the official language of the state of Madhya Pradesh and is the most widely spoken language (Census of India 2011).

Total Fertility Rate is 3.3 children born per woman and the population growth rate is 1.7. The average age at marriage is 21.7 years for boys and 18.4 years for girls. About 64% of rural men aged 25–29 years were married by age 21 (the legal minimum age at marriage for men) and 67% women aged 20–24 years were married by age 18 (the legal minimum age at marriage for women). The contraceptive prevalence rate is around 44% with female sterilisation accounting for 36% and all other modern temporary methods adding up to less than 10%. In Madhya Pradesh, about six per cent of rural women have an unmet need for spacing, especially between their first and second births (IIPS 2005–06).

The research was chosen to be carried out in two districts, Sehore and Raisen (Figure 5). Both these predominantly rural districts are relatively close to the state capital, Bhopal. In that respect, they cannot be termed as remote rural areas, and one can say that its proximity to Bhopal can also have an effect on its administrative reforms. The profile of these two districts is typical of the northern Indian rural districts in terms of low contraceptive prevalence, high fertility, reliance on female sterilisation (Census of India 2011) and this was the primary consideration while selecting the study areas. The two study districts, Sehore and Raisen together have a total population of 2.6 million (Table 3).



**TABLE 3.** Background socio-economic and demographic indicators for Sehore and Raisen districts, Madhya Pradesh (Census 2011)

Indicators	India	Madhya Pradesh	Sehore	Raisen
Population	1,210,193,422	7,25,97,565	1,311,008	1,331,699
Sex ratio*	940	930	918	899
Sex ratio at birth	914	912	906	927
Per cent urban population	23.6	38.8	18.0	18.4
Average literacy rate	74.0	70.6	71.1	74.3
Female Literacy Rate	54.3	65.5	58.9	65.1

\*No. of females per 1000 males



**FIGURE 5.** Map of India and the research area

## 8 Methods

### 8.1 Overall study design

This study involves exploring a broad range of issues pertaining to male involvement in reproductive health in rural India. Due to the broad objectives as well as the theoretical process-context approach, a mixed-method approach, comprising of both qualitative (focus group discussions and in-depth interviews) and quantitative (cross-sectional structured surveys) methods were used.

A study of a little-researched phenomenon, in this case male involvement in reproductive health, would benefit from a triangulated methodological approach. Triangulation integrates multiple data sources to improve the understanding of a public health problem and to guide programmatic decision-making to address such problems. By examining information collected by different methods among different populations, findings can corroborate each other and reduce the effect of both systematic bias and random error present in a single study (WHO 2008). This also helps to bring into focus the varied social aspects of fertility and broadens our understanding of the social mechanisms of demographic phenomena which are often difficult to capture through surveys alone.

Data collection occurred in three phases between November 2004 and September 2005. It consisted of pilot testing of the research tools, qualitative interviews and surveys interviews (Table 4).

**TABLE 4.** Overall research design – Male Involvement in Family Planning and Reproductive Health in Rural Central India (2005)

<b>SUB-STUDIES</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>
<b>TOPICS</b>	Study of how men understand and perceive family planning, paying special attention to male knowledge, perceptions, decision making and reliance on female sterilisation	Intra-family relationships and communication, and their influence on choice of contraceptive method and timing of use	Accessibility of reproductive health information and services, and assessing young men's vulnerabilities	The extent, motivation and prevalence of village-level health workers' interaction with men concerning reproductive health issues in rural central India
<b>STUDY POPULATION</b>	Currently married men with wives aged 15–45 years	1. Currently married men with wives aged 15–45 years 2. Wives of these men 3. Mothers of these men	Unmarried men aged 17–22 years	Public sector health care providers serving in rural areas
<b>METHOD</b>	Focus Group Discussion/Survey	In-depth Interviews	Focus Group Discussion/Survey	In-depth Interviews
<b>NO. OF INTERVIEWS: SAMPLE SIZE</b>	7 focus groups & 793 survey respondents	180 interviewees in 60 families	4 focus groups & 316 survey respondents	52 interviewees

## 8.2 Study subjects and methods

The primary research subjects were currently married (with wives aged 15–45 years) and unmarried (aged 17–22 years) men in rural central India. The secondary study population included the wives or women aged 15–45 years, mothers of married men, (hereafter referred to as 'mothers-in-law' in relation with the wives of men), and rural health care providers. Both the primary and secondary study subjects were drawn from the study area described above.

### 8.2.1 Qualitative research

Qualitative research is a method of inquiry employed in many different academic disciplines, traditionally in the social sciences. (Denzin and Lincoln 2005). Qualitative research aims to gather an in-depth understanding of human behaviour

and the reasons that govern such behaviour. The qualitative method investigates the 'how' of decision making, not just what, where, when. Hence, smaller but focused samples are more often needed than large samples.

In this study, the qualitative study consisted of three sets of data: focus group discussions (FGD), 'family triad interviews' and in-depth interviews of service providers.

The qualitative focus group discussions among married and unmarried men (I and III) were conducted by two male research assistants, who had worked in other health research projects in rural India. Both research assistants had a Master's degree in Social Sciences. Although they came with certain pre-qualifications, the author personally trained them specifically as per the requirements of this research in conducting focus group discussions. Besides, two women research assistants with similar backgrounds as the male research assistants were recruited and trained on in-depth interviewing techniques.

#### *8.2.1.1 Focus group discussions*

Focus group discussions (FGDs) were used initially to elicit research questions that could be probed further through structured survey instruments and interviews. FGDs were conducted among both married and unmarried men, respectively. Snowball sampling was used to recruit participants in both cases. Snowball sampling (or chain sampling) is a non-probability sampling technique where existing study subjects help to recruit future subjects from among their acquaintances. Thus the sample group appears to grow like a rolling snowball. As the sample builds up, enough data is gathered to be useful for research (Creswell 2003).

Currently married men whose wives aged between 15 and 45 years were recruited from the seven randomly selected villages. Overall, 58 men out of 62 agreed to participate in the seven focus group discussions, one per village.

For FGDs among the unmarried men, four out of 66 villages with at least 1000 population were randomly selected. Youth aged 17–22 years were recruited for the discussions. Only one focus group discussion per village was carried out to ensure that the participants were not affected by rumours of the discussion spreading in the village after a discussion, leading to information bias. A total of 38 unmarried young men were contacted and all agreed to participate in the four focus group discussions.

The discussion guides for the group discussions was piloted in another village not included in the final village selection. Of the two research assistants, one acted as the principal moderator who directed the discussions using the pre-tested guides, while the other was the co-moderator and he noted nonverbal cues observed during the discussions, as well as kept a track to ensure that all issues in the guide were covered by the principal moderator. Topics discussed included young, unmarried

men's knowledge, attitudes and perceptions about sexual and reproductive health including family planning, access to reproductive health services, and information about contraceptives and condoms and sexually transmitted infections and HIV/AIDS.

Discussions were conducted in the local language, Hindi, and lasted approximately two hours. All focus group discussions were held in the community centre of the village, ensuring that there was no disturbance or outside noise while discussions were on. The male research assistants conducted the sessions and gave feedback to the principal researcher (the author) after each group discussion, as her presence was culturally inappropriate due to gender considerations. All discussions were tape-recorded, transcribed verbatim in Hindi and then translated into English. To validate the tapes, they were checked against the translated text for likely inaccuracies. Data was analysed by qualitative content analysis by identifying relevant themes that would answer the research questions, using Atlas TI software for Windows version 5.0. (Scientific Software Development GmbH).

#### **8.2.1.2 *Family triad interviews***

Twelve villages were purposively selected from one district, Sehore. All households in the 12 villages where the mother-in-law, son and daughter-in-law lived in the same house, or where the mother-in-law lived close by in the neighborhood, were listed. Based on this listing, five families per village were randomly selected, one from the centre and four from the four corners of the village, to ensure that no particular community in the village were left out. This was necessary since the Indian villages have a particular structure wherein the most affluent groups stay in the heart of the village and then, as per the caste categories, the rest of them are given specific locations to reside in. First, the purpose of the study was explained to all three family members individually. If all three gave verbal consent, they were included in the study. Eight of the selected families did not qualify to participate since two families refused citing no reason and in the remaining six, at least one of the three members was not available at the time of the research assistants' visit to their homes. In such cases, the next family from the list was selected. In all, 180 members of 60 families completed the interviews.

In these interviews, all three respondents - the son, his mother and his wife - were interviewed using in-depth interview techniques at the same time but separately, in different locations by the three well-trained research assistants, ensuring that each interview was taken in privacy. While one woman research assistant was given the responsibility of conducting interviews only with the mothers-in-law, the other only interviewed the daughters-in-law and the male research assistant interviewed the men. Short, open-ended interview guides were used. There was no flexibility in the wording or order of the questions, although the responses were open-ended.

The interview schedule covered communication and decision-making within the family, discussion within the family about the need for family planning, knowledge and use of reversible contraceptive methods among the young couples; and mothers-in-laws' involvement with respect to reversible versus permanent methods. Each interview was carried out in privacy, and strict confidentiality was maintained. Interviews were tape-recorded. However, if a respondent objected to being taped, short notes were taken and elaborated immediately after the interview on preformatted sheets, to minimize any recall bias. Only six mothers-in-law objected to being tape recorded, the reason being their discomfort to talk in front of a recording machine. None of the men or their wives objected to their interviews being tape-recorded. The interviews were transcribed on the same day by the interviewers, translated into English and entered into a computer word document file, which finally contained material from all 60 families in order of interviews. The findings emerged through content analysis, by identifying themes and putting together information relevant to each theme from each interviewee.

#### ***8.2.1.3 In-depth interviews with health care providers***

In-depth interviewing (IDI) is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, programme, or situation (Boyce and Neale 2006).

The selection of respondents was purposive. A list of grass-root health functionaries, namely, Auxiliary Nurse Midwives, Lady Health Visitors, Male Supervisors and Male Multi-Purpose Workers was gathered from the health department office of the district headquarters. Participants were randomly selected and their availability was ensured and appointments sought before meeting them for individual interviews. Interviews were held with 20 Auxiliary Nurse Midwives, 6 Lady Health Visitors, 8 Male Supervisors and 16 Male Multi-Purpose Workers across the two districts. Discussions were also held with two senior programme managers – a Block Medical Officer from the block headquarter and a Chief Medical Officer from Sehore district. Thus, a total of 52 interviews were conducted.

Individual interviews were held with each of the respondents by the author personally, based on a discussion guide that was pre-tested. The interviews were conducted in a room, mostly at the sub-centre but sometimes at the primary health-care centre. The questions included their socio-economic profile, numbers of years of service, trainings attended, profile of work, community interactions and extent of interaction with men during their work. The interviews were kept as free-flowing as possible in order to gather all nuances pertaining to the health care providers' job responsibilities, as well as their interaction with community men. The data

were taped, transcribed, translated into English and analysed using content analysis technique after identifying specific themes that would answer the research questions.

## 8.2.2 Surveys

One of the most popular cross-sectional survey methods that have been used extensively in the area of health sciences is the Knowledge, Attitude, Practice (KAP) surveys. These surveys are typically used to understand the socio-economic and cultural aspects influencing the health of poor people across the world. (Launiala 2009, Hausmann-Muela et al. 2003). The data is easy to interpret and the results can be generalized to a larger population (Bhattacharyya 1997).

Two KAP surveys were conducted – one among currently married men with wives in the reproductive age group of 15–45 years; the other among unmarried young men aged 17 to 22 years. The survey was conducted by eight male research investigators, all of whom were recruited from the local school of social work. They were supervised by two male research supervisors who had a social science background, and were experienced with conducting data collection in rural areas, when recruited for the study. The author personally trained both the research supervisors for 5 days on various issues like sampling, quality checks, back-checks, and so on. They were also trained on team-management issues. They, in-turn, trained the eight recruited research investigators who went through a complete five days rigorous training on the survey instruments, nuances of coding the questionnaire, checking for errors by manually checking the range and consistency for each questionnaire, and doing a complete scrutiny. This team was responsible for the survey data collection for both sub-studies I and III.

### 8.2.2.1 *Survey among married men (I)*

A three-stage probability sampling procedure was used to select villages, households and eligible persons as sampling units at each stage of the survey. In each district, villages for the sample survey were randomly selected by first identifying those with a population of at least 1,000 people; the decision to select larger villages was based mainly on logistical reasons. For selected villages, we obtained the best estimates available of female literacy. Villages in each of the two districts were divided into low, medium and high literacy levels; four villages were randomly selected from each group, resulting in a total of 24 villages. We used a systematic sampling method for the village selection. In case the intervention campaign was on-going in a village selected randomly, that village was not considered for the research and the next available village from the list was selected. The most up-to-date voters' list (2004)

was used as a sampling frame.<sup>1</sup> About 30 households with eligible married men were selected from each village using systematic random sampling, resulting in a sample of 793 respondents.

The survey instruments were pre-tested extensively in areas similar but not contiguous to the study sites, and later finalized by modifying, adding or deleting questions. The survey questionnaire asked men about their socioeconomic and demographic characteristics, sources of family planning information, understanding and usage of family planning, and knowledge and perceptions of reversible contraceptives and female sterilisation. Interviews were held at a place where there was no disturbance, usually in the field, or under a tree.

Each participant gave oral informed consent after being provided with details of the purpose of the research. Ten per cent of the questionnaires were randomly checked back by the research supervisors with the respondents. This was part of the survey quality-control and it also included a check for completeness, consistencies and clarity of marked codes.

#### **8.2.2.2 Survey among young unmarried men (III)**

A total of 12 villages, six from each district, were selected using probability proportional to size sampling method. This process ensured heterogeneity in the data, which is essential to get meaningful results. Next, a house-listing was conducted to identify households that had unmarried men in the 17–22 years age group. Household selection was done using a systematic random sampling method, and every third household was selected. In any given household, only one eligible respondent was randomly recruited into the study.

As in the interviews with married men, here too, interviews were held in a place where there was no disturbance. This was usually in a place outside of home, mostly under a tree or in the field around the village. Information was collected on young men's socio-economic characteristics, knowledge, awareness and perceptions of family planning, attitude towards future contraceptive use, and intra-family communication, knowledge about STIs and HIV/AIDS, and access and use of condoms. Survey questionnaire topics were decided based on emerging issues from the focus group discussions which preceded the survey. About 20% of the questions were open ended and later coded for analysis. Data collection was conducted during September 2005 for one month; 316 men were interviewed in person.

---

1 The government voters' list contains names and household numbers of eligible men and women older than 18 (which is the eligible age for voting in India). The most recent list available was from 2004 and it was unlikely that there was any considerable changes in the population after the drawing of the voters list since the survey was conducted shortly after.



### 8.2.3 Data analysis

The background characteristics of the survey respondents were analysed using univariate analysis. For the behavioural data, bivariate analysis was used for married as well as unmarried men and the outcome of this analysis was used to corroborate the findings emerging from the qualitative focus group discussions. To study the factors affecting female sterilisation adoption, logistic regression was used, with the binary variable 'whether accepted female sterilisation' as the dependent variable, and socio-demographic characteristics as the independent variables.

All analysis carried out for the survey data were found adequate to answer the research questions. Data were analysed using SPSS statistical package for Windows, version 13.0 (SPSS Inc., Chicago IL).

## 8.3 Ethical approval

All the sub-studies were approved by the Institutional Review Board of School of Health Sciences, University of Tampere and the ethical board of a local institution in India, International Institute for Population Sciences. The study was conducted in accordance with the Helsinki Declaration of 1975, as revised in 2000 (National Institute of Health 2000). For all sub-studies, verbal informed consent was taken from all participants before recruiting them for the study.

## 9 Main Results

### 9.1 Conceptualisation and views on Family Planning (I, II, III)

According to the survey, nearly all currently married men (98%) had heard of contraceptives. However, only 29% of currently married men reported using a temporary family planning method at the time of the survey. Thirty-four per cent relied on female sterilisation; of these, two-thirds reported that female sterilisation was the first method of family planning they had ever adopted, and one-third had used a spacing method before sterilisation. (Table 1 of article I).

Focus group discussions attempted to understand how married men conceptualised and understood 'family planning' or *parivar niyojan* (in Hindi). Men equated family planning with sterilisation which in the Indian scenario, was most often 'female' sterilisation' or *mahila nasbandi* (in Hindi). The other very popular term that men understood to mean female sterilisation was 'operation'. "Contraception", on the other hand, was connoted with spacing methods, knowledge of which was limited to their names.

Young unmarried men in the focus groups conceptualised family planning and contraception very different than the married men. For the young men, discussion about family planning revolved only around condoms. Other than condoms, they had only 'heard' of the other methods but lacked detailed information of how they function and how to use them, similar to the knowledge levels of temporary methods among the married men. Also, married men's opinions during focus groups discussions revealed their callous attitude towards contraceptives. For example, 'only women undergo sterilisation and not men' or 'it is a woman's thing to do'. Young unmarried men viewed condoms more in the context of pleasure and a desire to avoid infections (STIs, HIV) rather than to avoid their partners from getting pregnant. The latter role of condoms for young men was only secondary. The results also indicate the casual attitude of young men with regard to condom use, and not using condoms was an acceptable phenomenon among them. (III)

The mothers-in-law in the triad interviews carried rather negative opinions about reversible contraceptive methods compared to their sons and daughters-in-law. (Table 3 of article II). Overall, mothers-in-law preferred getting their daughters-

in-law sterilised after reaching the required family size, rather than use reversible methods, which, they felt, caused side effects. This statement by a mother-in-law sum up their attitudes towards reversible methods – “When there is sterilisation, why talk about other methods? They all cause problems”. Overall, the young couples were more forthcoming about reversible methods as compared to the mothers-in-law. This was especially true for condom use (II).

## 9.2 Perceptions of male sterilisation (I, IV)

Both the survey as well as focus groups reveal that married men do not have any information about male sterilisation since it is neither discussed among their peers nor with the health care providers. According to one married man, “It was performed (by force) in the previous ages (meaning past years), and it has not been performed since”.<sup>2</sup>

Men were very clear in stating that “now-a-days, only women get operated”. When asked the reason for so many female sterilisations in the villages, the reason was very clear- “as soon as families have the required number of children and the desired sex-combination, it is time to go in for *operation*”. It is because of reasons like these and other fears that wives of the men in the triad interviews (II) discussed, that women prefer to get themselves sterilized. In the triad interviews, wives of married men revealed their fears, similar to the men in the community, that if male sterilisation failed, and if she conceived, her husband would doubt her faithfulness. This was one of the reasons that women preferred to undergo sterilisation, rather than their husbands.

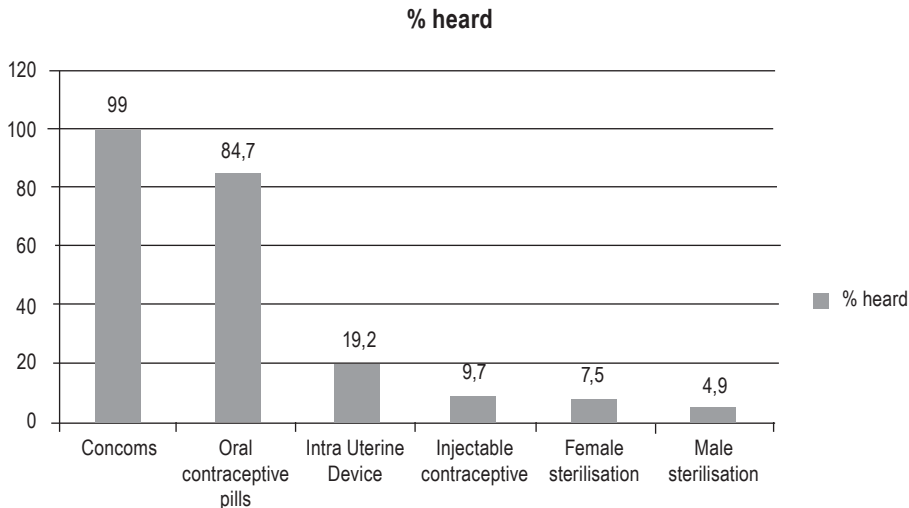
Service providers too indicated the challenges that they faced to motivate men to accept male sterilisation, but seemed to give up easily. “It is easy to motivate a woman for family planning operation than a man” – was a common understanding among the local health personnel in rural India.

## 9.3 Access to sexual and reproductive health information (I, III)

Both married and unmarried men in the two surveys respectively had heard of methods to stop or delay pregnancy (98%) and 81% married men mentioned at least three methods of contraception, namely, condoms, oral pills and female sterilisation. However, unlike the married men whose top-of-mind’ response to the most popular

<sup>2</sup> During the Indian emergency (1972–73), the then Prime Minister Mrs. Indira Gandhi’s son, Mr. Sanjay Gandhi carried out a mass Vasectomy programmer wherein men, especially rural men, were forced to get themselves sterilized. This incidence seems to have had a very negative impact on the overall perception, and popularity of the method. As a result, men do not like to undergo it (besides other reasons including myths and misconceptions surrounding the method).

contraceptive method was female sterilisation (I), unmarried men were not aware of this method (III). Only 8% young men mentioned female sterilisation. As was expected, condoms were the most popular and widely known method among this group (99%) while natural family planning methods like abstinence and withdrawal were hardly mentioned by them (<1%) (Figure 6). Other than condoms, young men had only ‘heard’ of the other methods but lacked detailed information of how they function and how to use them.



**FIGURE 6.** Proportion of young men aged 17–22 years who had heard of family planning methods

Men, in general, identified electronic mass media as the prime source of reproductive health information. However, they preferred more face-to-face communication for complete and correct information. Health service providers were preferred by young men (72%) so that they could discuss and resolve all their queries with regard to sexual and reproductive health, including methods of family planning (III). Even married men indicated the need for interpersonal communication on sexual and reproductive health issues (I).

The qualitative findings from this research among young unmarried men provided good data on the sexual health problems experienced by men in the rural areas. Although young men had heard of sexually transmitted infections (STIs), their information was incomplete. According to young men in focus group discussions, although they experienced various kinds of anxieties related to their sexuality, for example, night fall etc., they lacked information and knowledge which they stated as reasons for not understanding what they were going through. The most frequently mentioned *gupt rog* were not sexually transmitted infections, but rather ‘illnesses’

associated with semen loss, or semen deterioration. These conditions included *swapna dosh* (nocturnal emission), masturbation, white discharge (*dhat girna*) or semen becomes thin (*dhat patla hona*). These were some of the leading *gupt rog* mentioned by young men who later linked this condition to *kamjori* or weakness. Although mass media is an important source of information, according to the youth, it is only a one-way communication method and not very apt for them. (III)

#### 9.4 Access to contraceptives (III)

One of the concerns that young men had, despite having heard of methods to stop or delay pregnancies, or to prevent STI/HIV was about access to these methods. During discussions, they indicated awareness of the health care providers, for example, the Auxiliary Nurse Midwife (ANM), going from house-to-house distributing oral pills to married women. Majority (96%) were also aware that married men could access condoms either from the health care provider, the health centre, or from the shop in their villages. However, young unmarried men felt shy and uncomfortable accessing one from their own village owing to the strong socio-cultural norm in rural India that condemns young people who indulge in any sexual act prior to marriage. Young people felt ignored by the health providers who they felt, only served the married ones. However, this research highlights the fact that men, whether married or unmarried, felt neglected by the public health care system in rural India.

#### 9.5 Why are men neglected by the health care providers (IV)

Discussions with the health care providers revealed that none of them were trained on gender issues. Further, they reported that they were clueless about the national population policy of the Indian government. Table 5 below indicates the type of training and the components covered during training for the different categories of health care personnel in rural India, as reported by them during interviews.

**TABLE 5.** Profile of health care providers and trainings imparted to them, Madhya Pradesh, 2005

Health workers	Population served	Issues trained on/ working with
Auxiliary Nurse Midwives	8000	Birthing, pulse polio, ante natal care (ANC), HIV/AIDS, malaria control, blindness control, leprosy control
Lady Health Visitors	35,000	HIV/AIDS, diarrhoea control, behaviour change, pulse polio
Male supervisors	35,000	AIDs, malaria, nutrition, reproductive health
Multi-Purpose Workers	8000	Reproductive health, behaviour change, HIV/AIDS, STI, tuberculosis, leprosy, malaria control

Health care providers were evidently given thorough training (Table 5). However, none were directed to gender equity or male involvement issues. The grass root level workers had very large populations to cover. For example, Auxiliary Nurse Midwives (ANMs) and Multi-Purpose Workers (MPWs) had to cater to 8000 people on a regular basis, and the Lady Health Visitor (LHV) and male supervisors had 35,000 people to cater to. The ANMs mentioned that their schedule was very structured owing to the fact that they needed to cover over 15 villages during the month and that each village was located at a distance. The results highlight that the problem lies in the organizational limitation. Firstly, the local level workers lacked an understanding of the strategic guidelines directing their work. Their training encompassed their daily work routine and reporting responsibilities, while policy briefings were not part of the training programmes. According to them, “with so much to do, it is impossible to take the time to read and understand the national and state policies”.

However, there is a strong evidence of provider bias among the local health care providers that has crept into the family welfare programme of the Indian government. The health care providers have adopted local men’s disinterested views on family planning and see it as a convenient justification to leave men out from service provision. This is evident with statements like, “Men are less participatory or seen not interested in such issues when we visit their homes for discussions” and “...men are themselves wise and understanding- they do not need to know much”. However, there were some views which gave importance of the need to reach out to men, even though they did not see it fitting well within their current work frame. Overall, the results indicate a stronger provider bias in reaching out to men and this is, in turn, supported by the organizational set-up within which these health providers operate.

## 9.6 Family planning decision-making (I, II)

While most married men in focus group discussions reported themselves to be their family's sole decision-makers on reproductive health matters, only one-third of the survey respondents reported so. It was clear from the study that since men conceptualised both spacing and permanent methods differently (I), decision-making for both were therefore placed in two different frames of reference. With regard to spacing methods, men reported discussing with their wives on method adoption. The decision to adopt reversible methods was solely between the husband and wife and the role of conjugal communication appeared especially evident in these decisions. The mother-in-law was not involved in this discussion. As indicated by one mother-in-law in the triad interviews, 'Even if I feel like advising my daughters-in-law, what is the use? They will not listen and will do as they please'. On the other hand, about 42 of the 60 mothers-in-law interviewed opined that they decided when their daughters-in-law would get sterilized and this was agreed by both sons (38) and their wives (44). This sums up that while mothers-in-law continue to be dominating in directing their daughters-in-law to adopt female sterilisation, it is not so with regard to the adoption and use of reversible methods.

## 9.7 Factors affecting adoption of female sterilisation among men (I)

Logistic regression with seven underlying independent variables and one dependent variable (whether couples accepted female sterilisation) were analysed, to study the factors associated with acceptance of female sterilisation. In the unadjusted analysis, men whose wives were sterilized were more likely to be older, have more than two living children, and have two or more sons. Very clearly the odds of getting sterilized on achieving the desired numbers of sons seem to be the main responsible factor, far outweighing other factors. Situations where husbands alone decided had higher odds of accepting the method as compared to where there was joint decision, or were based on suggestions by others.

All variables that were found significant at 0.05 levels in the unadjusted model were included in a step-wise regression model and the variables remaining at the last step were simultaneously adjusted. In the step-wise model, age and family type were dropped from the analysis. Living sons, age of the youngest child and decision-maker on sterilisation were the most important determinants of sterilisation acceptance. The odds of sterilisation based on numbers of sons reduced, although the association still was very significant. However, the likelihood based on increased age of the youngest child did not change much between the two models. The decision of husbands continued to be a strong predictor of sterilisation compared with joint decision or suggestions by others, after adjustment (Table 6).

**TABLE 6.** Odds ratios (and 95% confidence intervals) from logistic regression analyses assessing the likelihood of accepting female sterilisation by selected characteristics (N=780)

Factors	Sterilized (N=284)	Non-sterilized (N=496)	Unadjusted odds ratio (95% CI)	Adjusted odds ratio (95% CI) using stepwise regression
Age				
<=30 yrs.	97	326	1.0	
>30 yrs.	187	170	3.69 (2.7–5.1)***	#
Level of education				#
None	20	43	1.0	
Primary	51	71	1.54 (0.81–2.93)	
Middle+	213	382	1.20 (0.69–2.09)	
Family type				#
Nuclear	167	209	1.0	
Other	117	287	0.51 (0.38 – 0.69)*	
Living children				
<=2	68	318	1.0	1.0
3+	216	178	5.7 (4.08–7.88)***	2.16 (1.29–3.61)**
Living sons				
0	8	180	1.0	1.0
1	56	177	7.09 (3.29–15.29)***	5.12 (1.82–14.39)**
2+	220	139	35.49 (16.96–74.25)***	16.6 (5.92–46.58)***
Age of youngest child†				
1–2 yrs.	65	339	1.0	1.0
3+ yrs.	219	158	7.29 (5.14–10.34)***	7.19 (4.59–11.26)***
Who decides on Female sterilisation?				
Husband alone	61	43	1.0	1.0
Couple decides	106	185	0.40 (0.25–0.65)***	0.23 (0.12–0.45)***
Others suggest	117	268	0.31 (0.19–0.49)***	0.19 (0.10–0.36)***

\* p<0.05. \*\* p<0.01, \*\*\* p<.001;

Note: 8 men had not heard of family planning and additionally 5 men had not heard of sterilisation as a method. In all, 13 cases are not included in the analysis.

†: N=681 since only those who have a child are included in the analysis.

#: Age, level of education and family type dropped in the step-wise model



## 10 Discussion

The present research was formulated on the premise that an individual is not alone in any decision making, and that there are external influencers that guide him. This holds true even in the area of family planning and reproductive health, and especially, as this research has addressed, in the area of contraceptive choices.

### 10.1 Strengths and limitations of the study

The biggest strength of the present community-based cross-sectional research was that it used mixed methods, both qualitative and quantitative, and was conducted by local researchers. Overall, this research saw very high participation among all groups of interviewees adding to the reliability of the data. This may be due to the fact that in a hierarchical society like India, there is an inherent cultural dominance of the more educated urban people over the rural people and the natural graciousness towards a visitor (Jacobson 2004). Initially, the qualitative FGDs were carried out to enable the framing of the quantitative survey hypothesis. These FGDs were detailed and yielded in-depth information and were hence included in the data set.

An FGD is a form of qualitative research in which a group of people are asked about their perceptions, opinions, beliefs and attitudes with regard to a particular issue. (Henderson 2009, Krueger and Casey 2000, Morgan 1997, Puchta and Potter 2004). Questions are posed to an interactive group and the participants are free to discuss with other group members. The advantage of the FGDs (Carey 1995) in the current research was that there was room to generate responses and general opinions on sensitive issues, in an environment of trust among a homogeneous group of people in a short span of time. The groups were relatively easy to assemble. There was, of course the possibility of certain sections being excluded from the discussion, but these groups were not meant to be representative of the larger population and the representativeness of the population being studied came from the sample survey that followed after the FGD.

The discussion guides were flexible in terms of format, types of questions and desired outcomes, and generated very detailed information on each of the questions pertaining to male involvement and sexual and reproductive health from among the community men. Also, FGDs are extremely useful especially among groups with

lower literacy levels (Zimmerman et al. 1996), as was the case in point and this direct interaction between the researcher and the participants yielded rich information. The experienced and well-trained moderators were able to handle the various roles that people may have played within the group, for example, 'expert', 'quiet', 'hostile', 'friend', etc.

In-depth interviews were used to collect information among the rural health care providers. The primary advantage of in-depth interviews in this case was that it provided much more detailed information about the health care system than what would have been possible through, for example, surveys. It also provided respondents with a relaxed atmosphere to discuss certain sensitive issues of their work. However, there was a danger of the information being prone to bias because the health care providers might have wanted to "prove" that they worked as per the guiding principles. However, this was unlikely in my research since the number of interviews was quite large and after a point of time, health care providers did talk about their frustrations related to their work too. Also, I personally conducted all interviews and introduced myself as a researcher wanting to understand their work better, with no affiliation to the government health system. This may have added to unbiased responses.

To the best of the researcher's knowledge, this was the first time that triad interviews were conducted with three members of the same family at the same time at different locations in reproductive health research, ensuring almost no information bias. These interviews were no doubt labour intensive as three moderators of similar education and skill levels were required to conduct them. This was handled very well since the three research assistants were working in the intervention programme with the researcher. For this research all the three of them were thoroughly trained on moderation skills at the same time. The short, semi-structured, simultaneous but separate interviews with the mothers-in-law, sons and daughters-in-law proved to be an effective tool to elicit succinct and to-the-point answers to the very specific questions posed. Since each interview was short (not more than half hour), everyone participated in the complete interviews with the result that there were no drop-outs in between interviews.

The 'traid' interviews used in this sub-study had three main advantages: 1. No information bias: as all three players were interviewed at the same time, and hence there was no question of 'discussion' between respondents, thus ensuring no information bias. 2. No selection bias: Three interviewers – 2 women and 1 man were assigned one set of respondents each. For example, all the mothers-in-law were interviewed by the first female research assistant; all the daughters-in-law were interviewed by the second female research assistant while all men were interviewed by the male research assistant. 3. It was an efficient method with respect to time too.

The surveys not only helped corroborate the findings from the qualitative studies, but also ensured a representative sample for the study. Moreover, these interviews were useful in assessing the extent of the matter and helped in understanding reproductive health priorities in rural central India.

The experienced research supervisors, like the three research assistants, had worked with the researcher in the five-year reproductive health intervention in the same state. They were well-versed and sensitized with the subject and had some previous training while working in the intervention project. They were further trained by me on specific research tools and research management.

Overall, despite the sensitive nature of the questions with regard to reproductive health and family planning, this research reached out to different stakeholders to assess their views, thus adding to its overall strength.

However, there were certain limitations to this research.

A five-year communication campaign on sexual and reproductive health intervention was on-going in the research areas. There was the possibility of response bias due to the communities' exposure to these campaigns. However, this was not likely to impact this research results because of two reasons. 1. The objective of the campaign was on making contraceptives (condoms, oral pills) available through the social marketing programme. 2. The villages that were randomly selected for this research were other than the ones where the communication campaign was on (see Introduction) and this was done in the entire districts.

There could have possibly been some other measurement errors due to response bias (I, III) since responses were being recorded real time and there was no means of verification or validation of their responses (Gratton, and Jones 2004, Trochim 2006). Also, in the two surveys among married men (I) and young unmarried men (III), we did not interview the women to corroborate what men had reported. Finally, the cross-sectional KAP surveys were not geared to understand causalities, if any, since information was gathered from individuals (Launiala 2009). In KAP surveys, as is the Cairo consensus, it is the individuals who are at the centre of attention. In societies where people think and act relationally, such as India or some African countries (Launiala 2009), KAP studies provide a limited understanding of the influence of family networks and local community in reproductive health choices. Therefore, while the current study did use KAP survey to gain insights into men's (both married and unmarried) perspectives on male involvement in reproductive health, this was only partial data that was then combined with qualitative data on the inter-spousal relationships, influence of extended families, and the role of the service provision system.

Snowball technique was used to gather respondents for the focus group discussions. Despite snowballing being a non-probability technique, and having its limitations as a recruitment technique, it was chosen since the topic of the discussions

was sensitive and required making use of personal networks to encourage men to get over their apprehensions and attend the group discussions.

India being a vast country, the study population represented only the central and parts of northern Hindi speaking belt of rural India, and in no way did it represent all Indian rural areas.

## 10.2 Conceptualisation of family planning

In this study, almost all men had heard of family planning and contraceptives. This finding was not surprising. What was surprising, however, was that married men distinguished family planning and contraception as two separate issues. The term “family planning” was often understood to mean sterilisation, while contraception referred to the use of spacing methods, according to men. One reason for this is possibly due to the fact that female sterilisation is the most popularly used method in the communities, and the health care providers also encourage women to accept this method. Secondly, in rural Madhya Pradesh, the contraceptive prevalence rate for any modern method is around 53%, of which 44% per cent are female sterilisation users, (IIPS 2005–06) and hence the method becomes synonymous with family planning. To the best of the researcher’s knowledge, there are no earlier studies that have tried to understand how men conceptualise and understand family planning within their social context.

The study findings bear out the vulnerabilities that young unmarried people faced with respect to access of knowledge and services pertaining to sexual and reproductive health. Like the adult married men (I), this study too focused on understanding how young unmarried men conceptualised family planning. However, unlike the married men, unmarried young men related only to condoms as a method about which they had some information, and they knew peers who had used them. As for the other methods, they had only heard of them but did not have any specific information about those modern methods; for example, intra-uterine devices and oral pills. Similar findings were reported in other studies indicating a superficial awareness of sexual and reproductive health matters among young people, including the married adolescents (Alexander et al. 2006, Abraham 2002, Barua et al. 2001, Chandra-Mouli et al. 2010). In a study on the situation and needs of youth in India (IIPS and Population Council 2010), it was noted that misconceptions abounded on most topics including sex and pregnancy, contraceptive methods including condoms, STIs and HIV/AIDS and the conditions under which abortion was legally available or restricted.

### 10.3 The popularity of female sterilisation today

In the study by Chandhick et al. (2003) a large majority of rural Indian women (71%) used a family planning method for the first time only after completing their desired family size. The main reason provided for not using any family planning method to space births was “family not complete” (35%). Some studies indicated that in rural areas of northern and central India, the desired family size of most couples still included three or more children (Chandhick et al. 2003, IIPS 2005–06, Pande and Astone 2007, Rajaretnam and Deshpande 1994). Since sons were clearly the determinant of “reproductive success,” Chandhick and others argued that only a significant change in the status of rural women could bring about widespread compliance with the official family planning programme’s two-child norm. One study has aimed at finding out possible relationship of sterilisations as a method of family welfare with the declining sex ratio and concludes that sterilisations are used after getting a child with the preferred sex (which obviously is a male), thereby effectively preventing the birth of a girl child (Bhasin et al. 2007). A study among currently married men in Sikkim in eastern India found that awareness and prevalence of contraceptive use among married men in a rural community were quite high. Nevertheless, female contraceptive methods continued to be the dominant method used in the community (Chankapa et al. 2010).

In India, earlier as well as recent research has mainly interviewed women on family planning and contraception (Barua and Kurz 2001, Edmeades et al. 2011, Kumar et al. 2010, NFHS-1 1992, NFHS-2 1999) and very few studies have sought men’s views (Balaiah et al. 1999, Balaiah et al. 2005, Chankapa et al. 2010, Das and Ray 2007, IIPS 2005–06). This thesis demonstrates that although female sterilisation continues to be the number one option of family planning in rural India, its ‘popularity’, according to men, is more because it is the method that is most known and understood by eligible couples. In our study, 34% men reported that their wives were sterilized. Slightly more than one-third of these couples who eventually adopted female sterilisation used a reversible method prior to sterilisation. These findings were similar to another study conducted in the region (Sangwan and Maru 1999). This indicated that the emphasis of the Indian family welfare programme was on female sterilisation and reiterated that the burden of family planning was on women. It also indicated that the practice of either delaying the first birth or spacing between two child births was non – existent. Similar findings were observed in other studies (Raju and Leonard 2000a, Varkey et al. 2004, IIPS 2005–06).

## 10.4 Determinants of female sterilisation adoption

The findings from the regression analysis confirmed some of the findings from previous studies. According to Thind (2005), maternal age, the number of living sons, religion, caste (scheduled caste/tribe/backward class) status, exposure to mass media and household standard of living were statistically significant determinants of the choice between sterilisation and other contraceptive methods (Thind 2005). Our study found somewhat similar results in determinants of sterilisation acceptance. Although an important indicator of family size in the study was the number of living children, it was mostly the number of sons born and living that established the family size.

In rural Madhya Pradesh, the realized number of children was higher than the ideal ones (IIPS 2005–06). This was also evident in the research of Balaiah et al. (1999). The family size was more than the ideal because sterilisation was performed only after the desired numbers of male children were born.

With a child sex ratio of 912 girls to 1000 boys, gender bias does exist in these villages and the girl child is viewed as a burden on the family. The boy, in turn, is considered the one who will continue the family lineage. This is something regulated by social norms that can be changed only slowly by improving the status of women.

Overall, the results of this study agree with most of the literature (Thind 2005, Balaiah et al. 1999, Donovan 1995, Bhende et al. 1991) and the number of sons had a strong influence on decision to sterilize compared to number of living children. This was clearly seen in the multivariate model with high odds of number of living sons. Similarly, in a male dominated society, the acceptance of female sterilisation based on husband's decision alone is significant.

The qualitative data analysis in this study reported men as significant decision-makers in family planning acceptance. Similar results have been reported in several studies (Becker and Costenbader 2001, Jejeebhoy 2002, Islam et al. 2006, Kadir et al. 2003, Gayen and Raeside 2006, Donner 2008, Becker et al. 2006, Maharaj and Cleland 2005, Islam et al. 2006, Gipson and Hindin 2007) using paired interviews, matched data or self-reports among married couples to arrive at the response-compatibility index that males are more likely to influence fertility decision than other family influencers.

My study further shows that although there are less complicated contraceptive options for male, for example, condoms and non-scalpel vasectomy, men, having decided to opt for a permanent method, would rather have their wives get sterilized rather than opting for one of the methods themselves. Similar to other studies (Säävälä 2002, Jeffery et al. 1994, Rao and Sinha 2001), in this case too men gave reasons of medical trauma, the fear of becoming physically weak and impotent as an important constraint to the acceptance of male sterilisation. According to Rao and

Sinha (2001), there is a strong notion in villages among both men and women that persons engaged in manual labour, such as, farmers and labourers should not go for sterilisation and that, there was a fear of men losing their virility after the operation. These results reiterate the need to educate couples with complete information about each method.

## 10.5 Intra-familial communication on family planning

Under the patriarchal joint family society system, a young married woman is under the control of the mother-in-law, who heads the power hierarchy effective among the women of the household. The mother-in-law may affect the reproductive health decisions of daughters-in-law as well as human capital investments in grandchildren. These decisions in turn influence the economic activities and outcomes of families, and consequently, that of society as a whole.

Going by earlier literature that indicated the dominating role of mothers-in-law in crucial family planning decisions in South Asia (Barua and Kurz 2001, Kadir et al. 2003), my study attempted to understand whether there was any change in the position of the mother-in-law within the family. As is evident from this research, the role of the mother-in-law had weakened and her domination had waned with regard to family planning decision making. While on the one hand, she was still influential in deciding the timing of her daughter-in-law's acceptance of sterilisation, the young couple did not consult her in the decision to adopt reversible contraceptives. In this regard, the mother-in-law also felt left-out. This result is similar to a Pakistan study (Kadir et al. 2003) that reported that overall, the mother-in-law's role seemed to be somewhat overshadowed by that of her son (family male member), except in the area of limiting family size. These results contradict certain available literature (Libbus and Kridli 1997, Salway 1994) that indicate strong influence of the mother-in-law in fertility decision making.

However, this study found that while the mothers-in-law were dominant in most areas, including household matters and deciding health care for children, the difference was evident only in family planning matters. Similar to this study, few other studies found the role of mothers-in-law very important with regard to child health and food distribution (Pettigrew 1986, Saini et al. 2006). This is contrary to the Pakistan study (Kadir et al. 2003) that reported responsibility of household and child care matters to be that of a nuclear family.

Sons in this study seemed to approve of the role of their mothers in the family and gave them their position in the household. In this respect, the views of daughters-in-law were different from those of mothers-in-law and sons, wherein the younger woman did not easily acknowledge the importance of the older woman in the family. Daughters-in-law seemed to be envious of the position their mothers-in-law

had within the family. Sons and daughters-in-law tended to see mothers-in-law's roles differently. In the son's view, she was an important personality and decision-maker when it came to broader family responsibilities, like health, child care and taking decisions for the family, while the daughter-in-law had a more ambivalent relationship with her (Jain et al. 1992, Jeffery et al. 1989, Kadir et al. 2003, Säävälä 1999, Vera-Sanso 1999).

The results of this case study in rural Central India showed that the view that the older generation, particularly the mother-in-law, was the preponderant authority regarding childbearing in rural South Asia is undergoing change. The young couples in the study, having realized the mother-in-law's aversion to temporary reversible methods of contraceptives, preferred to keep them out of the decision-making process, leading to covert use of spacing methods among couples. The findings support the empirical analysis of Rahman & Rao (2004) who pointed out that women's autonomy is not solely a reflection of kinship structures.

## 10.6 Young, unmarried men and SRH services

This study interviewed young men aged 17–22 years. This criterion is different from any of the standard criteria for adolescents and young people. The United Nations Population Fund (UNFPA) defines adolescents as 10–19 year olds (early adolescence 10–14 and late adolescence 15–19), youth as 15–24 year olds and young people as 10–24 year olds (UNFPA). WHO defines adolescence as the second decade of life, the period between the age of 10 to 19 (WHO 2001). The International Planned Parenthood Federation (IPPF) also defines adolescence as the age between 15 to 19 (IPPF 1994). However, the categorization of adolescence and young people varies depending on adolescents' individual situations (IPPF 1994). For example, married young people tend to be considered adults while young people at school are still considered as adolescents, even if they are of the same age (IPPF 1994).

In India, about 64% of rural men aged 25–29 years were married by legal age 21 and 67% women aged 20–24 years were married by legal age 18 (IIPS 2005–06). It was therefore necessary to segment the youth into groups depending on their needs. Also based on my experience of working with young people during the sexual and reproductive health intervention, clearly this age group was on the brink of marriage. It was therefore necessary to target this age group to understand their situation with regard to reproductive health issues.

My research suggested that majority youth (67%) were exposed to mass media, mostly television. Although mass media was important to young people in terms of reproductive health information, young men found it insufficient for more in-depth and complete information on matters pertaining to sexual and reproductive health. Other studies (IIPS & Population Council 2010, Khan et al. 2008) too



emphasized young people's high exposure to television. One study (Khan et al. 2008) found that gatekeepers of youth, including parents, community elders and influencers were worried about rapid changes in the aspiration, expectation, and irresponsible behavior of young men which included changing values of sexuality leading to various risk behaviors among young men, as a consequence to mass-media exposure. Young men in my study preferred to discuss these issues in a face-to-face format, preferably with a health worker for more detailed information. Young men discussed such intimate issues with their friends and peers. Family setting was hardly ever considered for such discussions by the young men. Another recent Indian study (IIPS & Population Council 2010) among youths regarding communication with parents on issues relevant to youth – such as school performance, romantic relationships, growing up matters and reproductive processes too found similar results. In that multi-state study around India, a parent was rarely cited as a leading confidante on the more sensitive matter of boy-girl relationships. Moreover, while young women identified their mothers as the most likely confidante on menstrual problems, young men rarely identified a parent as a leading confidante on matters relating to nocturnal emission or *swapnadosh* (IIPS & Population Council 2010).

One key finding from the current research was that although condoms were the only appropriate contraception for young unmarried men, they were not easily accessible to them. As reported in another study, (IIPS and Population Council 2010) here too men reported being too shy and embarrassed to access condoms from their own villages and worried about being seen with a condom. Findings also suggested that consistent condom use was missing and it did not matter to these young unmarried men whether they used condoms or not. Other research (IIPS and Population Council 2010) has similarly reported that consistent condom use is rarely practiced by those reporting pre-marital sexual relations, and very few married youth reported the use of condoms at the time of the interview. Moreover, large proportions of youth reported discomfort about seeking contraceptives, including condoms, from a health care provider or pharmacy.

Unmarried men's experiences of sexual health problems in the study were similar to other qualitative studies from among both married and unmarried men from different parts of India (Savara and Sridhar 1992, Verma et al. 1998, Joshi et al. 1998). Clearly, males throughout India are anxious and concerned about 'semen loss' and 'weakening of semen'. Concerns about loss of sexual vigour are common, and result in the frequent mention of *kamjori* (weakness) as a sexual health problem, notably in the Mumbai study (Verma et al. 1998). The rural men in the study were well aware of the sexual transmission of infections, but they also believed that these conditions could be caused by diet, excessive heat and other reasons. Awareness of AIDS was lacking among these men. Overall AIDS awareness among rural men in Madhya Pradesh state is reported to be 59% (IIPS 2005–06). However, with intensive HIV

campaigns being implemented by National AIDS Control Organisation, this picture is changing fast (NACP III). NFHS (2005–06) reported 51% of rural men in Madhya Pradesh knew that correct and consistent condom use can reduce the chances of HIV transmission; 68% of our young subjects were aware of the same.

## 10.7 Health care providers' exclusion of men

This research recognized the urgent need to develop initiatives that reached out to men during their often brief contact with the health care providers to address men's unique concerns, and increased access to counseling and services for couples who preferred joint consultation. This result was similar to the results from another study (Pile et al. 2008) which went on to say that such initiatives needed to be implemented without compromising women's autonomy.

In 2010, the Ministry of Health and Family Welfare carried out an analysis of the staff strength in each of India's rural health setups as all posts filled was one of the important prerequisites for the efficient functioning of the rural health infrastructure. The study found that overall there was a shortfall of around 9% of female health workers and a whopping 64% of male health workers. Similarly, more male assistants were missing from the field (44%) than their female counterpart (31%). Overall, 52% sub centres were without a male health worker. The analysis clearly stated that there was a dearth of health workers in rural India, with a larger shortfall among the male staff (MPW-M) and Male Supervisors (Rural Health Statistics in India, GoI 2010).

Surprisingly, despite all the evidence both from the study and others that pointed to the 'ignored' rural men, as well as the Indian Government being a signatory of the ICPD (1994) for all its elements, including encouraging male participation in sexual and reproductive health, the project implementation plan of the current National Rural Health Mission (2006–2012) for the state of Madhya Pradesh continued to exclude men from the larger sexual and reproductive health programme in the state (National Rural Health Mission 2006). While the plan specified the need for enhanced training to the female health providers, namely, the ANMs and LHVs, once again, the male staff was left out in totality. There was only a mention of involving men in the statement '... it is the strategy to promote male participation in Family Planning.' (National Rural Health Mission 2006), but missed to mention the strategy. With such an operational lacuna existing in the current plan, males continue to remain left-out from the programme. This will eventually lead to the health staff continuing to ignore men unless it involves men's own health. Women will continue to take the onus of family planning on them unless some immediate measures are taken at the policy level. In such a situation our initial question of why men feel ignored by the health care providers remain largely unanswered.

Another argument to the 'missing men' in community based sexual and reproductive programme could be the continuing impact of the 'forced' vasectomy programme during the Indian emergency years (1975-77). The research subjects were very young or might not have been born at the time of the emergency rule, yet men had heard about the 'horror' of the family planning programme. This has been entrenched in the society to such an extent that part of the bias may be from men themselves.

All these reasons, along with the health care providers' lack of motivation to involve men due to their excessive work pressures has led to men feeling excluded from the family welfare programme, unless men on their own approach them. This was acknowledged by the health workers themselves during my research.

## 11 Conclusions

It is over 17 years since the 1994 International Conference on Population and Development recognized men as legitimate partners for sexual and reproductive health promotion. This recognition was a result of work carried out during the 1980s and 90s when programme planners and implementers realized that it would be difficult to achieve sexual and reproductive health goals without the active participation of men. The Programme of Action (2004) proposed that men should be involved because their active participation was crucial to the success of the programme as well as to bring about gender equity, for the overall welfare of women and children.

The present research aimed to explore the extent of and hindrances to male involvement in family planning and reproductive health services in rural central India. The following conclusions were drawn:

1. Men conceptualise family planning in ways different from the government family planning promotion campaigns. An understanding of local terminologies and concepts used by men would help policymakers and planners devise and implement more effective strategies to promote reversible contraceptive methods. Besides the married heterosexual men, it is also important to understand the conceptualisation and sexual and reproductive health concerns of unmarried youth.
2. This study corroborates other studies indicating that men are indeed willing and enthusiastic participants in family planning programmes. They are keen to learn more about sexual and reproductive health, family planning and various contraceptive methods and prefer getting all these information from local health care providers through inter-personal discussion.
3. Because men are decision-makers in the communities, male perception of family planning is an important factor when trying to influence the usage pattern of reversible methods in family planning. Moreover, men strongly believe that they are more aware and knowledgeable about these issues than their wives although they do acknowledge that the health workers discuss these issues more with their wives than with them. This makes it all the more important for programme planners to ensure that men have complete and correct information, for them to make informed choices.

4. Various government initiatives have attempted to encourage couples to use spacing methods. However, due to gender inequalities that continue to exist in our societies, and as highlighted once more in this study, couples continue to produce children till they achieve their desired number and sex-combination of children; after which they adopt female sterilisation. The concept of delaying or spacing between births is yet to find a firm footing in our rural societies.
5. Finally, young, unmarried men in rural India seem ready and willing to absorb reproductive health messages and services, and it is just a matter of effectively reaching out to them. The sexual and reproductive health of young unmarried men in the study is currently hampered by inadequate access to correct and complete information and youth-friendly health services like interpersonal discussion with health care providers, and easy and non-discriminatory access to supplies, especially condoms.

## 12 Recommendations

The recommendations have been organised into two broad categories:

### **Information, Education and Communication**

- Men should be educated in all aspects of reproductive health as both direct beneficiaries and partners. Current education campaigns need to be reviewed to assess their value in promoting male involvement. Programmes that inadvertently stigmatise condom use so that it is associated only with high-risk situations may reduce condom use in marital relationships.
- Reproductive health education must be linked to service provision. Education alone will be insufficient without a clear understanding of what services are provided, how they can be used, and in what way they benefit both individual males and their families.
- The mass media should be used more frequently and more effectively. Television is widely accessible and can reach even highly remote groups. Also, this medium is hugely popular with the rural youth groups. This media is highly useful in conveying messages in a country with an illiteracy rate of 36 per cent (Census 2011). This must, however, be supported by inter-personal communication preferably by the health care providers.

### **Service Improvement**

- Existing health care providers need to be briefed about the national and state policies and trained on strategies to involve men in family welfare programmes. A set of short, clear and constructive guiding principles needs to be developed that will assist them in mainstreaming male involvement in reproductive health strategies.
- Any measure that seeks to challenge gender roles must be introduced and implemented as sensitively and as appropriately as possible. For example, men are interested in their reproductive health of themselves and that of their wives and may see themselves as the family protectors. Therefore, the programme should attempt to persuade them to participate with women to family planning consultations purely on the basis of their responsibility as husbands and partners.

- Effective outreach activities need to be developed to facilitate both men's and women's access to RH services. Limited access to, and perceptions of, formal health services suggests that culturally and socially appropriate outreach activities might be particularly effective for assisting some people in some areas in obtaining RH information and care. For example, evidence collected from young people in this study suggests that although youth discuss issues with their peers, they still consider the staff of health facilities as useful sources of information.
- The Indian government should map and identify the important groups with specific needs, evaluate available information and services, and devise action plans for each of these groups. While the international definition of youth could be relevant generally, from the Indian context, needy age-groups that may not fit within these definitions, but are found to have specific needs, should nevertheless be targeted for information and services.
- Given the appropriateness of the condom for use among young people, it is important that bold and imaginatively designed communication programmes aimed at youth are implemented so as to dispel misconceptions and encourage condom use; and at the same time bold and imaginative changes are made in the service delivery structure that enable youth to access condoms easily and in confidence.

## Acknowledgements

The present study has been carried out under the auspices of the School of Health Sciences, (formerly Tampere School of Public Health), University of Tampere, in collaboration with Väestöliitto, Finland and DKT India. I am grateful to the Academy of Finland (Grants SA 205648 and SA138232), the Doctoral Programmes in Public Health (DPPH), and the University of Tampere, Finland, for supporting this endeavour financially and in all respects through its many phases.

It is my pleasure to thank the many people who have made this thesis possible.

My gratitude to my Ph.D supervisor Dr. Teija Kulmala cannot be overstated. She was the prime mover in providing me this opportunity for pursuing a Ph.D when I had, in a sense tapered off, after a busy 15 year career. With her enthusiasm, inspiration and support, she helped to make this journey enlightening for me.

My sincerest thanks to Prof. Suvi Virtanen, my co-supervisor and coordinator of the IPPE programme for our batch (2005–06), who has constantly encouraged and supported me in my work.

I wish to express my heartfelt thanks to my follow-up committee member, co-author, and a good friend, Docent Minna Säävälä for her constant support, sound advice, and lots of good ideas throughout the tenure of this work. She was my constant guide, and her continuous motivation helped me get through difficult times. Thank you very much for reviewing numerous versions of my articles and summary, and always coming back with constructive insights. Her guidance in analyzing the qualitative research, which this thesis is heavily based on, was especially very helpful. Thank you for your support, camaraderie, entertainment, and your care.

I sincerely thank the International Postgraduate Programme in Epidemiology (IPPE) and all the faculty members of School of Health Sciences as well as some from the Medical school. I sincerely thank Prof. Emeritus Matti Hakama for initiating this international programme which has given non-resident students like me an opportunity to study in the School of Health Sciences. I would like to thank the director of the school Prof. Pekka Rissanen, Dr. Ulla Ashorn, my follow-up member, Prof. Anssi Auvinen, Prof. Pekka Jousilahti, Prof. Arto Palmu, Prof. Hannu Oja, Prof. Stephen Walter, Prof. Matti Lehtinen, Prof. Timo Hakulinen, Prof. Per Ashorn, Sr. Lecturer Heini Huhtala, Dr. Susanna Kautiainen, Dr. Miia Artama, Dr. Klaus



Nordhausen, Lecturer Neill Booth and all other members of the administrative staff who helped me in my studies and research work. I am grateful for the assistance I got from Heli Koivisto for all my computer and internet needs throughout the sojourn in Finland. My sincere thanks to the janitors of the school for assisting me in all practical matters.

Special heartfelt thanks to Catarina Ståhle-Nieminen, our very own International Coordinator, without whom I would have been totally lost. She was always there whenever I approached her, giving sage advice, helping with various applications, coordinating various activities, and all this with a smile. I am totally indebted to her for her kind assistance and help throughout the journey from registering for the programme to the huge support towards the end till defending my thesis. I also wish to thank the previous coordinators, Marika Yli-Arvela and Salla Lappi for all their help and assistance during the nine-month stay in Tampere. From the DPPH, I wish to profusely thank Prof. Marja Jylhä, Dr. Kirsi Lumme-Sandt and Tiina Immonen. Leena Nikkari's support throughout and especially during the last phase of my stay in Finland merits appreciation. I profusely thank Sirpa Randell for her great help with the technical editing, and Outi Sisättö and Soile Levälähti for helping with printing and publication of this manuscript.

I wish to sincerely thank my two reviewers – Prof. Elina Hemminki and Docent Maili Malin for their very thorough and insightful comments on my thesis, and their expeditious review of my thesis. I am indeed indebted to them.

This work would never have been possible without the consent and participation of my numerous respondents who agreed to talk to me. Thank you very much for being the bedrock of my work. I also thank the numerous reviewers of my original articles and the publishers of my work.

My big thank you to Väestöliitto for giving me the opportunity to work in Madhya Pradesh (MP), my study area, for six long years, and for helping me put in place the framework for this scientific research. I would specially like to thank the director, Helena Hiila, and her colleagues, Hellevi Hatunen, Hilikka Vuorenmaa and others from the Global Development Unit, who were there for me and took interest in my work.

Back home, this journey would never have taken off if DKT India, the social marketing organization with whom I was professionally associated had not tasked me for making a difference among the community in Madhya Pradesh. I wish to thank Phil Harvey, Andy Pillar and Sandra Gass for believing in my abilities to make a world of difference to the community men and women in rural MP. To Andy Pillar, thank you for your camaraderie and for helping me decide to take this 'jump' into the world of academics once again.

I would like to thank the International Institute for Population Sciences, Mumbai, and their ex-director, Prof. Fauzdar Ram, for giving me the ethical clearance to carry out this work, for making the library of the institute accessible to me, as well as for commenting on my earlier proposal for this research.

My heartfelt thanks to Vesa, Henriikki, Sofia and Ella for their hospitality when I arrived here for the first time. My sincerest thanks to Johanna Sarlio; thank you for being there for me at all times, whenever needed. Most of all, thank you for giving me a Finnish address for all practical matters. Pentti will always remain in my son's and my heart forever. His ever-cheerful face has been etched in our hearts and minds permanently. Pia, Milan and Alekski Das, thank you for welcoming me into your family and for the many lovely evenings we have spent together. My friends, Annika Launiala, Valerie Flax, Heli Kuusipalo, thank you for being my sounding boards when I needed to bounce ideas and for supporting me in my work. My best friend Shilpa Bhatt who sent a whole carton of Indian food when I landed here for my IPPE programme, thank you so much for your long-distance support and for always thinking of me. My deepest gratitude to Tuomas, Arni and Toivo, for always welcoming me with open arms into their home and hearts.

Many thanks to my IPPE and SoE colleagues for providing a stimulating and fun environment to learn and grow. I am especially grateful to Mangesh Pednekar, Richard Muwonge, John Phuka, Jenny Wu, Alexei Baburin, Felipe Castro, Katerina Savchuk, and Aline Kapeu; thanks for being such good friends and making my study and stay in Finland so enjoyable. My friends Bright Nwaru, David Doku and Shivaraj NS, thanks so much for assisting me towards the end of this journey.

I am totally indebted to my entire family for providing a loving environment for me. My mother-in-law, Alamelu, has always encouraged me throughout this process. Thank you very much for taking care of the family during my extended periods of absence from home. You were instrumental in my decision to start this journey. My loving husband Venkatesh, who was always there, encouraging me not to give up – thank you for being ever-so supportive. My dearest sisters Anu and Arti, my brothers-in-law, Murali and Srinivas, my nieces Surabhi and Karuna and my nephew Ameya, all of you have been truly wonderful and supportive. Last but not the least, my son Pradyumna (Prad), what would I have done without you? You have tolerated my long absences from home and have always been so patient, supportive and understanding. Thank you so very much for being a wonderful son.

Lastly, and most importantly, I wish to thank my mother, Padma Char and my father the Late C. Narasimha Char. Their constant love and encouragement has gone a long way in making me what I am today. My father's last words to me before his untimely demise were – 'you must go to Finland and pursue your dreams', my predominant impetus to register for the resident programme. To him I dedicate this thesis.

Arundhati Char

Tampere, Finland, November 2011

## References

- Abraham L. 2002. Bhai-behen, true love, time pass: Friendships and sexual partnerships among youth in an Indian metropolis. *Culture, Health & Sexuality*. 4:337–353.
- Abraham L. 2001. Understanding youth sexuality: A study of college students in Mumbai city. *The Indian Journal of Social Work*. 62:233–248.
- Agha S. 2010. Intentions to use contraceptives in Pakistan: implications for behavior change campaigns. *BMC Public Health*. 10:450.
- Alexander M, Garda L, Kanade S, Jejeebhoy S and Ganatra B. 2006. Romance and sex: Pre-marital partnership formation among young women and men, Pune district, India. *Reproductive Health Matters*. 14:144–155.
- Alexander M, Garda L, Kanade S, Jejeebhoy S and Ganatra B. 2007. Correlates of premarital relationships among unmarried youth in Pune district, Maharashtra, India. *International Family Planning Perspectives*. 33:150–159.
- Amatya R, Akhter H, McMahan J, Williamson N, Gates D and Ahmed Y. 1994. The effect of husband counseling on Norplant contraceptive acceptability in Bangladesh. *Contraception*. 50:263–73.
- Armitage A. 1993. Family planning in Maghreb: Redefining responsibility. *Entre Nous Cph Den*. 24:10–11.
- AVSC International. 1997. Profamilia's Clinics for Men: a Case Study. AVSC International, New York.
- Balaiah D, Naik DD, Parida RC, Ghule M, Hazari KT and Juneja HS. 1999. Contraceptive knowledge, attitude and practices of men in rural Maharashtra. *Advances in Contraception*. 15(3):217–34.
- Balaiah D, Naik DD, Ghule and Tapase P. 2005. Determinants of spacing contraceptive use among couples in Mumbai: a male perspective. *Journal of Biosocial Science*. 37:689–704.
- Barnett B and Stein J. 1998. *Women's Voices, Women's Lives: The Impact of Family Planning. A synthesis of findings from the Women's Studies Project*. Research Triangle Park, NC: Family Health International.
- Barnett B. 1998. Family planning use often a family decision. *Network*. 18(4):10–11,13–14.
- Barua A and Kurz K. 2001. Reproductive health-seeking by married adolescent girls in Maharashtra, India. *Reproductive Health Matters*. 9(17):53–62.

- Basu I, Jana S, Rotheram-Borus MJ, Swendeman D and Lee SJ. 2004. HIV prevention among sex workers in India. *Journal of Acquired Immune Deficiency Syndromes*. 36(3):845–8.
- Basu AM. 2005. Ultramodern contraception: Social class and family planning in India. *Asian Population Studies*. 1(3):303–323.
- Battala M. 2001. Knowledge of STDs, HIV / AIDS and risk behaviour among single male migrants from Karnataka in the Govandi slum area of Mumbai, India. *International Institute for Population Sciences*. 10 p.
- Becker S and Costenbader E. 2001. Husbands' and wives' reports of contraceptive use. *Studies in Family Planning*. 32(2):111–29.
- Becker S, Hossain MB and Thomson E. 2006. Disagreement in spousal reports of current contraceptive use in sub-Saharan Africa. *Journal of Biosocial Science*. 38(6):779–96.
- Beckman LJ. 1984. Husbands' and wives' relative influence on fertility outcomes. *Population and Environment*. 7:182–197.
- Berer M. 1996. Men. *Reproductive Health Matters*. 7:7–11.
- Bernstein S and Hansen CJ. 2006. Public choices, private decisions: Sexual and reproductive health and the millennium development goals. *UN Millennium Project Report: United Nations Development Programme*.
- Bhasin SK, Saini NK, Trikha VK and Joshi ID. 2007. The disappearing girl child: Possible role of sterilisations as a method of family planning. *Indian Journal of Community Medicine*. 32(3):212–214.
- Bhattacharyya K. 1997. Key informants, pile sorts, or surveys? Comparing behavioural research methods for the study of acute respiratory infections in West Bengal. In: *The anthropology of infectious diseases*, pp. 211–238. Eds Inhorn MC and PJ Brown, the Netherlands: Gordon and Breach Publishers.
- Bhende AA, Choe MK, Rele JR and Palmore JA. 1991. Determinants of contraceptive method choice in an industrial city of India. *Asia-Pacific Population Journal*. 6(3):41–66.
- Bhuyan KC. 1991. Social mobility and family planning practices in rural Bangladesh – a case study. *Journal of Family Welfare*. 37(4): 46–58.
- Bloom SS, Tsui AO, Plotkin M and Bassett S. 2000. What husbands in northern India know about reproductive health: Correlates of knowledge about pregnancy and maternal and sexual health. *Journal of Biosocial Science*. 32(2):237–251.
- Boulay M and Valente TW. 2005. The selection of family planning discussion partners in Nepal. *Journal of Health Communication*. 10(6):519–36.
- Boyce C and Neale P. 2006. A guide for designing and conducting in-depth interviews for evaluation inputs. *Pathfinder International Tool Series. Monitoring and Evaluation -2*.

- Bradley J, Moses S, Blanchard JF, Rajaram S, Ramesh BM, Verma S and Alary M. 2010. Assessing reported condom use among female sex workers in southern India through examination of condom availability. *Sexually Transmitted Infections*. 86 Suppl 1:i44–8.
- Bruijn B. 1999. *Foundations of demographic theory. Choice, process, context*. Amsterdam. Thela Thesis.
- Bryan AD, Fisher JD and Benziger TJ. 2001. Determinants of HIV risk among Indian truck drivers. *Social Science and Medicine*. 53(11):1413–26.
- Bustamante-Forest R and Giarratano G. 2004. Changing men's involvement in reproductive health and family planning. *Nursing Clinics of North America*. 39(2):301–18.
- Carey MA. 1995. Comment: Concerns in the analysis of focus group data. *Qualitative Health Research*. 5(4):487–495.
- Cates W Jr. 1996. The dual goals of reproductive health. *Network*. 16(3):3.
- Census of India. 2011. Office of the Registrar General and Census Commissioner, Government of India.
- Chandhick N, Dhillon BS, Kambo I and Saxena NC. 2003. Contraceptive knowledge, practices and utilization of services in the rural areas of India (an ICMR task force study). *Indian Journal of Medical Science*. 57:303–10.
- Chandra-Mouli V, Lawe-Davis O and Dick B. 2010. Responding to the needs of adolescents. *Bulletin of the World Health Organization*. 88:3.
- Chankapa YD, Pal R and Tsering D. 2010. Male behaviour towards reproductive responsibilities in Sikkim. *Indian Journal of Community Medicine*. 35(1):40–45.
- Chaturvedi S, Singh Z, Banerjee A, Khera A and Joshi RK. 2006. Sexual behaviour among long distance truck drivers. *Indian Journal of Community Medicine*. 31 (3):153–156.
- Clark J, Young KM and Rochat R. 2008. Men's involvement in Family Planning in rural Bangladesh. *Journal of Biosocial Science*. 40:815–840.
- Cornwall A and White SC. 2000. Men, masculinities and development politics: politics, policies and practice. *IDS Bulletin: Men, Masculinities and Development*. 31:1–6.
- Creswell J W. 2003. *Research design: Qualitative, quantitative, and mixed method approaches*. Thousand Oaks, CA: Sage Publications.
- Danforth N and Jezowski T. 1994. Beyond Cairo: Men, family planning, and reproductive health. Presented at the annual meeting of the American Public Health Association, Washington, DC, Oct. 31. 11 p.

- Danforth N and Roberts P. 1997. Better together: A report on the African regional conference on men's participation in reproductive health. Baltimore, Johns Hopkins School of Public Health, Centre for Communication Programmes, (Special Paper No. 4).
- Das BM and Ray S. 2007. Adolescent male reproductive health: Awareness and behaviour among peri-urban and rural boys in West Bengal, India. *International Journal of Men's Health*. 6:79–99.
- Dhanu A and Neogi AJ. 2004. Condom promotion among young people living in vulnerable situations. *Journal of Family Welfare*. 50 (2):73–84.
- DHS 2005. Demographic and Health Surveys in 39 developing countries, conducted between 1996 and 2003. 2005. ORC Macro International.
- Denzin NK and Lincoln YS. (Eds). (2005). *The Sage Handbook of Qualitative Research* (3rd ed.). Thousand Oaks, CA: Sage.
- DKT India. 2004. Project Mandi mid-term evaluation (unpublished).
- Donner H. 2008. *Domestic Goddesses: Maternity, globalization and middle-class identity in contemporary India*. Aldershot: Ashgate.
- Donovan P. 1995. About 40% of Indian women practice contraception; only one in four users rely on reversible methods. *International Family Planning Perspectives*. 21(2):81–2.
- Drennan M. 1998. Reproductive Health: New perspectives on men's participation, *Population Reports*. Series J, No. 46.
- Edmeades J, Pande RP, Falle T and Krishnan S. 2011. Son preference and sterilisation use among young married women in two slums in Bengaluru city, India. *Global Public Health*. 7:14.
- Finger WR and Ndong I. 1998. Male responsibility for reproductive health. *Network*. 18(3):4–6.
- Gallen M, Liskin L and Kak N. 1986. Men-New focus for family planning programmes. *Population Reports*, Series J, No. 33. Johns Hopkins School of Public Health, Baltimore, MD.
- Gayen K and Raeside R. 2006. Communication and contraception in rural Bangladesh. *World Health and Population*. 9(4):110–22.
- Ghule M and Donta B. 2008. Sexual behaviour of rural college youth in Maharashtra, India: An intervention study. *Journal of Reproduction and Contraception*. 19 (3):167–189.
- Giddens A. 1984. *The constitution of society. Outline of the theory of structuralism*. Berkeley, University of California Press.
- Gipson JD and Hindin MJ. 2007. Marriage means having children and forming your family, so what is the need of discussion? Communication and negotiation of childbearing preferences among Bangladeshi couples. *Culture, Health and Sexuality*. 9(2):185–198.

- Gratton C and Jones I. 2004. *Research methods for sports studies*. London: Routledge.
- Green CP. 1995. Male involvement in reproductive health including family planning and sexual health. United Nations Population Fund (UNFPA). Technical Report. 28:104.
- Greene ME. 1998. Male involvement in reproductive health: Translating good intentions into sensitive programmes. George Washington University, NW Washington, DC. USA.
- Greene ME and Biddlecom AE. 2000. Absent and problematic men: Demographic accounts of male reproductive roles. *Population and Development Review*. 26(1):81–115.
- Greene ME, Mehta M, Pulerwitz J, Wulf D, Bankole A and Singh S. 2006. Involving men in reproductive health: Contributions to development. Background paper to the report *Public Choices, Private Decisions: Sexual and reproductive health and the Millennium Development Goals*, UN Millennium Project.
- Greenhalgh S. (Ed.). 1995. *Situating fertility. Anthropology and demographic inquiry*. Cambridge University Press, Cambridge.
- Gupta P, Joshi A and Crook B. 2002. Gender and social justice: nurturing young men's partnership with women to improve reproductive health. A case study of the central Himalayas. Men and reproductive health subcommittee of the U.S. Agency for International Development Interagency Gender Working Group. Washington, DC.
- Hall MAK, Stephenson RB and Juvekar S. 2008. Social and logistical barriers to the use of reversible contraception among women in a rural Indian village. *Journal of Health, Population and Nutrition*. 26(2):241–250.
- Hausmann-Muela S, Muela RJ and Nyamongo I. 2003. Health-seeking behaviour and the health system response. DCP Working Paper no. 14: <http://www.dcp2.org/file/29/wp14.pdf>. (accessed on 4 August 2010).
- Helzner J. 1996a. Gender equality remains the objective. *Planned Parenthood Challenges*. (2):4–7.
- Helzner JF. 1996b. Men's involvement in family planning. *Reproductive Health Matters*. 7:146–154.
- Henderson NR. 2009. Managing Moderator Stress: Take a Deep Breath. You Can Do This!. *Marketing Research*. 21(1):28–29.
- International Institute for Population Sciences (IIPS) and Population Council. 2010. *Youth in India: Situation and Needs 2006–2007*. Mumbai.
- International Institute of Population Sciences (IIPS). 2005–06. *National Family Health Survey(NFHS)*. ORC Macro.
- International Planned Parenthood Federation (IPPF). 1994. *Understanding Adolescents: An IPPF Report on Young People's Sexual and Reproductive Health Needs*, London.



- Islam MA, Padmadas SS and Smith PW. 2006. Men's approval of family planning in Bangladesh. *Journal of Biosocial Science*. 38(2):247–59.
- Jacobson D. 2004. Indian society and ways of living. <http://asiasociety.org/countries/traditions/indian-society-and-ways-living>. (accessed on 2 February 2011).
- Jain A, Visaria L and Visaria P. 1992. Impact of family planning programme inputs on use of contraceptives in Gujarat state. Working Paper No. 43. Ahmedabad: Gujarat Institute of Development Research.
- Jaya J and Hindin MJ. 2007. Non-consensual sexual experiences of adolescent in Urban India. *Journal of Adolescent Health*. 40:573e7-573e14.
- Jaya J and Hindin MJ. 2009. Premarital romantic partnerships: Attitudes and sexual experiences of youth in Delhi, India. *International Perspectives on Sexual and Reproductive Health*. 35:97–104.
- Jeffrey P, Jeffrey R and Lyon A. 1989. Labour pains and labour power: Women and child-bearing in India. London: Zed Books.
- Jeffrey P and Jeffrey R. 1994. Killing my heart's desire: Education and female autonomy in rural North India. In Nita Kumar (Ed.). *Women as subjects. South Asian histories*. Charlottesville: University Press of Virginia, pp. 125–171.
- Jejeebhoy SJ. 2002. Convergence and divergence in spouses' perspectives on women's autonomy in rural India. *Studies in Family Planning*. 33(4):299–308.
- Jejeebhoy SJ and Sebastian MP. 2003. Actions that protect: Promoting sexual and reproductive health and choice among young people in India. *Regional Working Papers*, No. 18. New Delhi: Population Council.
- Joshi A, Dhapola M, Kurian E and Peltó P. 1998. Rural women's experiences and perceptions of marital sexual relationships. Ford Foundation Working Papers Series. Ford Foundation, New Delhi, India.
- Joshi BN, Chauhan SL, Donde UM, Tryambake VH and Gaikwad NS. 2006. Reproductive health problems and help seeking behavior among adolescents in urban India *Indian Journal of Pediatrics*. 73(6):509–513.
- Kadir MM, Fikree FF, Khan A and Sajan F. 2003. Do mothers-in-law matter? Family dynamics and fertility decision-making in urban squatter settlements of Karachi, Pakistan. *Journal of Biosocial Sciences*. 35:545–58.
- Kamal I. 2001. Field experiences in involving men to promote safe motherhood: The Pakistan experience. Paper presented at the World Health Organization (WHO) meeting of regional health advisors on programming for male involvement in reproductive health, Washington, DC, Sept. 5–7.
- Kanitkar T and Kulkarni S. 2002. Involvement of males in practice of contraception in Maharashtra. *Demography India*. 31(1):1–16.
- Karra MV, Stark NN and Wolf J. 1997. Male involvement in family planning: a case study spanning five generations of a south Indian family. *Studies in Family Planning*. 28(1):24–34.

- Khan ME and Patel BC. 1997. Male involvement in family planning: a KABP study of Agra district, India. Final report. New Delhi, India, Population Council, Asia and Near East Operations Research and Technical Assistance Project.
- Khan ME, Mishra A and Morankar S. 2008. Exploring opportunities to project a “responsible man” image: Gatekeepers’ views of young men’s sexual and reproductive health needs in Uttaranchal, India. *International Quarterly of Community Health Education*. 28(1):13–31.
- Kim YM. 2001. Counseling and communicating with men to promote family planning in Kenya and Zimbabwe. Paper presented at the WHO meeting of regional health advisors on programming for male involvement in reproductive health, Washington, DC.
- Krueger RA and Casey MA. 2000. *Focus Groups: A practical guide for applied research*. Sage Publication, London.
- Kumar M, Meena J, Sharma S, Poddar A and Dhaliwal V. 2010. Contraceptive use among low-income urban married women in India. *International Society for Sexual Medicine*. 4:1–7.
- Kumar A, Mehra M, Badhan SK and Gulati N. 1997. Heterosexual behaviour and condom usage in an urban population of Delhi, India. *AIDS CARE*. 9(3):311–8.
- Kuseka I and Silberman T. 1990. Male motivation impact evaluation survey. Harare, Zimbabwe: ZNFPC.
- Lasee A and Becker S. 1997. Husband-wife communication about family planning and contraceptive use in Kenya. *International Family Planning Perspectives*. 23(1):15–20, 33.
- Launiala A. 2009. How much can a KAP survey tell us about people’s knowledge, attitudes and practices? Some observations from medical anthropology research on malaria in pregnancy in Malawi. *Anthropology Matters*. 11(1).
- Libbus K and Kridli S. 1997. Contraceptive decision making in a sample of Jordanian Muslim women: delineating salient beliefs. *Health Care for Women International*. 18(1):85–94.
- Maharaj P and Cleland J. 2005. Women on top: the relative influence of wives and husbands on contraceptive use in KwaZulu-natal. *Women and Health*. 41(2):31–41.
- Malhotra N, Chanana C and Garg P. 2007. Post-sterilisation regrets in Indian women. *Indian Journal of Medical Sciences*. 61(4):186–191.
- Mayer KU and Tuma NB. 1990. Life course research and event history analysis: an overview. In: Mayer KU and Tuma NB (Eds). *Event history analysis in life course research*. Madison (Wisc.), University of Wisconsin Press. Pp. 3–20.
- Mbizvo MT and Basset MT. 1996. Reproductive health and AIDS prevention in Sub-Saharan Africa: the case for increased male participation. *Health Policy and Planning*. 11(1):84–92.

- McNicoll G and Cain M. 1990. Institutional effects on rural economic and demographic change. Working Paper No. 14. Population Council Research Division, New York.
- McNicoll G. 1994. Institutional analysis of fertility. Working Paper No. 62. Population Council Research Division, New York.
- Miller BD. 1997. Social class, gender and intra-household food allocations to children in South Asia. *Social Science and Medicine*. 44(11):1685–95.
- Moore M. 1994. Indian plan thwarted by quest for sons. Population grows as farmers insist upon two male heirs. *Washington Post*, Sept. 7, A26.
- Moore M. 1999. Men in Uttar Pradesh, India, know little about women's reproductive health needs. *International Family Planning Perspectives*. 1999:25(2):107.
- Morgan DL. 1997. *Focus Groups in Qualitative Research*. Sage Publications, London.
- Mumtaz Z and Salway SM. 2007. Gender, pregnancy and the uptake of antenatal care services in Pakistan. *Sociology of Health and Illness*. 29(1):1–26.
- Nag M and Dusa MB. 1988. Opposition from husband as constraint on wife's contraception use in Matlab, Bangladesh: a qualitative analysis. Presented at the annual meeting of the Population Association of America, New Orleans, Louisiana, April 21–23.
- Narayan D, Chambers R, Shah MK and Petesch P. 2000a. Gender Relations in Troubled Transition. In: *Voices of the Poor: Crying Out for Change*. New York, N.Y. Published for the World Bank, Oxford University Press.
- Narayan D, Patel R, Schafft K, Rademacher A and Koch-Schulte S. 2000b. Changing gender relations in the household. In: *Voices of the Poor: Can Anyone Hear Us?* New York, N.Y. Published for the World Bank, Oxford University Press.
- Nath MB. 2000. Women's health and HIV: Experience from a sex workers' project in Calcutta. *Gender and Development*. 8(1):100–8.
- Nath A and Garg S. 2008. Adolescent friendly health services in India: A need of the hour. *Indian Journal of Medical Sciences*. 62(11):465–72.
- National AIDS Control Organization (NACO). 2006. National Behavioural Surveillance Survey. General Population. Ministry of Health and Family Welfare (MoHFW), Government of India. New Delhi
- National AIDS Control Programme (NACP)-III. 2006. National AIDS Control Organisation (NACO). Ministry of Health and Family Welfare (MoHFW), Government of India. New Delhi.
- National Institute of Health. 2000. World Medical Association Declaration of Helsinki. <http://ohsr.od.nih.gov/guidelines/helsinki.html> (accessed on 15 November 2011).
- National Population Policy. 2000. Ministry of Health and Family Welfare, Government of India. New Delhi.

- National Rural Health Mission. 2006. Programme Implementation Plan (2006–2012). State Health Mission, Department of Health & Family Welfare, Government of Madhya Pradesh, Bhopal.
- National Youth Policy. 2003. Government of India. New Delhi.
- Ndong I, Becker RM, Haws JM, and Wegner MN. 1999. Men's Reproductive Health: Defining, Designing and Delivering Services. *International Family Planning Perspectives* 25(Supplement): S53–S55.
- Nema A and Sharma KKN. 2009. Perspectives of family planning among youth of Jabalpur City, Madhya Pradesh. *The Anthropologist*. 11:173–179.
- Obermeyer CM. 1997. Qualitative methods: a key to better understanding of demographic behaviour. *Population and Development Review*. 23(4):813–818.
- Oheneba-Sakyi Y and Takyi BK. 1997. Effects of couples' characteristics on contraceptive use in sub-Saharan Africa: the Ghanaian example. *Journal of Biosocial Science*. 29(1):33–49.
- Omondi-Odhiambo. 1997. Men's participation in family planning decisions in Kenya. *Population Studies*. 51(1):29–40.
- Oni GA and McCarthy J. 1991. Family planning knowledge, attitudes and practices of males in Horin, Nigeria. *International Family Planning Perspectives*. 17(2):50–54, 64.
- Osrin D, Tumbahangphe KM, Shrestha D, Mesko N, Shrestha BP, Manandhar K, Standing H, Manandhar DS and Costello AML. 2002. Cross sectional, community based study of care of newborn infants in Nepal. *BMJ*. 325(7372):1063.
- Pachauri S. 2011. Sexual and Reproductive Health Services: Priorities for South and East Asia. *Indian Journal of Community Medicine*. 36(2):83–84.
- Panda S, Chatterjee A, Bhattacharya SK, Manna B, Singh PN, Sarkar S, Naik TN, Chakrabarti S and Detels R. 2000. Transmission of HIV from injecting drug users to their wives in India. *International Journal of STD and AIDS*. 11(7):468–73.
- Pande R, Kurz K, Walia S, MacQuarrie K and Jain S (Eds). 2006. Improving reproductive health of married and unmarried youth in India. International Centre for Research on Women.
- Pande RP and Astone NM. 2007. Explaining son preference in rural India: The independent role of structural versus individual factors. *Population Research and Policy Review*. 26(1):1–29.
- Patel T. 1994. Fertility behaviour: Population and society in a Rajasthan village. Delhi: Oxford University Press. p. 287.
- Paul D and Gopalakrishnan S. 2001. Knowledge regarding modes of transmission and prevention of sexually transmitted diseases including HIV/AIDS. *Indian Journal of Community Medicine*. 26(3):4 p.

- Pelto PJ, Das B, Das RN and Bohidar N. 1997. Men's Sexual Health Concerns: A Freelisting Approach. AIMS. Unpublished.
- Pettigrew J. 1986. Child neglect in rural Punjabi families. *Journal of Comparative Family Studies*. 17(1):63–85.
- Piet-Pelon N, Rob U and Khan ME. 1999. Men in Bangladesh, India and Pakistan: Reproductive Health Issues. Population Council, New Delhi, India. pp. 90–91.
- Pile JM, Bumin C, Ciloglu GA and Akin A. 1999. Involving men as partners in reproductive health: Lessons learned from Turkey. AVSC Working Paper, New York: No. 12.
- Planning Commission. 10<sup>th</sup> Five-year plan-2002-2007. Government of India. New Delhi. [http://planningcommission.nic.in/plans/planrel/fiveyr/10th/volume2/10th\\_vol2.pdf](http://planningcommission.nic.in/plans/planrel/fiveyr/10th/volume2/10th_vol2.pdf). (accessed on 10 October 2011).
- Planning Commission. 11<sup>th</sup> Five-year plan-2007-12. Government of India. New Delhi. [http://planningcommission.nic.in/plans/planrel/fiveyr/11th/volume2/11th\\_vol2.pdf](http://planningcommission.nic.in/plans/planrel/fiveyr/11th/volume2/11th_vol2.pdf). (accessed on 10 October 2011).
- Pradhan MR and Ram U. 2009. Female sterilisation and ethical issues: The Indian experience. *Social Change*. 39(3):365–387.
- Pradhan MR and Ram U. 2010. Perceived gender role that shape youth sexual behaviour: Evidence from rural Orissa, India. *Journal of Adolescence*. 33:543–551.
- Puchta C and Potter J. 2004. *Focus Group Practice*. Sage Publication, London.
- Qurub SA. 1995. Hope for the future: Planning for sons. *People and Planet*. 4(4):23–24.
- Rahman L and Rao V. 2004. The determinants of gender equity in India: examining Dyson and Moore's thesis with new data. *Population and Development Review*. 30(2):239–68.
- Rajaretnam T and Deshpande RV. 1994. Factors inhibiting the use of reversible contraceptive methods in rural south India. *Studies in Family Planning*. 25(2):111–21.
- Raju S. and Leonard A. (Eds). 2000a. Men as supportive partners in reproductive health – Moving from rhetoric to reality. Population Council, New York.
- Raju S and Leonard A. 2000b. Non-governmental organizations pave the way. In: Raju S. and Leonard A. (Eds). Men as supportive partners in reproductive health – Moving from rhetoric to reality. Population Council, New York.
- Rao GR and Sinha RK. 2001. Male participation in family planning. An evaluation study of no-scalpel vasectomy project, Madhya Pradesh. *International Institute for Population Sciences*. (6):47, (9) p.
- Ram Murthy S and Dharma Rao M. 2003. An analysis of factors influencing the acceptability of vasectomy in Andhra Pradesh. *Health and Population–Perspectives and Issues*. 26(4):162–182.

- Rangaiyan G, Verma RK. 2005. Reproductive Health, sexual activity and condom use: Knowledge among male college students in Mumbai. *The Indian Journal of Social Work*. 66:442–459.
- Rani PMS. 2005. Sexual and reproductive health status of adolescents and young married girls: Issues and concerns. *The Indian Journal of Social Work*. 66:460–471.
- Reed KD. 2001. A tale of two cities: Brothel based female commercial sex work, spread of HIV, and related sexual health care interventions in India, using Bombay and Delhi as examples. *Journal of Family Planning and Reproductive Health Care*. 27(4):223–7.
- Rele JR, Kapoor PN and Khan ME. 1989. Determinants and consequences of contraceptive method choice in India. pp. 191–209. In: R.A Bulatao et al. (Eds). *Choosing a contraceptive: Method choice in Asia and the United States*. Boulder: Westview Press.
- Ringheim K. 1999. Reversing the downward trend in men's share of contraceptive use. *Reproductive Health Matters*. 7(14):83–96.
- Ringheim K. 2002. When the client is male: client-provider interaction from a gender perspective. *International Family Planning Perspectives*. 28(3):170–175.
- Rural Health Statistics in India. 2010. Ministry of Health and Family Welfare, Government of India, New Delhi.
- Rutenberg N and Watkins SC. 1996. Conversation and contraception in Nyanza province, Kenya. Presented at the annual meeting of the Population Association of America, New Orleans, Louisiana, May 9–11.
- Säävälä M. 1999. Understanding the prevalence of female sterilisation in rural south India. *Studies in Family Planning*. 30(4):288–301.
- Säävälä M. 2002. *Fertility and Familial Power Relations: Procreation in South India*. Richmond: Curzon Press.
- Saha S. 2000. Adolescents and their need for sex-education. *Health for the millions*. 26(5):10–2.
- Saini NK, Singh M, Gaur DR, Kumar R and Rajput M. 2006. Awareness and practice regarding spacing methods in urban slums of Rohtak. *Indian Journal of Community Medicine*. 31(2):4p.
- Salway S. 1994. How attitudes towards family planning and discussion between wives and husbands affect contraceptive use in Ghana. *International Family Planning Perspectives*. 20:44–47.
- Samant Y, Mankeshwar R, Sankhe L and Parker D. 2006. HIV-related knowledge and attitude among first year medical students in Mumbai. *India Adolescents International Electronic Journal of Health Education*. 9:13–24.
- Sangwan N and Maru RN. 1999. The target-free approach: an overview. *Journal of Health Management*. 1(1):71–96.

- Santhya KG and Dasvarma GL. 2002. Spousal communication on reproductive illness among rural women in southern India. *Culture, Health & Sexuality*. 4(2):223–236.
- Santhya KG and Jejeebhoy SJ. 2007. *Young People's Sexual and Reproductive Health in India: Policies, Programmes and Realities, South & East Asia, Regional Working Paper Series*. No. 19, Population Council, New Delhi, 46 pp.
- Santhya KG. 2008. *Empowering married young women and improving their sexual and reproductive health: Effects of the first-time parents project*. New Delhi: Population Council.
- Savara M and Sridhar CR. 1992. Sexual behaviour of urban, educated Indian men: Results of a survey. *Journal of Family Welfare*. 38(1):30–43.
- Schotter A. 1981. *The economic theory of social institutions*. New York, Cambridge University Press.
- Sebastian MP, Khan ME and Roychowdhury S. 2010. Promoting healthy spacing between pregnancies in India: Need for differential education campaigns. *Patient Education and Counseling*. 81(3):395–401.
- Senanayake P. 1994. What does “quality” mean for Ranee? *Planned Parenthood Challenges*. (2):15–6.
- Sharma ML. 2002. Sharing reproductive health responsibilities: Men's perspectives. *Journal of Family Welfare*. 48:66–76.
- Sharma V, Sharma A, Dave S and Chauhan P. 1996. Sexual behaviour of adolescent boys – a cause for concern. *Sexual and marital therapy*. 11(2):147–51.
- Singh A and Arora AK. 2008. How much do rural Indian husbands care for the health of their wives'. *Indian Journal of Community Medicine*. 33(1):19–25.
- Singh D and Bhattacharya M. 2004. Determinants of care for a sick neonate in a rural community. *Indian Journal of Preventive and Social Medicine*. 35(3–4):99–111.
- Singh KK, Bloom SS and Tsui AO. 1998. Husband's reproductive health knowledge, attitudes, and behavior in Uttar Pradesh, India. *Studies in Family Planning*. 29(4):388–99.
- Sivaram S, Johnson S, Bentley ME, Go VF and Latkin C. 2005. Sexual health promotion in Chennai, India: key role of communication among social networks. *Health Promotion International*. 20(4):327–333.
- Stein J. 1997. *Empowerment and Women's Health*. Zed, London.
- Sternberg P and Hubley J. 2004. Evaluating men's involvement as a strategy in sexual and reproductive health promotion. *Health Promotion International*. 19(3):389–96.
- Stycos JM. 1996. *Men, Couples and Family Planning: a Retrospective Look*. Working paper No. 96–12. Cornell University Population and Development Programme, Ithaca, New York.

- Sundby J. 2006. Young people's sexual and reproductive health rights. *Best Practice and Research Clinical Obstetrics and Gynaecology*. 20(3):355–368.
- Thind A. 2005. Female sterilisation in rural Bihar: What are the acceptor characteristics? *Journal of Family Planning and Reproductive Health Care*. 31(1):34–36.
- Thomas BE, Rehman F, Malaisamy M, Dilip M and Suhadev M. 2004. A study of condom acceptability among men in an urban population in South India. *AIDS and Behavior*. 8(2):215–220.
- Tiwari VK and Kumar A. 2004. Premarital sexuality and unmet need of contraception among youth-evidence from two cities of India. *Journal of Family Welfare*. 50(2):62–72.
- Trochim WMK. 2006. Time in research. *Research Methods Knowledge Base*. Web Centre for Social Research Methods. <http://www.socialresearchmethods.net/kb/timedim.php>. (accessed on 7 June 2011).
- United Nations. 1994. Report of the International Conference on Population and Development, Cairo. New York: Para. 4.27, p. 30.
- United Nations Population Fund (UNFPA). 1997. A new role for men: Partners for women's empowerment. United Nations Population Fund, New York.
- United Nations Population Fund (UNFPA). What does the UN mean by "youth," and how does this definition differ from that given to children? Youth at the United Nations: Frequently asked questions: <http://www.un.org/esa/socdev/unyin/qanda.htm> (accessed on 10 October 2010).
- Vera-Sanso P. 1999. Dominant daughters-in-law and submissive mothers-in-law? Co-operation and conflict in South India. *Journal of Royal Anthropological Institute*. (5):577–593.
- Varkey LC, Mishra A, Das A, Ottolenghi E, Huntington D, Adamchak S, Khan ME and Homan F. 2004. Involving Men in Maternity care in India. *Frontiers in Reproductive Health Programme*, Population Council, New Delhi, India.
- Verma R, Rangaiyan G, Narkhede SL, Agarwal M and Pelto PJ. 1998. Cultural perceptions and categorisation of male sexual health problems by practitioners and men in a Mumbai slum population. Paper presented at a workshop on Reproductive Health. Indian Institute of Health and Family Welfare, Hyderabad, India.
- Verme CS, Wegner MN and Jerzowski T. 1996. The language of male involvement: What do you mean by that? *Populi*. 23(2):10–12.
- Wegner MN, Landry E, Wilkinson D and Tzanis J. 1998. Men as Partners in Reproductive Health: From Issues to Action. *International Family Planning Perspectives*. 24(1):38–42.



- World Health Organisation, SEARO. 2008. Overview of triangulation methodology: Synthesis of multiple data sources for evaluation and decision-making in HIV epidemics, based on initial experiences. [http://www.searo.who.int/LinkFiles/Facts\\_and\\_Figures\\_08Tri-Resource\\_Guide\\_Generalized.pdf](http://www.searo.who.int/LinkFiles/Facts_and_Figures_08Tri-Resource_Guide_Generalized.pdf) (accessed on 2 December 2010).
- Willekens FJ. 1990. Paradigm shift in demography. Groningen, University of Groningen.
- Willekens FJ. 1991. Understanding the interdependence between parallel careers. In: JJ Siegers, J de Jong-Gierveld and E Van Imhoff (Eds). Female labour market behaviour and fertility. Berlin, Springer Verlag. pp. 11–31.
- World Health Organisation (WHO). 2001. Global consultation of friendly health services. A consensus statement. Department of Adolescent and Child Health and Development, Geneva 7–12 March, 2001. [http://www.who.int/child-adolescent-Health/New\\_Publications/ADH/WHO\\_FCH\\_CAH\\_02.18.pdf](http://www.who.int/child-adolescent-Health/New_Publications/ADH/WHO_FCH_CAH_02.18.pdf) (accessed on 10 October 2010).
- World Health Organisation (WHO). 2008. Overview of Triangulation methodology: Synthesis of multiple data sources for evaluation and decision-making in HIV epidemics, based on initial experiences. [http://www.searo.who.int/LinkFiles/Facts\\_and\\_Figures\\_08Tri-Resource\\_Guide\\_Generalized.pdf](http://www.searo.who.int/LinkFiles/Facts_and_Figures_08Tri-Resource_Guide_Generalized.pdf) (accessed on 11 October 2011).
- Zimmerman M, Newton N, Frumin L and Wittet S. 1996. Developing Health and Family Planning materials for low-literate audiences: A Guide. Program for Appropriate Technology in Health. Revised edition.



Original Publications





## Influence of mothers-in-law on young couples' family planning decisions in rural India

Arundhati Char,<sup>a</sup> Minna Saavala,<sup>b</sup> Teija Kulmala<sup>c</sup>

- a Doctoral student, School of Public Health, University of Tampere, Tampere, Finland.  
E-mail: [arundhatichar@gmail.com](mailto:arundhatichar@gmail.com)
- b Senior Researcher, Vaestoliitto (Family Federation of Finland), Helsinki, Finland
- c Senior Researcher, School of Public Health and Department of International Health, University of Tampere, Tampere, Finland

**Abstract:** *It has been widely documented in patrilocal and strongly patrilineal settings in India that the presence and influence of mothers-in-law in the household may affect fertility decisions made by young couples. However, not much is known about how intra-family relationships per se influence choice of contraceptive method and timing of use. To understand patterns of family planning decision-making, we carried out short, open-ended interviews in rural Madhya Pradesh in 2005 with 60 mothers-in-law, 60 sons and 60 daughters-in-law from the same families. Mothers-in-law were found to have an important influence on family decisions pertaining to activities within the household. They were also likely to influence the number of sons their daughters-in-law had and the timing of their daughters-in-law being sterilised, but they did not seem to have the same authority or influence with regard to decisions on the use of reversible contraceptive methods, which were mainly being made by young couples themselves. The findings show the flexibility and transformability of intra-family interactions, even within a hierarchically-ordered kinship system that is often considered an obstacle to improving reproductive health and gender equity. Given the right information, and availability of and access to reversible methods, young couples in rural Madhya Pradesh are increasingly making contraceptive choices for themselves. ©2010 Reproductive Health Matters. All rights reserved.*

**Keywords:** contraception, sterilisation, marital relations, family size preference, family dynamics and decision-making, India

THE recent decade has witnessed a growing interest in understanding how couple communication influences contraceptive use in the developing world. Demographic and Health Surveys report that, in general, communication between spouses about family size and family planning is limited in many countries in Asia and sub-Saharan Africa.<sup>1,2</sup> Nonetheless, numerous studies have reported a positive association between spousal communication and contraceptive use.<sup>3–6</sup> Almost all studies conclude that a more couple-oriented approach is the key to successful family planning programmes. However, this limited focus often ignores an impor-

tant reality in many couples' lives – that couples are often not the sole decision-makers regarding contraceptive use, particularly in cultures where extended kinship relations and lineage structures have a socially determining role.<sup>7</sup>

Few studies have looked at the impact of family members and others on the sexual and reproductive health of young couples.<sup>7–9</sup> While these few persuasive qualitative studies on the family dynamics behind Indian women's reproductive choices attest to the central importance of mothers-in-law,<sup>10–12</sup> there is very little systematic empirical evidence on the extent to which family interactions affect contraceptive

method choice. In India, female sterilisation is the predominant method used, while according to the National Family Health Survey (2005), overall use of all modern reversible methods is barely 10% (and in rural India, 7%).<sup>1</sup>

The impetus for the present study emerged from a five-year sexual and reproductive health intervention in rural Madhya Pradesh (2001–2005), implemented by a contraceptive social marketing organisation.\* The goal of the intervention was to address unmet need for contraception, by making reversible contraceptive methods (mainly condoms and oral contraceptives) available and accessible using a social marketing model. In casual discussions during the intervention project, rural women often mentioned that mothers-in-law were opposed to young women's desire to limit family size. It was therefore felt relevant to ascertain whether mothers-in-law were really as powerful and domineering as young women suggested.

The research on this question was initiated six months after Project *Mandi* was completed, as part of broader research on male involvement in reproductive health. Three different data sets were gathered in the study area: a survey among currently married men, focus group discussions and family interviews. The views of men on female sterilisation were published in 2009.<sup>13</sup> In the family interviews, we studied the interplay between mothers-in-law, sons and daughters-in-law as regards contraceptive decision-making, focusing on the use of reversible contraceptive methods. We aimed to answer the following questions: How does the mother-in-law influence young couples' contraceptive choice in a kinship system characterised by strong inter-generational power asymmetries, an ideal of extended, patrilocal households and pronounced patrilineal ideology, such as in rural Madhya Pradesh? Are household power dynamics as regards family planning transformed when reversible contraceptive methods are made available?

### The study area

Kinship practice among Hindus in the state of Madhya Pradesh corresponds largely to the North Indian model, in which patrilineal families

by males are the backbone of society. Traditionally, only sons have had the right to inherit, and in land-owning and better-off households, daughters are married off with a dowry into an unrelated and unknown family, generally far from their natal village. The young wife enters a household of strangers in which men and secondarily older women hold decision-making power.

The data reported here were collected in Sehore district, about 50 km from the state capital, Bhopal, from August to September 2005. About 73% of the state population lived in rural areas, and 98% of families self-identified as Hindus. According to the National Family Health Survey (2005), the total fertility rate of Madhya Pradesh was 3.12 (3.34 in rural areas), compared to the national rate of 2.68 (2.98 in rural India). According to the 2001 census, about 70% of the population depended on agriculture for their income. The sex ratio in 2001 was 933 females to 1000 males, the birth rate was 32.3 per 1000 persons and about 50% of women and 70% of men were literate.<sup>14</sup>

In 2005, the contraceptive prevalence rate in Madhya Pradesh was 55.9% (54.1% in the rural areas), among which 46.9% of eligible couples were using female sterilisation.<sup>1</sup> Due to the intervention that preceded this research, the research area had a much higher prevalence of reversible contraceptive use (29%)<sup>13</sup> than rural Madhya Pradesh as a whole (3.5%).<sup>14</sup> Thus, we could examine how they made sense of the introduction and use of reversible contraceptive methods within a rural hierarchical family system.

### The study

For this study, 12 villages were purposively selected from among the villages involved in the social marketing intervention. The aim was to choose all households where young married couples and the parents of the young husband were in regular day-to-day interaction. Information on the number of eligible couples residing together within the same household was gathered, and all households in the 12 villages where the mother-in-law, son and daughter-in-law were all living in the same house, or where the mother-in-law lived close by in the neighborhood, were listed. Based on this listing, five families per village were randomly selected, one from the centre and four from the four corners

\*Project *Mandi*, an initiative of DKT India, Mumbai.

of the village, to ensure that the sample was representative. In case of joint families, in which more than one eligible couple resided together, an equal proportion of eldest, middle or youngest were selected as the index couple. A total of 60 households from the 12 villages were interviewed over a one-month period. First, the purpose of the study was explained to all three family members individually. If all three gave verbal consent, they were included in the study. In all, 180 members of 60 families completed the interviews.

Short, open-ended interview guides were used. There was no flexibility in the wording or order of the questions, although the responses were open-ended. This interview technique is useful for reducing bias in a qualitative study when several interviewers are involved.<sup>15</sup> The interview schedule covered demographic background (current age, education, age at marriage, number of children, family type – nuclear or joint); communication and decision-making within the family, how household decisions were made and conflicts resolved and who had the final authority; discussion within the family about the need for family planning, who participated, considerations based on the need for spacing children or stopping further pregnancies, and who made the decisions; knowledge and use of reversible contraceptive methods among the young couples; and mothers-in-laws' involvement with respect to reversible vs. permanent methods.\*

The interviews aimed to assess current household and health decision-making patterns, including family planning decision-making and use. However, the innovative feature of the methodology was that three members, the mother-in-law, her son and her daughter-in-law, were interviewed separately and concurrently, so that the opinions of each remained independent. This is an important consideration in a hierarchical social situation in which the daughters-in-law, specifically, are not expected to air views contrary to those of their elders or their husbands. Each interview was carried out

in privacy, and strict confidentiality was maintained. This method required both a clear definition of what should be elicited from each participant within the family and three well-trained research assistants: one man, who interviewed the sons, and two women, who interviewed the older and young women. Interviews were tape-recorded. However, if a respondent objected to being taped, short notes were taken and elaborated immediately after the interview on preformatted sheets, to minimise any recall bias.

The interviews were transcribed on the same day by the interviewers, translated into English and entered into a document file containing material from all 60 families in order of interview. They were organised in a tabular form where the rows contained the specific questions asked and the columns had the responses from each of the three family members to each of the questions. Organising the data in this format helped the researchers compare responses across the three family members (horizontally) and also read the overall views of the three groups of interviewees (vertically). The findings emerged through content analysis, by identifying themes and putting together information relevant to each theme from each interviewee.

### Profile of respondents

The mean ages of mothers-in-law, sons and daughters-in-law were 56, 32 and 27 years, respectively. Sixty-five per cent of the sons and 55% of the daughters-in-law were literate. A quarter of the daughters-in-law had had at least seven years of schooling. Only eight mothers-in-law had ever gone to school, up to primary level (four years). The majority of families lived in joint households (80%), which were similar to the regional profile,<sup>14</sup> and the couples living in nuclear households had their mothers-in-law staying very close to them or in a house in the same compound. Mothers-in-law had had an average of six live births while the young couples had had around three. At the time of the study, 25 of the 60 daughters-in-law had already been sterilised, 11 couples were using condoms and nine were using oral pills. Only one couple was using an IUD, two were using abstinence or the “safe” period and 12 couples were not using any method.

\*The terms used throughout the text are as follows: *father-in-law* refers to the son's father, *mother-in-law* refers to the son's mother and *daughter-in-law* refers to the son's wife.

## Knowledge of contraceptive methods

All 60 daughters-in-law clearly emerged as more knowledgeable about contraceptive methods than their husbands, including male methods like condoms, male sterilisation and methods requiring male cooperation, such as abstinence and withdrawal. Thirty mothers-in-law knew about female sterilisation only as a way to stop further conception; an additional 24 mothers-in-law were knowledgeable about some reversible methods as well (Table 1).

Sons reported obtaining information about family planning methods from television and from health workers in the community. Forty of them thought their wives were better informed about family planning methods than them, and hence they discussed these methods with their wives before making family planning decisions.

## Influence of mothers-in-law on the sterilisation decision and on number of sons

As in all rural India, female sterilisation is the most widely used method of family planning in the research area. Mothers-in-law in the study clearly wanted to make decisions about daughters-in-law's use of female sterilisation. Ten mothers-in-law had been sterilised themselves. They did not want their daughter-in-law to undergo the operation until she bore the number of sons the mother-in-law required. Male heirs are a crucial issue for kin groups in rural India, economically, socially and symbolically.

**Table 1. Knowledge of contraceptives among mothers-in-law, sons and daughters-in-law, rural Madhya Pradesh, 2005**

Method known	Mothers-in-law (n=60)	Sons (n=60)	Daughters-in-law (n=60)
None	3	1	0
Oral pills	21	33	48
Condoms	13	33	45
Intrauterine device	11	1	17
Injectable	4	1	13
Female sterilisation	54	38	53
Male sterilisation	16	2	11
Others (e.g. abstinence, withdrawal)	1	2	4

*"I am the one who decides when my daughter-in-law needs to get sterilised. Unless there are at least two sons, there is no way that I am going to permit her to get it done."* (Mother-in-law 10)

*"I will get both my daughters-in-law sterilised: first the elder one, then the younger. One son is a must, if not two. Until a son is born, the daughters-in-law will have to continue having children. No matter how many daughters are born, there will be no sterilisation for them unless the required sons are born."* (Mother-in-law 25)

Three mothers-in-law reported that when they were young, they had been sterilised without the consent of their mother-in-law, but they would not permit this for their daughter-in-law. In most cases, the daughter-in-law who wanted sterilisation sought her mother-in-law's consent.

*"We (husband and wife) discussed the possibility of my getting sterilised after we had our two sons and one daughter. We asked my mother-in-law and she agreed."* (Daughter-in-law 4)

The authority of the mother-in-law is considerable – although not overarching or absolute – on the issue of female sterilisation. Two out of three mothers-in-law were of the opinion that they should decide when the daughter-in-law should get sterilised, and the same number of daughters-in-law and sons agreed with this position (Table 2). It is notable, however, that one in three mothers-in-law did not agree with this, although producing sons and deciding on the number of children has been a predominant issue for earlier generations in rural Indian families.

A strong son preference emerged not only from talking to sons and mothers-in-law; some daughters-in-law also felt very strongly about sons:

*"I am the eldest daughter-in-law. I have three daughters and am currently pregnant again. But the desire to have a son is immense. I hope that this time I will have a son. My younger co-sister has two sons and so she is given a lot more importance than me in the household. I too want that position and I know I will get it only if I bear a son."* (Daughter-in-law 9)

Culturally, son preference exists among both sexes in the research area and leads to discrimination against daughters-in-law who have few or no sons.



**Table 2. Opinions of mothers-in-law, sons and daughters-in-law on family planning, rural Madhya Pradesh, 2005**

Opinions of mothers-in-law (n=60)	Sons' responses (n=60)			Daughters-in-law's responses (n=60)		
	Agree	Disagree	No opinion	Agree	Disagree	No opinion
I am very important in the family. (n=44)	31	29	0	14	46	0
I decide when my daughter-in-law gets sterilised. (n=42)	38	12	10	44	8	8
The son and daughter-in-law do not involve me in their family planning decisions. I feel left out. (n=24)	30	0	30	31	0	29

### Role of mothers-in-law in contraceptive decision-making

A discrepancy emerged in the interviews between the younger women's evaluation of the general importance of their mother-in-law in the family, and her role in decisions concerning sterilisation. Only 14 of the 60 daughters-in-law thought their mother-in-law's authority was important in the family generally, while 44 acknowledged her authority regarding female sterilisation (Table 2). A majority (42) of the mothers-in-law themselves opined that they had and should have the final say in their daughters-in-law being sterilised, but they considered communication on other contraceptive use within the extended family as limited, even useless.

*"Even if I feel like advising my daughters-in-law, what is the use? They will not listen and will do as they please."* (Mother-in-law 1)

*"I am sure my daughter-in-law is using something to prevent pregnancy. She has probably discussed it with my son. I am never consulted in these matters at all."* (Mother-in-law 13)

When asked what kind of discussions about use of contraception take place within the family, 24 mothers-in-law said they were left out of those discussions, while 38 said they knew of no such discussion.

*"There is no such discussion within the family and so I am not even aware if my daughters-in-law are using any contraception. I am only aware that my eldest daughter-in-law is sterilised, which she informed me of after the procedure."* (Mother-in-law 12)

*"Neither do I discuss such issues, nor does anyone discuss them with me. I do not have any interest in such things."* (Mother-in-law 17)

Half the sons and daughters-in-law also said their mother-in-law was left out of their decisions concerning reversible family planning methods (Table 1). More than two out of three daughters-in-law reported that they discussed the use of reversible methods only with their husbands, but never their mothers-in-law.

Twenty-one daughters-in-law viewed their mothers-in-law as interfering, even if they were not asked their opinion. This led to conflicts over the use of reversible contraceptive methods despite the belief that the older generation should not be involved.

*"Although we had kept my mother-in-law out of the discussion about our using condoms, she somehow got to know and was annoyed with us, asking us to stop using them immediately. Fortunately, my husband is very understanding and so we continued using them."* (Daughter-in-law 2)

### Role of sons in decision-making on reversible methods

Reversible contraceptive methods are categorised differently from female sterilisation among the population of the research area because they are for spacing, not limiting family size.<sup>13</sup> This places the decision-making into two somewhat different frames of reference.

More than half of the sons seemed not only knowledgeable about reversible methods (mainly oral pills and condoms) (Table 1) but were also involved in decision-making on and

**Table 3. Mothers-in-law's negative opinions on reversible methods, rural Madhya Pradesh, 2005**

Opinions of mothers-in-law (n=60)	Sons' responses (n=60)			Daughters-in-law's responses (n=60)		
	Agree	Disagree	No opinion	Agree	Disagree	No opinion
Reversible methods cause adverse side effects (n=17)	0	10	50	0	8	52
Condoms are dirty and should not be in respectable people's homes (n=11)	0	45	15	0	40	20

use of these methods. More than a third of the sons interviewed reported having ever used condoms and nearly as many reported ever use of oral pills by their wives. One son reported ever-use of an IUD by his wife. Twenty-five sons reported that their wives had been sterilised. Only six men reported not using any modern contraceptives at the time of the interview, due to attempts to conceive (two cases), or the wife being currently pregnant (two cases), or breastfeeding (two cases). It was remarkable that among the interviewees we did not find any couples (apart from the breastfeeding ones) having an unmet need for contraception. This is, however, not the case in rural Madhya Pradesh overall, where unmet need is 12.0% (5.7% for spacing, 6.3% for limiting). The relatively good family planning situation in the area is most probably a reflection of the earlier reproductive health intervention, which has made temporary methods much more available and heightened people's awareness of them.<sup>16</sup>

Half of all men interviewed reported that decisions concerning the use of reversible methods were made jointly between husband and wife. Despite the norm of male dominance, joint decisions on family planning do occur in rural Indian society. The role of conjugal communication appeared especially evident in decisions about using reversible methods. Thirteen additional men stressed their wives' extensive role, while only 11 of the 60 excluded their wives from the decision-making altogether.

*"My wife and I discussed delaying the second child after our first was born. We jointly decided to use oral pills. I procure these either from the hospital or the medical shop. Those who want to delay pregnancy and space children should use such methods. They are useful."* (Son 3)

### Mothers-in-law's negative views on reversible contraceptive methods

Seventeen of the 21 mothers-in-law who knew of any reversible contraceptive methods thought they caused adverse side effects, and did not approve of them, especially with regard to oral pills and IUDs.

*"Oral pills lead to boils and menstrual disturbances. IUDs also cause swelling and ruin the uterus. This is the reason why women opt for female sterilisation."* (Mother-in-law 20)

None of the sons or daughters-in-law agreed with their mother-in-law's negative views on temporary methods but the majority of them had no opinion; only a minority disagreed (Table 3). Moreover, nine men whose wives used oral pills did believe that the pills made their wife dizzy yet they still approved of her using them.

Eleven of those same 21 mothers-in-law had very negative opinions on condoms, far more negative than those of their sons or daughters-in-law, none of whom agreed with them, and most disagreed (Table 3).

*"When I went to the hospital with my daughter-in-law during the delivery of her last child, the doctor showed me some condoms and suggested that I ask my son and daughter-in-law to use them. I refused to even hold one in my hands. I don't want such dirty things in my house."* (Mother-in-law 2)

*"I have seen condoms strewn around the village. This is the most indecent thing and the government is doing wrong in promoting them. These things are for people with a bad reputation and those using it also get a bad name. On the other hand, sterilisation is a decent method to adopt."* (Mother-in-law 19)

For these mothers-in-law, female sterilisation was far preferable. In fact most mothers-in-law in the study support this favourable view towards female sterilisation.

*“When there is sterilisation, why talk about other methods? They all cause problems.”*  
(Mother-in-law 2)

## Discussion

The households in the study are typical of rural Indian society as regards dominance based on age and gender. The role of the mother-in-law in the family was felt to be typical in such communities. Simple household decisions on daily chores like cooking and taking care of children are generally made by older women. Sons seemed to endorse the role of their mothers in the family and their position in the household. The younger women, in contrast, did not easily acknowledge the importance of the older women.<sup>8,10,12,17</sup>

The influence of mothers-in-law in terms of young couples' reproductive health in South Asia is considered to be significant. Studies have reported that when mothers-in-law were not living with the couple in the same household, the probability of those couples adopting modern contraceptive methods was higher. For example, a 1992 study by Jain et al<sup>18</sup> in India found that along with other factors such as age, number of living sons and female education, absence of mothers-in-law was also a factor influencing use of modern contraceptive methods. This finding was also reported in more recent studies (2003, 2006), and said to be due to the older generation having a higher family size preference and more conservative approach to innovations such as modern contraceptive methods.<sup>8,19</sup> In this qualitative study, no difference in views concerning the role of mothers-in-law in family planning issues emerged between the extended households and those where the mother-in-law was living close by. Irrespective of sharing or not sharing the rice pot, the intensive day-to-day interaction still appeared to have overarching importance.

According to Saavala's qualitative studies in 2002 and 2006 rural South Indian young women are relatively satisfied with female sterilisation as a contraceptive method and feel that

it relieves them of the domination of their mothers-in-law.<sup>12,20</sup> In the South Indian context, a young wife usually receives continuous support from her own natal family and may be sterilised even against her mother-in-law's wishes. This differs from the Northern and Central Indian kinship practice, characterised in this study, in which a young wife tends to be much more dependent on her in-laws. However, in the South India study area<sup>12</sup> reversible methods of contraception were practically non-existent, so the relationship between mothers-in-law and daughters-in-law as regards the sterilisation decision would be different.

This study reveals a more nuanced picture of inter-generational family relations in terms of family planning, as compared to earlier studies, which have mainly been interested in whether the mother-in-law hindered or enabled young couples' use of family planning. Our findings show that decision-making on contraceptive use to some extent stands apart from other household decision-making. Although mothers-in-law did have a strong influence on timing of sterilisation for young women, based on the number of sons produced, this was often not the case for use of reversible methods.

In India, son preference is still widespread; 20% of women and men say they would like more sons than daughters while only 2–3% say they would like more daughters than sons.<sup>1</sup> Son preference and the desire for a family of at least three children have also influenced the timing of sterilisation in relation to fertility in India.<sup>20</sup>

Even if temporary methods of contraception are mainly used for the purpose of birth spacing in rural India – and are thus benign from the perspective of fulfilling the required number of sons in the family – mothers-in-law in this study were not neutral or indifferent to them, though the small numbers mean they cannot be taken to represent the wider view.

In this study area, an intervention project made contraceptive pills, condoms and IUDs available and raised people's awareness of these methods through information dissemination, street theatre, and the like. The spread of spacing methods may have had the consequence of creating in younger women a greater awareness of being able to control their own fertility, whatever the wishes of their mothers-in-law or husbands. With regard to the sons in this study, even though

they paid heed to their mothers, they regarded decisions concerning use of reversible methods as their own. Although most daughters-in-law felt they were not in a position to be sterilised against their mother-in-law's will, they saw any interference from her in the use of reversible methods as unjustified.

This study found that although mothers-in-law are considered to be the predominant authorities in the family regarding childbearing decisions in rural India, this is not a simple or unchanging truth. The findings support the empirical analysis of Rahman & Rao in 2004, that women's autonomy is not solely a reflection of kinship structures.<sup>21</sup> Public services such as family planning may have an important, trans-

formative effect on familial power relations, making it possible for young couples to make autonomous choices about spacing children.

### Acknowledgments

*The authors thank the Academy of Finland (Grant No. SA205648) for supporting the fieldwork of this study and the Doctoral Programmes in Public Health, University of Tampere, Finland, for supporting the analysis and writing of this article. Project Mandi was funded by Vaestoliitto, the Family Federation of Finland, Helsinki. Vaestoliitto and DKT India. They are also gratefully acknowledged for their support during the fieldwork and data analysis.*

### References

1. International Institute for Population Sciences. National Family Health Survey. Mumbai, India: ORC Macro, 2005.
2. Miller K, Zulu EM, Watkins SC. Husband-wife survey responses in Malawi. *Studies in Family Planning* 2001;32(2):161–74.
3. Jejeebhoy S. Convergence and divergence on spouses' perspectives on women's autonomy in rural India 2002; 33(4):299–308.
4. Islam MA, Padmadas SS, Smith PWF. Men's approval of family planning in Bangladesh. *Biosocial Science* 2006;38(2): 247–59.
5. Gayen K, Raeside R. Communication and contraception in rural Bangladesh. *World Health and Population* 2006;9(4):110–22.
6. Donner H. Domestic goddesses: maternity, globalization and middle-class identity in contemporary India. Aldershot: Ashgate, 2008.
7. Barnett B. Family planning use often a family decision. *Network* 1998;18(4):10–11,13–14.
8. Kadir MM, Fikree FF, Khan A, et al. Do mothers-in-law matter? Family dynamics and fertility decision-making in urban squatter settlements of Karachi, Pakistan. *Journal of Biosocial Sciences* 2003;35: 545–58.
9. Boulay M, Valente TW. The selection of family planning discussion partners in Nepal. *Journal of Health Communication* 2005;10(6): 519–36.
10. Patel T. Fertility behaviour: population and society in a Rajasthan village. Delhi: Oxford University Press, 1994. p.287.
11. Jeffrey P, Jeffrey R, Lyon A. Labour Pains and Labour Power: Women and Child-bearing in India. London: Zed Books, 1989.
12. Saavala M. Fertility and Familial Power Relations: Procreation in South India. Richmond: Curzon Press, 2002.
13. Char A, Saavala M, Kulmala T. Male perceptions of female sterilisation in rural central India. *International Perspectives on Sexual and Reproductive Health* 2009;35(3): 131–38.
14. Government of India. Census of India. New Delhi, 2001.
15. Patton MQ, editor. *Qualitative Evaluation and Research Methods*. 2nd ed. Newbury Park, CA: Sage, 1990.
16. Project Mandi: Mid-term evaluation report. DKT India, Mumbai, 2004. (Unpublished)
17. Vera-Sanso P. Dominant daughters-in-law and submissive mothers-in-law? Co-operation and conflict in South India. *Journal of Royal Anthropology Institute* 1999;5: 577–93.
18. Jain A, Visaria L, Visaria P, et al. Impact of Family Planning Programme Inputs on Use of Contraceptives in Gujarat State. Working Paper No. 43. Ahmedabad: Gujarat Institute of Development Research, 1992.
19. Qutub SA. Hope for the future: planning for sons. *People Planet* 1995;4(4):23–4.
20. Saavala M. Sterilised mothers: women's personhood and family planning in rural South India. In: Fruzzetti L, Tenhunen S, editors. *Culture, Power and Agency: Gender in Indian Ethnography*. Calcutta: Stree Publishers, 2006. p.135–70.
21. Rahman L, Rao V. The determinants of gender equity in India: examining Dyson and Moore's thesis with new data. *Population and Development Review* 2004; 30(2):239–68.

## **Résumé**

Dans les environnements patrilocaux et fortement patrilinéaires de l'Inde, le fait que la présence et l'influence des belles-mères dans le ménage affectent les décisions des jeunes couples sur la fécondité a été largement documenté. Néanmoins, on connaît mal la manière dont les rapports au sein de la famille influencent en eux-mêmes le choix de la méthode contraceptive et le moment de son utilisation. Pour comprendre les modalités de décision en matière de planification familiale, nous avons mené de brefs entretiens ouverts dans le Madhya Pradesh rural avec 60 belles-mères, 60 fils et 60 brus des mêmes familles. Nous avons constaté que les belles-mères exerçaient une forte influence sur les décisions familiales concernant les activités dans le ménage. Elles tendaient aussi à influencer sur le nombre de fils qu'avaient leurs brus et le moment où celles-ci étaient stérilisées, mais elles ne semblaient pas avoir la même autorité ou influence sur le choix des méthodes contraceptives réversibles, qui dépendait principalement des jeunes couples eux-mêmes. Ces conclusions montrent la souplesse et la capacité de transformation des interactions dans la famille, même dans un système de parenté ordonné hiérarchiquement qui est souvent considéré comme un obstacle à l'amélioration de la santé génésique et de l'équité. Avec des informations exactes, la disponibilité de mesures réversibles et la possibilité d'y avoir accès, les jeunes couples du Madhya Pradesh rural font de plus en plus par eux-mêmes leurs choix contraceptifs.

## **Resumen**

En India se ha documentado ampliamente en ámbitos patrilocales y muy patrilíneales que la presencia e influencia de suegras en el hogar podría afectar las decisiones de parejas jóvenes en cuanto a la fertilidad. Sin embargo, se sabe poco acerca de cómo las relaciones intrafamiliares en sí influyen en la elección del método anticonceptivo y en el momento en que se empieza a utilizar. Para entender los patrones de la toma de decisiones sobre la planificación familiar, en 2005 realizamos entrevistas abiertas cortas, en las zonas rurales de Madhya Pradesh, con 60 suegras, 60 hijos y 60 nueras de las mismas familias. Se encontró que las suegras tienen una importante influencia en las decisiones de la familia respecto a las actividades del hogar. Además, era probable que influyeran en el número de hijos que tenían sus nueras y en el momento en que sus nueras eran esterilizadas, pero aparentemente no tenían la misma autoridad o influencia en cuanto a decisiones sobre el uso de métodos anticonceptivos reversibles, las cuales eran tomadas principalmente por parejas jóvenes. Los hallazgos muestran la flexibilidad y transformabilidad de las interacciones intrafamiliares, incluso en un sistema de parentesco de orden jerárquico que a menudo es visto como un obstáculo para mejorar la salud reproductiva y la equidad de género. Con la información correcta y la disponibilidad y accesibilidad de métodos reversibles, las parejas jóvenes en las zonas rurales de Madhya Pradesh cada vez más están tomando decisiones anticonceptivas por sí mismas.

RESEARCH ARTICLE

Open Access

# Assessing young unmarried men's access to reproductive health information and services in rural India

Arundhati Char<sup>1,4\*†</sup>, Minna Saavala<sup>2,4†</sup> and Teija Kulmala<sup>1,2,3†</sup>

## Abstract

**Background:** We investigated the accessibility of reproductive health information and contraceptives in a relatively less developed area of rural central India and assessed the risks facing young unmarried men.

**Methods:** This cross-sectional study used both qualitative and quantitative methods. Participants included 38 unmarried rural men in four focus-group discussions and a representative sample of 316 similarly profiled men, aged 17-22 years, in a survey. Information was collected on the men's socioeconomic characteristics; awareness, knowledge, and perceptions of family planning; attitudes toward future contraceptive use; intra-family communication; knowledge about STIs/HIV/AIDS; and access and use of condoms. Content analysis for qualitative information and descriptive analysis for survey data were used to draw conclusions.

**Results:** Young unmarried rural Indian men's sexual and reproductive health (SRH) knowledge is limited, although the majority is familiar with condoms (99%). The young men identified electronic mass media (67%) as the prime source of reproductive health information, yet they lacked detailed knowledge of various contraceptives and felt ignored by health providers, who, they felt, would be capable of providing SRH information through interpersonal communication. Young men are more concerned about avoiding infections and securing sexual pleasure and less concerned about avoiding potential pregnancies. For example, 68% of the young men were aware of condoms and their HIV/AIDS preventive role, but only about two-fifths mentioned condom use to prevent unwanted pregnancies. Although most young men (96%) knew where to access a condom, they felt uncomfortable or embarrassed doing so in their own villages or close by because of socio-cultural norms that prevented them from using contraceptives. Very few respondents (4%) disclosed using condoms themselves, but 59% said they knew someone from their peer group who had used them.

**Conclusions:** Young unmarried men in rural India are underserved with regard to SRH information and services, because they are not recognized as key targets under the public health system, and they receive their limited knowledge and information mainly from the mass media; this situation could be greatly improved by public health service providers. It is important that programmers involve young men with effective communication strategies to enable them to act responsibly with regard to their own sexual health needs.

**Keywords:** Young men, sexual and reproductive health, access, services, information, condoms, rural India

\* Correspondence: arundhati.char@uta.fi

† Contributed equally

<sup>1</sup>School of Health Sciences, University of Tampere, 33014 Finland

Full list of author information is available at the end of the article

## Background

Adolescents and young adults form one of the largest groups with an unmet need for reproductive health services in South Asia [1,2]. India has committed itself to a comprehensive family-planning program, which includes providing reproductive health information to all population groups, regardless of gender or age [3]. India has the world's biggest-ever youth generation, with an estimated 300 million young people (aged 10-24 years), comprising almost one-third of the country's population [4]. The enhanced programmatic focus on young people's reproductive health services and information needs requires more detailed culture-specific information on reproductive health and reproductive choices [5].

The sexual and reproductive health (SRH) needs of young unmarried people differ from those of young married people in significant ways that have thus far been poorly understood and addressed in India. In the socio-cultural context of South Asia, premarital sex is censured not only for girls, but also for boys, and consequently young people's sexual activity and sexual health information and needs remain largely unaddressed. Not only urban but also rural Indian adolescents spend an increasingly longer time at school, experience puberty at a younger age, and marry and have children later than in the past. Neglecting this group will have major future implications, since the sexual behavior during adolescence will have far-reaching effects as these young people progress into adulthood. In South Asia, over the last decade, both researchers and governments have begun to shed traditional inhibitions toward young people's SRH, and a growing body of empirical evidence combined with government interest has provided opportunities to take stock of the regional situation in this regard. Studies have consistently found that young people in developing countries lack basic knowledge about sexuality and contraception [6-11]. Moreover, even subjects in Indian studies who report awareness tend to harbor misperceptions or possess only superficial information about these issues [1,12].

Most available studies about unmarried youths have focused on sexual behavior in the context of HIV/AIDS [13-17]. The few studies that do address young people's reproductive health and sexuality are mostly studies of women, with very limited emphasis on young unmarried men [18-20]. Those focusing on young males tend to concentrate on urban populations, particularly college students [21-24]. The present study targeted young unmarried men aged 17-22 years in a rural context, a group thus far rarely addressed in research, despite the fact that two-thirds of the Indian population still lives in rural areas. Young men in this age-group constitute about 16% of India's population, and are on the threshold of a life-cycle milestone-marriage. In rural India, 68% of

men aged 15-45 years are ever-married. Only 4% of rural men marry very early, by age 19 and one-third are married by the median age of 21.5. Only 1% of males in the age-group 45-49 have never been married, indicating that marriage is still nearly universal in India [12]. In addition to affecting young men's and their current partners' opportunities to enjoy sex responsibly and safely, young unmarried men's current views on SRH will affect them and their spouses in the future.

## Justification for the study

During the years 2001 to 2005, DKT India, a contraceptive social marketing organization, carried out an extensive reproductive health intervention in rural areas of the state of Madhya Pradesh in central India. The principle objective of this intervention was to inform and educate the rural communities, which included men and women in the reproductive age-groups of 15-45 years on various reproductive health issues, including family planning. The intervention used various communication media, including interpersonal communication, street theater, and audiovisual as well as print media, for effective impact of reproductive health messages.

During the course of this intervention, young unmarried men aged 17 to 22 freely discussed various reproductive health issues. However, the subjects lacked adequate knowledge of contraceptives, although they had heard about them, and they indicated they were not very comfortable about accessing contraceptives.

It was therefore important to investigate this sector of the population in terms of individuals' access to contraceptives and the problems they face with regard to information and access to reproductive health commodities. This study investigates whether young unmarried rural men in India are underserved in terms of SRH issues. We hypothesize that their knowledge and access to SRH information and services remain inadequate, due to limited interaction with health-care providers, with the mass media being their main channel of information. We review their knowledge, attitudes, and perceptions about SRH. The findings from this study will address key areas of youth SRH in terms of access to information and services, and will help direct effective communication strategies for this target audience.

## Methods

The study was conducted among unmarried young men aged 17-22 years from two rural districts in Madhya Pradesh.

## The study setting

Madhya Pradesh has a total population of 60.4 million, of which about 73% reside in rural areas. The total fertility rate is 3.12 for the state overall and 3.34 for rural

areas; these figures are higher than the comparable national rates of 2.68 and 2.98, respectively [12]. About 70% of Madhya Pradesh residents depend on agriculture for their income. The sex ratio at birth is 933 females per 1,000 males; the birth rate is 32.3 per 1,000 persons, and about 50% of women and 70% of men are literate [4]. The average age at marriage is 21.7 years for males and 18.4 years for females. About 64% of rural men aged 25-29 years were married by age 21 and 66.5% women aged 20-24 years were married by age 18 [25].

The two study districts, Sehore and Raisen, have a total population of around 2,200,000, of which about 10% are males in the age-group 17-22. Of these, approximately half are unmarried, which would make the size of the target group approximately 110,000 [4].

#### **Data**

The data was drawn from a larger study, "Male Involvement in Sexual and Reproductive Health in Central India," conducted to examine how rural Indian men act to secure their own and their partners' SRH. The results of the larger study were intended to have relevance for SRH policies: to identify strategies for positively influencing men's SRH-seeking behavior, including participation in fertility regulation, practice of safe sex, support of maternal and child health, and prevention of unwanted pregnancies. We used a multi-method approach, including focus-group discussions and a cross-sectional survey, because we believed that the study of such an intimate and partly taboo subject would most likely benefit by adopting different methods. The qualitative data was used heuristically to improve the survey instrument and, later, to assess and interpret the survey results. In addition, the survey enabled the findings that emerged from the focus groups to be corroborated and assessed. Combining the two methods also helped to bring into focus the varied social aspects of young people's fertility, and broadened our understanding of the social mechanisms of demographic phenomena, which are often difficult to capture through surveys alone [26].

Data collection occurred in two phases from March 2005 to September 2005: initially, there were focus-group discussions; these were followed by the cross-sectional survey. Currently unmarried 17-to 22-year-old men were eligible to participate in the study.

#### **Focus-group discussions**

We used snowball sampling as a recruitment technique to gather participants for the focus-group discussions (FGDs), a relatively homogeneous group of unmarried men aged 17 to 22 years, who would provide credible information about practices and norms with regard to youth SRH. Despite snowballing having its limitations as a recruitment technique, it was chosen because the

topic of the discussions was sensitive, and this approach required making use of personal networks and encouraging the young men to overcome their apprehensions and attend the group discussions. Since the initial main purpose of the FGDs was to direct development of the survey questionnaire, it was restricted to one district, Sehore. Out of 66 villages in Sehore with a population of at least 1000, four were randomly selected based on their location in relation to the main road. Two of these were chosen from within a 10-km radius of the road, while two were outside this radius. Only one FGD per village was carried out, to ensure that the participants were not affected by rumors about the discussion spreading in the village and leading to information bias. Young men in the age-group of 17-22 years were recruited from each selected village: one such individual was contacted and briefed about the purpose of the group discussion, and he initiated the recruitment process. Overall, 38 men were contacted, and all agreed to participate in the four FGDs after the details of the study were explained to each; their informed consent was obtained.

The four discussions reached a saturation point, and further discussions were not expected to bring up any new points of view. FGDs aim at deciphering commonly shared convictions and attitudes, not the variation in individual experiences, and we believe that carrying out the discussions in other villages or districts of the state would most likely have produced a similar range of views, possibly textured with local idiosyncrasies. As is generally the case, the qualitative data was not intended to be representative. It is possible that there was a selection bias among those attending the groups; however, we consider this unlikely considering the background characteristics of the participants. The most important factor ensuring reliability of the qualitative data was that the discussions were conducted in an atmosphere of trust and sharing. The principal investigator, who has long field experience working in the district and fluency in the local dialect, could not detect any factors that might potentially have rendered the discussions systematically biased or unreliable.

The discussion guide used for the FGD was piloted in a village not included in the final village selection, and the guide was finalized before being employed in the study. Two highly experienced male research associates moderated the discussions. As the principal moderator directed the discussions, the co-moderator noted non-verbal cues. Discussions were conducted in the local language, Hindi, and lasted approximately two hours. All the FGDs were held in the community center of the village, which ensured that there was no disturbance or outside noise while they were being conducted. All the discussions were recorded, transcribed verbatim in



Hindi, and then translated into English. To validate the tapes, we checked them against the translated text for any inaccuracies. Data was analyzed by qualitative content analysis, using ATLAS.ti software for Windows version 5.0. (Scientific Software Development GmbH). Topics discussed during the FGDs were young unmarried men's knowledge, attitudes, and perceptions about SRH, including family planning, access to reproductive health services and information about contraceptives, and sexually transmitted infections (STIs)/HIV/AIDS.

#### **Profile of FGD participants**

The average respondent age across the four village groups was around 18 years, and most men had had at least eight years of schooling. Three men were Muslims, and the rest were Hindus. Among the Hindus, the majority (21) belonged to the caste administratively designated as Other Backward Class; nine belonged to the Upper Class, and the remaining five were of the Scheduled Class. All participants were residents of the village in which the discussions were conducted.

#### **Cross-sectional survey**

The second, main part of data collection involved a cross-sectional survey in Sehore and Raisen. A three-stage probability sampling procedure was used to select villages, households, and eligible persons as sampling units at each stage of the survey. From each district, villages with a population of 1000 to 3000 (as per the census listing) were drawn up; the decision to select larger villages was based mainly on logistical reasons. There were 137 such villages. For each of these villages, we obtained the best available estimates of female literacy [4]. The villages in the two districts were divided into low, medium, and high literacy levels; two villages were randomly selected from each group, resulting in a total of 12 villages, six from each district, using a probability-proportional-to-size (PPS) sampling method. This process ensured heterogeneity in the data, which is essential to obtain meaningful results. If a particular selected village was one where the FGDs had been held with similarly profiled men, the next village on the list was selected; this ensured that the survey was not conducted in the same villages as those that held the FGDs and avoided any information bias. Next, a house listing was drawn up to identify households that had unmarried men in the 17-22 age-group. Survey household selection was carried out using a systematic random-sampling method, and every third household was chosen. In any given household, only one eligible respondent was randomly recruited into the study.

Six male postgraduate students with backgrounds in the social sciences were recruited from the local state university as research investigators. The selected researchers were rigorously trained by the principal investigator for four days, including one day of field

training. Of these investigators, two were identified as supervisors for the fieldwork, and they were specially trained in sampling methods and selection of respondents for the survey. Once trained, the research investigators conducted a household survey.

A semi structured interview schedule was used to collect information from the young unmarried men. The survey instrument was pretested extensively in areas similar to but not contiguous with the study sites, and it was later finalized by modifying, adding, or deleting questions. Information was collected on the subjects' socioeconomic characteristics; knowledge, awareness and perceptions of family planning; attitudes toward contraceptive use; intra-family communication and knowledge about STIs and HIV/AIDS; and access to and use of condoms. Survey questionnaire topics were decided based on issues emerging from the FGDs that preceded the survey. About 20% of the questions were open ended and later coded for analysis. Data collection was conducted during September 2005 for one month; 316 men were interviewed.

Since the interviews required privacy, the investigators took the respondents outside their homes; if necessary, the respondents were taken to another village location, such as under a tree off the road or into the fields close to the village, where they would not be disturbed during the questionnaire administration. Each participant gave oral informed consent after being apprised of the purpose of the research. A 10% back-check of questionnaires in each village was carried out by the research supervisors, who also scrutinized all questionnaires on the same day that they were filled to check for completeness, consistencies, and clarity of marked codes. Data were managed and analysis was performed using the SPSS statistical package for Windows, version 13.0 (SPSS Inc., Chicago IL).

The study was approved by the Institutional Review Board of Tampere School of Health Sciences and the Ethics Board of the International Institute for Population Sciences in India. The study was conducted in accordance with the Helsinki Declaration of 1975, as revised in 2000.

## **Results**

### **Background characteristics**

The young men surveyed were on average 19-years-old. The majority (90%) were educated to at least middle-school level (eight years schooling). Hindus were predominant among the interviewed young men. Most of them belonged to the economically and socially weaker classes, with 60% coming from castes administratively designated as Other Backward Classes. About three-fifths of the young men were employed in the agricultural sector, either as cultivators of their own land or as

laborers. Less than two-fifths of the young men were engaged in nonagricultural activities. Only 3% of the young men were not employed in any income-generating activity at the time of the survey. About half of the respondents reported living in a nuclear family, with parents and unmarried siblings (Table 1).

#### Family-planning knowledge

The survey showed that young unmarried men had limited knowledge of SRH issues. However, almost all the subjects knew about condoms. Knowledge about family planning (*parivar niyojan*) was elicited from the males in the survey ("Have you heard of the method/technique with which a couple can either delay or avoid becoming pregnant?"). For those who answered yes, the next question was an open-ended one: "What does family planning mean to you?" In the Indian context, "family planning" or its local language equivalent refers to contraceptive methods; among married men and women, it particularly refers to female sterilization, which is the most commonly used method [27,28].

Table 2 shows the percentage of respondents who had heard of a method for delaying, spacing out, or preventing pregnancies, as well as those who could spontaneously

**Table 1 Background characteristics of young unmarried men aged 17 to 22 years, by selected sociodemographic characteristics, Madhya Pradesh, India, 2005 (n = 316)**

Characteristics	Categories	N (%)
<b>Age (years)</b>		
Mean age(+ SD)	19.2 (± 1.68)	
	17-19	187 (59.1)
	20-22	129 (40.9)
<b>Education</b>	None	16 (5.1)
	Primary	13 (4.1)
	Middle	65 (20.6)
	Secondary+	222 (70.2)
<b>Religion</b>	Hindu	295 (93.4)
	Muslim	20 (6.3)
	Other	1 (0.3)
<b>Caste</b>	Upper Caste	72 (22.8)
	Scheduled Caste	37 (11.7)
	Scheduled Tribe	20 (6.3)
	Other Backward Caste	186 (58.8)
<b>Occupation</b>	Agricultural based	186 (58.8)
	Non-agricultural based#	120 (38.0)
	Unemployed	10 (3.2)
<b>Monthly family income</b>	Low (up to Rs.1,000)	53 (16.8)
	Medium (Rs.1,000-3,000)	182 (57.6)
	High (> Rs.2,500)	81 (25.6)
<b>Type of family</b>	Nuclear	163 (51.6)
	Joint	153 (48.4)
<b>Average family size</b>		6.5

**Table 2 Knowledge of family planning among 316 young men aged 17-22 years in rural central India, 2005**

Description	N (%)
Had heard of methods for delaying or stopping pregnancies (Yes)	308 (97.5)
<b>Family planning methods heard of by respondent*</b>	
Condoms	305 (99.0)
Oral contraceptive pills	261 (84.7)
Intra Uterine Device (IUD)	59 (19.2)
Injectable contraceptive	30 (9.7)
Female sterilization	23 (7.5)
Male sterilization	15 (4.9)
Abstinence	2 (< 1.0)
Withdrawal method	1 (< 1.0)
Average number of modern methods cited	2.0

\* Percentage may exceed 100.0 due to multiple responses.

name individual methods of contraception. Overall, 98% of the subjects had heard of some family-planning method. Condoms were the most widely known method, and nearly every young man (99%) mentioned them. Contraceptive pills were the next-most commonly named method (85%). About one in five young men mentioned the intrauterine device (IUD). As noted above, female sterilization is the most popularly known and used method among married couples in India [12]. This is true also among rural married couples [27]. However, knowledge of this commonly known and used method was low, and only about 8% of the young men mentioned female sterilization. Also, natural family-planning methods, such as abstinence and withdrawal, were hardly mentioned among this group of respondents. The average number of methods that respondents mentioned was two.

#### Attitude toward condoms and access to them

As mentioned above, the most often mentioned contraceptive method among the young men was condoms. Young men considered condom use more in terms of pleasure and disease prevention and only secondarily in terms of pregnancy prevention. While almost 70% were aware of the use of condoms as protection against HIV/AIDS, only about two-fifths reported that condoms were used to prevent pregnancies. Further, most men (96%) knew where to obtain condoms. Most commonly, they mentioned health centers as a source of condoms, and more than one in two mentioned shops (both general stores and pharmacies) (Table 3).

Although the subjects were aware of where condoms could be obtained, they felt uncomfortable in accessing them in their villages or close to home because of social

**Table 3 Young unmarried men's knowledge about and attitude toward condoms in rural central India, 2005**

Description	N (%)
Has heard of condoms (Yes)	305 (99.0)
<b>Why condoms are used *</b>	
To prevent HIV/AIDS	207 (67.8)
To prevent pregnancies	115 (38.7)
To space out pregnancies	26 (8.5)
Knows where to get/buy a condom (access)*	293 (96.0)
<b>Sources of condom access</b>	
Health center	212 (72.3)
Shop/pharmacy	152 (51.9)
Government hospital	61 (20.8)

\* Percentage may exceed 100.0 due to multiple responses.

and cultural norms that prevented them from using contraceptives. The dialogue below details how the cultural context makes contraceptives inaccessible to this group, even though they are easily available in the community.

Respondent (R)2: The nurse-midwife only goes to see married people and women who are pregnant. Who comes to ask what we want? We're very shy to even approach these people for a condom. It would mean that we were doing something wrong.

Moderator (M): Do you know if they are available in the market?

R5: Yes, they're available in the stores in our village, as well as at the shops in towns and cities.

M: So would you go to the store to purchase one?

R5: Yes, but only in the big city. Not here (in our village shop). If someone saw me buying a condom, word would spread. (FGD 4)

Clearly, young men seemed to be thinking of these issues, and they had ready opinions on the use of condoms. The overarching moral condemnation and its effects on discussing the issues also came through forcefully.

#### Condom use

Although the survey was intended to try to gather information about whether the respondents themselves had used condoms, very few (12 men; 4%) reported having done so. However, a large number reported knowing a friend or peer that had used a condom. It was our impression that at least some of the respondents may have reported their own experience as that of another person.

Though the subjects did not readily admit experience with condom use, such issues were much more openly discussed in the focus groups than in the survey:

M: Have you used one?

R1: Never needed to. We can do our "work" [sexual intercourse] without one.

M: Without a condom, what do you do?

R1: With some girl... (*laughs*)

R2: Some people do. We don't. Some people must be doing it in the village.

R3: My brother did it. He's sitting there.

M: Did you use a condom? (Directing the question to the person indicated by R3)

R4: I did use a condom once. It tore (*laughs*). I established sexual relations. I thought that I would get AIDS or something, so I'd better use a condom. But then it tore.

M: What happened then?

R4: Nothing happened. It tore, and I went home. (FGD 1)

As seen in the above excerpt and also in the survey data regarding knowledge about condoms, condom use among the young unmarried men was mainly understood in the context of pleasure and was motivated by the desire to avoid infections; the contraceptive function was clearly secondary.

Analysis revealed that about three-fifths of respondents in the survey knew of someone who had used a condom. About two-fifths of the subjects reported being told of a positive experience with a condom. Although during the focus groups, the young men discussed their experience with condom use, in the survey they reported very little discussion taking place in the community with regard to condoms (46%). Only 17% of the young men mentioned any open or free discussion in the community about condoms. Again, friends were the people they trusted most and the ones they thought they would feel comfortable about discussing condoms with in the future (for 90% of the young men). Only 2% of the young men mentioned planning to discuss condoms with a future wife (Table 4).

#### Sources of reproductive health information

The main source of SRH information was the electronic mass media (67%; mostly television, but to a lesser extent radio). However, among the young men, there was a notable preference for personal, face-to-face information through health professionals (72%). About one-fourth of the young men mentioned friends and other village peers as people from whom they would feel comfortable obtaining information in the future. Family members were not mentioned as preferred sources in this regard, while only 2% of respondents preferred television as a future source of reproductive health information (Table 5).

During group discussions, the young men mentioned that the mass media was important in terms of

**Table 4 Young unmarried men's views in community discussions of condom use in rural central India, 2005**

Description	N (%)
<b>How openly does the community discuss condoms?</b>	
There is very little discussion	146 (46.2)
Like-minded people/very close friends discuss	65 (20.6)
People discuss freely	54 (17.1)
Can't say	51 (16.1)
Total	316 (100.0)
<b>Who would you discuss condom use with?</b>	
Friends	286 (90.5)
Doctor/nurse	14 (4.4)
Future wife	9 (2.9)
No-one	7 (2.2)
Total	316 (100.0)

maximum reach of family-planning messages. However, here too they stressed the importance of interpersonal communication for information on reproductive health, particularly contraception, through community health workers. The young men wished for more detailed information from health workers and a chance to discuss their queries in privacy:

"Auxiliary nurse-midwives come to talk to unmarried girls in our villages. The nurse-midwives sit in the *anganwadi* [a center catering to services for 0-6 year-olds] behind closed doors and talk to them for hours on end. Why is it that they don't come and talk to us?" (FGD 2)

**Table 5 Sources of information about reproductive health among young men aged 17-22 years in rural central India, 2005**

Reproductive health (RH) information	N (%)
Received information	308 (97.5)
<b>Principal source of RH information</b>	
Media (TV/Radio)	207 (67.2)
Health workers	73 (23.7)
Friends/village peers	26 (8.5)
Family	2 (0.65)
Total	308
<b>Preferred source of RH information in the future</b>	
Health workers	225 (72.1)
Friends/village peers	77 (24.7)
TV	6 (1.9)
Not sure	8 (2.5)
Total	316

"We too wish to be told about various contraceptives and how they should be used, and we want to clear up all our doubts about sexual issues. But where do we go for such information?" (FGD 2)

The young men also discussed the importance of schools and educational institutions as sources of information:

"Nowadays, most children from our villages go to schools to study. If such information could be given to older children in school, it would be well accepted and received, since teachers in our villages are highly respected." (FGD 3)

"Many youths from our villages go to town for further studies. Teachers can give information about various family-planning methods available, their use, and information about access. This will be useful to everyone." (FGD 1)

The qualitative data shows that young unmarried men in rural India regard schools and educational institutions as acceptable, even desirable, channels of SRH information.

#### Communication about family planning

Clearly, the role of the peer group is important for the young men. They would also prefer to receive information from service providers, although this is not easily available. In an attempt to understand whether, after accessing information, young people ever discussed family planning-and if so, with whom-various questions were used in the survey (Table 6). Slightly more than one in two young men responded that he had indeed discussed family planning with someone. Friends or

**Table 6 Young men and communication about family planning in rural central India, 2005**

Description	N (%)
Discussed FP with someone (Yes)	169 (53.5)
<b>Discussion partners</b>	
Friends	130 (76.9)
Health workers	20 (11.8)
Family members	14 (8.3)
Villagers	5 (3.0)
Total	169
<b>Preferred discussion partner for discussing FP in future</b>	
Friends/other village peers	182 (57.6)
Doctor	82 (25.9)
Health workers	24 (7.6)
Wife (after marriage)	14 (4.4)
Family (older brother or mother)	8 (2.5)
Not sure	6 (1.9)
Total	316

peers seemed to be the most popular choice of people with whom they discussed family-planning issues. On being queried about the people with whom they would prefer to discuss reproductive health matters in the future, again friends seemed to be most popular choice. Only 14 men (4%) mentioned that they would discuss such issues with their future wives.

The young men in the focus groups were also queried about whom they preferred for discussing SRH issues. Above anyone else, they preferred to discuss such issues with their friends, as clearly emerged from the group discussions:

M: Who do you prefer to discuss your sexual health with?

R1: I discuss that kind of thing very openly with my friends.

M: So what do you talk about?

R3: It may start like this: someone tells a friend that he has some kind of problem. That friend tells me. I tell another friend, and he tells someone else. It spreads like that. Everyone gets to know. So we're aware that such problems can occur to any one of us, and we tell the first friend how to get treatment.

R2: Like for example, he (*pointing to one of the participants*) told me that he has some kind of boils on his private parts. So I told his older brother about the problem and asked him to get his brother treated. So his family got him treated. (FGD 3)

## Discussion

Our findings point out the need to develop effective strategies to educate young unmarried men in rural India about reproductive health and contraception, and also to improve their access to family-planning information and services, thus reducing the risk of unwanted pregnancies and STIs. The age of marriage among rural men is rising; thus the period after puberty when they are most susceptible to unwanted pregnancies and STIs is increasing. For example, the pressure to achieve financial stability before marriage often forces young men to delay marriage, which increases the risk of unsafe sexual activity if they are not provided with accurate information and appropriate services [6]. At the same time, young men at this stage are curious and willing to absorb new information. A lack of the necessary reproductive health information or services during this period will be detrimental to the reproductive health of young men and married couples.

Overall, the results indicated a good level of knowledge about the existence and effects of condoms. However, little information was available to the young men on other methods, such as IUDs, injectable contraceptives, or even the most common family-planning method in rural India, female sterilization. With the

Indian government's promotion of the use of condoms as a result of HIV/AIDS [29,30], it is not surprising that most young men have heard about this form of contraception and are more comfortable talking about it than about any other method. Since the only available contraceptives for young men in rural India are condoms, it is natural that in the group discussions the subject was not so much one of contraceptives generally than of condoms alone. Also, it was clear that among this group, condoms are discussed more in the context of pleasure and as protection against infections for both parties than to avoid pregnancies. It is important that the responsibilities of these young men, both in terms of health and enjoyment for themselves and their sexual partners, be stressed to them. Communication campaigns should emphasize that the dual merits of condoms are prevention of both STIs/HIV and pregnancies.

Young people face many barriers in accessing services in preventing HIV and unwanted pregnancies. Although national SRH and HIV programs recognize the need to provide such services, concerted action is often hindered by a lack of clear understanding on how to reach young people with the information and services they need. There is often also a level of discomfort about providing young people with such services [31]. A review of various published and unpublished studies has documented the increased use by young people of health services with trained providers, along with increased availability and accessibility of youth-friendly services [32]. Within the Indian family-welfare system, health workers target only married couples with SRH information and services. The FGDs clearly showed that young unmarried men are not targeted with any such information, nor is there any available assistance as to where they might seek services relating to SRH. The little information young men possess comes from television and other mass media. Though television is an important source of family-planning information because of its wide reach, it does not help resolve individual SRH queries, since such media offer generalized information, and this may be insufficient for young men. They wish for more interpersonal communication with credible sources, such as community health workers. The discrepancy between the principal source of information (electronic mass media) and its low status as a preferred source of information among young unmarried men is noteworthy. There is clearly a need for other sources of information on SRH besides that provided by television and other mass media.

Another important source of SRH information, as suggested by the present study, is schools and other educational institutions. With universal education becoming an important program for the Indian government under its campaign "Education for all," more and more young

people enroll in schools and complete their school education. A mixture of mass media and school education programs could help improve the information provided to young people.

Only 4% of survey respondents reported contraceptive use, although there were more indications of experience, especially with condoms, during the FGDs. By and large, the young men did not seem very open about their own contraceptive experience. This may be a result of the moral condemnation of premarital sex for both males and females in Indian society. Both the FGD and survey data point to limited reproductive knowledge among young unmarried men. They seem to be unaware or indifferent to the effects of unprotected intercourse on their sexual partners in the form of unwanted pregnancy. For the majority of the young men, contraception means condoms, and their reason for using them is to avoid contracting HIV. This view may partly reflect the fact that if young unmarried men do have sex, it is most probably with sex workers or older married women, and only secondarily with adolescent girls [33]. The almost universal awareness of condoms and HIV/AIDS among young unmarried rural men is a good beginning, but it is a grossly insufficient basis for responsible and safe, present and future sexual behavior. Though evidence of sexual risk taking is not available at the national level, a synthesis of small and admittedly unrepresentative studies undertaken in different geographic settings and among different subpopulations of young people suggests that 15-30% of young men and fewer than 10% of young women have engaged in premarital sexual relations, mostly unprotected [34]. This study confirms that premarital sex among young unmarried Indian men is not as rare as is commonly believed. Three out of five respondents revealed knowing other peers who had used condoms.

The only contraceptive that is suitable for young unmarried men-condoms-is also inaccessible to them in their immediate geographic area. Clearly, young men lack basic access to condoms more because of socio-cultural considerations than practical availability. The men argued that while it is easy for married people to have access to condoms, young unmarried men find it difficult to do so in the vicinity of their villages, and they would rather buy them from shops outside the villages-away from the prying eyes of their village peers/elders. This was also observed in the discussion by Meirik [35].

Unsurprisingly, very few young men mentioned any plans to discuss family planning with a future wife. They preferred discussing the matter with friends. This brings up yet another important issue: future communication between spouses among these soon-to-be-married young men. This group of young unmarried men does not seem to be aware of or believe in the importance of

having an open discussion with their future spouses. However, their present intention not to discuss condoms with their wives does not necessarily determine their eventual actions once married. In the Indian context, marriage is a watershed moment in young men's lives and could change many of their views concerning women.

## Conclusions

The findings clearly indicate the need for focused interventions in the rural areas of India, where young men seem ready and willing to absorb reproductive health messages and access services. It is important that program planners identify this underserved group of young unmarried men with effective communication strategies that will enable them to act responsibly not only in the present, but also in the future, when they are married, and take crucial family-planning decisions together with their wives. Youth-inclusive communication campaigns, with more focused intervention targeting young unmarried men, should be developed, and health workers should be made aware of the needs of this group in future communication.

## Acknowledgements

The authors thank the Academy of Finland (Grant No. SA205648) for supporting the fieldwork of this study and the Doctoral Program in Public Health (DPPH), University of Tampere, Finland and the Academy of Finland (Grant No. SA138232) for supporting the analysis and writing of this article. The intervention project in which the principal investigator was involved was funded by Vaestoliitto, the Family Federation of Finland, Helsinki through DKT India, a contraceptive social marketing organization. DKT India is also gratefully acknowledged for its support during the fieldwork.

## Author details

<sup>1</sup>School of Health Sciences, University of Tampere, 33014 Finland. <sup>2</sup>Vaestoliitto, The Family Federation of Finland, Helsinki, Finland. <sup>3</sup>The Department of International Health, University of Tampere, 33014, Finland. <sup>4</sup>Department of Social Research, University of Helsinki, Finland.

## Authors' contributions

All three authors-AC, MS, and TK-participated and contributed in the conception, design, analysis and writing of the article. Further, all three authors read and approved the final manuscript, and are aware that the manuscript is being submitted to the journal.

## Competing interests

The authors declare that they have no competing interests.

Received: 25 March 2011 Accepted: 17 June 2011

Published: 17 June 2011

## References

1. Santhya KG, Jejeebhoy SJ: **Young people's sexual and reproductive health in India: Policies, programmes and reality.** *Regional working paper, South and East Asia, The Population Council, New Delhi, India* 2007.
2. Pachauri S, Santhya KG: **Reproductive choices for Asian adolescents: A focus on contraceptive behavior.** *International Family Planning Perspectives* 2002, **28**(4):186-95.
3. **Programme of Action of the 1994 International Conference on Population and Development, Chapters I-VIII.** *Population and Development Review* 1995, **21**(1):187-213.

4. Registrar General of India: *Census of India* New Delhi: Government of India; 2001.
5. Jejeebhoy S: **Adolescent sexual and reproductive behavior: a review of the evidence from India.** *Soc Sci Med* 1998, **46**:1275-90.
6. Bott S, Jejeebhoy S, Shah J, Puri C: **Towards Adulthood: Exploring the sexual and reproductive health of adolescents in South Asia.** Geneva, WHO; 2003.
7. Nare C, Katz K, Tolley E: *Measuring Access to Family Planning Education and Services for Young Adults in Dakar, Senegal* Research Triangle Park, NC: Family Health International; 1996.
8. Katz K, Nare C: **Reproductive Health Knowledge and Use of Services Among young adults in Daker, Senegal.** *J. Biosoc. Sci* 2002, **34**:215-231.
9. Bailie R, Steinberg M: **The focus group method in a formative evaluation of a South African high school sexuality education programme.** *Br J Fam Plann* 1995, **21**(2):71-75.
10. Amazigo U, Silva N, Kaufman J, et al: **Sexual activity and contraceptive knowledge and use among in-school adolescents in Nigeria.** *Int Fam Plann Perspect* 1997, **23**(1):28-33.
11. Gorgen R, Yansane M, Marx M, et al: **Sexual behaviour and attitudes among unmarried urban youths in Guinea.** *Int Fam Plann Perspect* 1998, **24**(2):65-71.
12. International Institute for Population Sciences (IIPS) and ORC Macro, India. Mumbai: **National Family Health Survey (NFHS-3) 2005.**
13. Hira S, Khalil SN, Rabia MWRM: **Knowledge and attitudes towards HIV/STD among Indian adolescents.** *International Journal of Adolescence and Youth* 2005, **12**:149-168.
14. Abraham L: **Bhai-behen, true love, time pass: Friendships and sexual partnerships among youth in an Indian metropolis.** *Culture, Health & Sexuality* 2002, **4**:337-353.
15. Abraham L: **Understanding youth sexuality: A study of college students in Mumbai city.** *The Indian Journal of Social Work* 2001, **62**:233-248.
16. Bollinger RC, Brahme RG, Divekar AD, et al: **High-risk behaviour in young men attending sexually transmitted disease clinics in Pune, India.** *AIDS Care* 2005, **17**:377-385.
17. Banerjee P, Mattle C: **Knowledge, perceptions and attitudes of youths in india regarding HIV/AIDS: A review of current literature.** *International Electronic Journal of Health Education* 2005, **8**:48-56.
18. Rani PMS: **Sexual and reproductive health status of adolescents and young married girls: Issues and concerns.** *The Indian Journal of Social Work* 2005, **66**:460-471.
19. Santhya KG: *Empowering married young women and improving their sexual and reproductive health: Effects of the first-time parents project* New Delhi: Population Council; 2008.
20. Nema A, Sharma KKN: **Perspectives of family planning among youth of Jabalpur City, Madhya Pradesh, India.** *The Anthropologist* 2009, **11**:173-179.
21. Jaya J, Hindin MJ: **Premarital romantic partnerships: Attitudes and sexual experiences of youth in Delhi, India.** *International Perspectives on Sexual and Reproductive Health* 2009, **35**:97-104.
22. Samant Y, Mankeshwar R, Sankhe L, Parker D: **HIV-related knowledge and attitudes among first year medical students in Mumbai.** *India Adolescents. International Electronic Journal of Health Education* 2006, **9**:13-24.
23. Rangaiyan G, Verma RK: **Reproductive health, sexual activity and condom use: Knowledge among male college students in Mumbai.** *The Indian Journal of Social Work* 2005, **66**:442-459.
24. Jaya J, Hindin MJ: **Non consensual sexual experiences of adolescents in Urban India.** *Journal of Adolescent Health* 2007, **40**:573e7-573e14.
25. District Level Household and Facility Survey (DLHFS-3), Madhya Pradesh, International Institute for Population Sciences (IIPS), 2007-2008: Mumbai.
26. Greenhalgh S: **Towards a political economy of fertility: anthropological contributions.** *Population and Development Review* 1990, **16**(1):85-106.
27. Char A, Saavala M, Kulmala T: **Male perceptions on female sterilization: A community-based study in rural central India.** *International Perspectives on Sexual and Reproductive Health* 2009, **35**:131-138.
28. Saavala M: *Fertility and familial power relations: Procreation in South India* Richmond: Curzon; 2001.
29. National Aids Control Organization: *National AIDS Prevention and Control Policy, New Delhi* 2004.
30. National Aids Control Organization: *Annual Report, 2002-2004* .
31. Chandra-Mouli V, Lawe-Davies O, Bruce D: **Responding to the needs of adolescents.** *Bull World Health Organ* 2010, **88**(1):3.
32. Dick B, Ferguson J, Chandra-Mouli V, Brabin L, et al: **Review of the evidence for interventions to increase young people's use of health services in developing countries.** In *World Health Organ Tech Rep Ser. Volume 938.* Department of Child and Adolescent Health and Development; 2006:151-204, discussion 317-41.
33. Verma RK, Pelto PJ, Schensul SL, Joshi A: **Sexuality in the Time of AIDS: Contemporary Perspectives from Communities in India.** New Delhi: Sage; 2004.
34. Jejeebhoy SJ, Sebastian MP: **Young people's sexual and reproductive health.** In *Looking Back, Looking Forward: A Profile of Sexual and Reproductive Health in India.* Edited by: Jejeebhoy SJ. New Delhi: Rawat Publications; 2004.
35. Meirik O: **Adolescence and safety of contraceptives.**[<http://www.who.int/reproductivehealth/publications/adolescence/9241562501/en/index.html>].

#### Pre-publication history

The pre-publication history for this paper can be accessed here:  
<http://www.biomedcentral.com/1471-2458/11/476/prepub>

doi:10.1186/1471-2458-11-476

**Cite this article as:** Char et al.: Assessing young unmarried men's access to reproductive health information and services in rural India. *BMC Public Health* 2011 **11**:476.

**Submit your next manuscript to BioMed Central and take full advantage of:**

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at  
[www.biomedcentral.com/submit](http://www.biomedcentral.com/submit)



Provider bias or organizational limitations? Female and male health care workers' interaction with men in reproductive health programs in rural central India

Arundhati Char, M.Sc<sup>1,4</sup>, Minna Saavala, Ph.D<sup>2,4</sup>, Teija Kulmala, MD., Ph.D<sup>1,2,3</sup>

<sup>1</sup> School of Health Sciences, University of Tampere, Finland

<sup>2</sup> Vaestoliitto, The Family Federation of Finland, Helsinki, Finland

<sup>3</sup> The Department of International Health, University of Tampere, Finland

<sup>4</sup> Department of Social Research, University of Helsinki, Finland



## **Abstract**

While the national policy stresses on the need to involve men in reproductive health services to enhance the health of the couple, little is known about how health care providers perceive this, and how far have they realistically involved men with regard to information, communication and services. This article examines the extent, motivation and prevalence of village-level health workers' interaction with men concerning reproductive health issues in rural central India. A total of 52 in-depth interviews with four levels of health providers and two senior medical administrators from the block and district were conducted and analyzed using content analysis techniques. The results show that there is definitely a big degree of provider bias against involving men but also organizational weakness, wherein the health providers are not aware of the importance of strategically involving men in the range of reproductive health services which are so far restricted to women alone.

## **Introduction**

In reproductive health programs, the quality of the client-provider interaction is known to have a strong influence on initial adoption, effective use, and continuation of family planning methods, as well as on word-of-mouth favorable publicity about family planning and other reproductive health services.<sup>1,2</sup> Guidelines for client-provider interaction generally assume that the client is a woman.<sup>2</sup> However, the last fifteen years have witnessed increasing global recognition of the importance of men's involvement in sexual and reproductive health (SRH). Issues such as the AIDS epidemic have reinforced the urgency of encouraging men to take responsibility for their own sexual and reproductive health and that of their partners.<sup>3</sup>

The International Conference on Population and Development (ICPD) in 1994 called on organizations that historically had provided family planning and other reproductive health services to women, to constructively involve men in their programs for the benefit of both men and women.<sup>4</sup> The National Population Policy (2000) of India too emphasized an increased male participation in Planned Parenthood. Gender inequalities in patriarchal societies ensure that men play a critical role in determining and making decisions on key areas like education, employment and marriage, besides access to and utilization of health, nutrition, and family welfare services for women and children.<sup>5</sup> It is therefore essential to include them in programs for increased reproductive health outputs for both males and females.

Currently, with regard to family planning services, over 97 percent of sterilizations in India are performed on women. Public family health strategies both at national and state levels have acknowledged the need to correct this manifestation of gender imbalance.<sup>5,6</sup> According to the National Population Policy, the special needs of men include re-popularizing vasectomies, in particular non-scalpel vasectomy as a safe and simple procedure, and focusing on men in the information and education campaigns to promote the small family norm.<sup>5</sup>

Despite global recognition at the level of international agreements as well as finding a mention in the national and state program policies, India has not developed large-scale programs that effectively reach out to men. Involving men is particularly challenging in countries whose culturally defined gender roles may discourage men's participation. Women's health advocates and feminists initially asked whether involving men risked diverting resources from women and encroached on their reproductive freedom. These concerns, however, have lessened with the growing recognition, spurred on by the HIV epidemic that the reproductive health of individuals largely depends on a relational act occurring between two people.<sup>2</sup> The potential benefits of men's involvement include increased rights for women, improved family health, better communication between partners, and joint and informed decision making within households.<sup>7</sup> Empirical evidence shows convincingly that men exhibit poor reproductive health knowledge and underutilization of reproductive health services in India. A survey in India and an intervention study in Pakistan each documented that even educated men lacked knowledge about reproductive health issues.<sup>8,9</sup>

During India's state of emergency between 1975 and 1977, an infamous family planning initiative began in April 1976, involving the vasectomy of thousands of men under coercive conditions. The then Prime Minister Indira Gandhi's son, Sanjay Gandhi, was largely blamed for what turned out to be a failed program. The highly controversial program was followed by a strong resistance to any male-oriented family planning initiative, which has continued into the 21st century.<sup>10</sup>

Grass-root health workers have since then interfaced more with women in communities rather than men for family planning information and services. This historic focus on services targeted at women has led to men being neglected in the reproductive health information and services network, often to the detriment of both men and women. Consequently, governmental policies at the strategic level have addressed the need to involve men since the late 1990s.<sup>5</sup> However, it is not yet clear how the strategy aimed at addressing men has been played out in the rural reality. Health provider - potential male client interface is still limited, and there is a lack of clarity with regard to the underlying factors. The role of systemic factors, namely the fieldworkers' lack of strategic knowledge and structural weaknesses in the organization of the family health program needs to be ascertained along with the extent to which the lack of interaction with male clients derives from provider bias against men among village health workers.

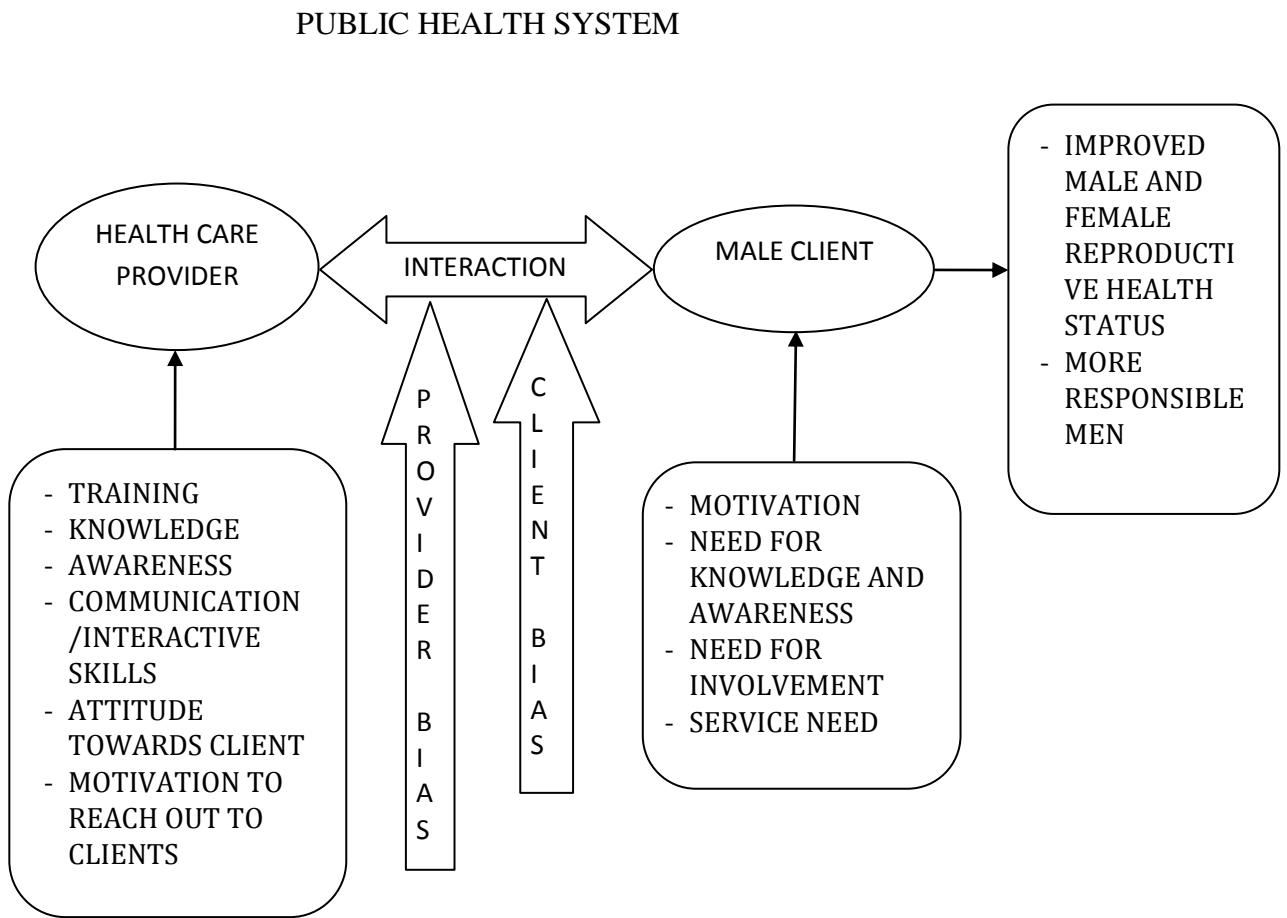
This article examines the extent, motivation and prevalence of village-level health workers' interaction with men concerning reproductive health issues in rural central India. The main interest is in the initial contact points in the households and villages where fieldworkers visit to promote family planning and provide information on reproductive health services.

### *Conceptual framework*

The interaction between a health provider and a potential client, in this case a male client, brings together a health worker who is part of the public health care system, and a man who is motivated, consciously or otherwise, by his and/or his partner's sexual and reproductive health objectives. The occurrence and nature of this interaction reflects a number of limiting conditions: the health provider's strategic awareness and interactive skills, and the man's awareness of his own or his spouse's motivation, level of knowledge and service needs (Figure 1). At the baseline, all these factors are affected by the gender ideology that manifests values, norms and asymmetrical opportunities available for men and women.

In this study, we concentrate particularly on two parts of this complex picture, namely the organizational structures and provider bias which is defined here as 'the attitude of a provider who provides services only to individuals who he/she is comfortable with, or who does not feel the need to reach out to a particular group with reproductive health information with the understanding that it may not be beneficial to them'. Provider bias against men in sexual and reproductive health in developing countries has attracted attention only as part of wider male involvement issues.<sup>2</sup> However, most studies of male client-provider interaction in the developing world deal with the issue in the context of non-governmental organizations' experiences.<sup>11-16</sup> In this study, we examine this interaction in the public service provision.

Figure 1: The study's conceptual framework of factors relating to male client-health provider interaction



## **Methodology**

### *Structure of the rural health care system in India*

India's rural health care system is well established and it reaches out to the micro-interiors of the country.

With its three-tier structure in the public sector, a sub-health centre (sub-centre) is the most peripheral and first contact point between the primary health care system and the community. As per the population norms, one sub-centre is established for every 5000 population in plain areas and for every 3000 population in hilly/tribal/desert areas. At the next tier is the Primary Health Center (PHC) that caters to a population of 30,000 people. The tertiary health unit is the Community Health Centre (CHC), which is based at the district headquarters and caters to a population of about 1,20,000 population. All these referral units are equipped with personnel and equipment to carry out a range of health services under sexual and reproductive health, including pregnancy, post-partum, child health and family planning services, immunization, and general health care. An Auxiliary Nurse Midwife (ANM), a female paramedical worker posted at the sub centre and supported by a Male Multipurpose Worker (MPW-M) are the front line workers in providing Family Welfare Services to the community. A Lady Health Visitor (LHV) posted at the PHC supervises the ANM.<sup>17</sup>

The daily routine of the ANMs is built on monthly route plans. During their usual course of work, they visit ante natal care (ANC) women regularly, conduct check-ups for babies up to 3 years of age, distribute contraceptives (oral pills and condoms), motivate female sterilization clients during their home visits and monitor the health of families in their area. Most of the interactions of the ANMs are in homes of people and mostly with women of the household. Usually, health care centers are over-burdened and struggle to provide services with limited personnel and equipment. Absence of supportive supervision, lack of training in inter-personal communication, and lack of motivation towards their work in rural areas, together impede citizens' access to reproductive and child health services, and contribute to poor quality of services and an apparent insensitivity to client's needs.<sup>5\*</sup>

To meet the health needs of the population, especially at grass root level, a multipurpose health workers program was introduced in 1978, to undertake various tasks relevant to promotion of health and prevention of disorders, with special emphasis on maternal and child health services. The Male Multipurpose Worker (MPW-M) mostly interacts with men in the community and is supervised by the Male Supervisor (MS). He also works towards the promotion of male sterilization, including non-scalpel vasectomy, which the government of India is trying to promote in order to encourage male involvement in family planning. He conducts discussions with men on various contraceptive methods and talks of condoms as a dual protection against pregnancy and STIs/HIV, in addition to his other public health promoting activities, which forms major part of his responsibility.

### *The study setting*

The study was conducted in Sehore and Raisen, two districts of Madhya Pradesh in central India from September to October 2005. The state has a total population of 60.4 million people, of which about 73% reside in rural areas. The total fertility rate is 3.12 for the state overall and 3.34 for

---

\* Since this 2005 study, the rural health care structure has been modified with the implementation of the National Rural Health Mission (NRHM) and now there is a network of Accredited Social Health Activists (ASHA) workers, who comprise of community peers who have been trained for any emergency health services in the villages.

rural areas, which are higher than the comparable national rates of 2.68 and 2.98, respectively. About 70% of residents of Madhya Pradesh depend on agriculture for their income. The sex ratio at birth is 933 females per 1,000 males, the birth rate is 32.3 per 1,000 persons, and about 50% of women and 70% of men are literate.<sup>18</sup> In 2005, the contraceptive prevalence rate in Madhya Pradesh was 55.9% (54.1% in the rural areas), among which 46.9% of eligible couples were using female sterilization.<sup>19</sup>

### *The data*

The data reported here were collected from four categories of rural health service providers in two districts - Sehore and Raisen, about 50 km from the state capital, Bhopal, from August to September 2005. This cross sectional study used qualitative in-depth discussion interviews (IDIs) and broadly covered most of the health care provider categories serving rural areas, both male and female. The selection of respondents was purposive.

A list of Auxiliary Nurse Midwives (ANMs), Lady Health Visitors (LHVs), Male Supervisors (MS) and Male Multi-Purpose Workers (MPW-M) was gathered from the Block Extension Office at the District Headquarters. Participants were randomly selected and their availability was ensured and appointments sought before meeting them for individual interviews. The purpose of the interview was explained to each one of them as 'to understand their work, modus operandi and points of contact with the communities, especially with men in the community'. Interviews were held with 20 ANMs, 6 LHVs, 8 MS and 16 MPW-M across the two districts. Discussions were also held with two senior program managers - a Block Medical Officer (BMO) from the block headquarter and a Chief Medical Officer (CMO) from Sehore district.

Thus, a total of 52 interviews were conducted. Individual discussions were held with each of them based on a discussion guide that was pre-tested. The questions included their socio-economic profile, numbers of years of service, trainings attended, profile of work, community interactions and extent of interaction with men during their work. The interviews were kept as free-flowing as possible in order to get all nuances pertaining to the health care workers' interaction with community men. The data was analyzed using content analysis technique.

## **Results**

### *Profile of study participants*

The average age of the respondent health workers spanned from 38 years to 55 years. They had 10 to 14 years of formal schooling after which each one had intensive training for the health service position that they were currently working, ranging from one month for the ANM training to one year for MPW training. Their experience in the current job ranged from 7 to 14 years. All of them had undergone both theoretical as well as on-field training either prior to joining or while on the job, qualifying them as experienced workers. The block and district level health officers interviewed were trained medical doctors and had been in their current service position for about seven years, with a total of 15 and 25 years in service respectively.

All the village level health workers belonged to similar rural backgrounds, spoke the same language as the communities they were serving, and had their homes and families in the same rural pockets.

The duties described by the interviewees corresponded to the ones expected from them according to the state family health organization's guidelines.<sup>5</sup>

*Extent of interaction with men in the community*

While the local health structure was well-defined and followed a particular program,<sup>17</sup> the segmentation of the population for information and service reach was based on the perceptions of the health workers per se rather than on what the program addressed and advised. The local health workers took it for granted that they were expected to interact mainly with women for messages related to reproductive health and family planning. The interviews revealed that men are seldom addressed and hardly ever specifically targeted in the program.

An ANM, a female village worker, explained an experience shared by nearly all female interviewees:

"I do not interact with the men of the community. Even men do not come to me for any information and counseling on family planning or contraception. Their involvement on these issues is very less". (ANM1)

All the ANMs interviewed said that their discussions on RCH and FP at the community level are held mostly with women, at their homes:

"Discussions on RCH/FP are again held in people's homes, more on a one to one interaction. These are mainly held with women; we do not discuss with couples. (ANM4)

When the interaction is on a one-to-one basis at home, it becomes difficult for a female worker to address men. In rural India, it is considered inappropriate for a female worker to discuss such issues with a male, particularly if no one else is present and if she is herself actively bringing the topic to the fore. One ANM explained: "No man has approached me on his own with any query regarding contraception or other related issues. It is not a priority to him since his wife is talking to us anyway". (ANM7)

Only one female village worker said that when there were discussions on condoms, men were involved in such discussions, but again, only if they were present during the health worker's visit to their homes.

In general, the grass root female health workers (ANMs and LHVs) do not interact much with men in the community. On the contrary the male staff (MPWs and MS) interact more with men than women in the community as they are not limited by conceptions of propriety as much as women. However, male village workers also report a non-enthusiastic audience in men with regard to information on reproductive health: "We contact men since the ANM mainly interacts with women. However not many men participate. Only one in four comes for such discussions" (MS3)

The male multipurpose workers (MPWs) mainly counsel and discuss with men in the community. However, here too, they say that village women come forward for information more eagerly than men. As mentioned by one multi-purpose worker,

"Condoms are the most popular among men since they also prevent infections and diseases like AIDS. However, the women come to the forefront even to discuss condoms - the men do not take any interest" (MPW4)

## *Program factors affecting interaction with village men*

### *a. Awareness of the policy of male involvement among village workers*

The National Population Policy as well as the Madhya Pradesh Population Policy clearly states the importance of involving men in the family planning program.<sup>5,6</sup> We went on to assess health workers' knowledge of the national and state policies on male involvement in reproductive health. We wanted to investigate whether the lack of outreach to men is an outcome of the level of awareness on the issue among village level health workers. Further, has the policy interest failed to materialize due to blocks in the information flow concerning strategic objectives?

The interview data shows that the local level workers lack information on strategic guidelines, although they are trained well to work on practical issues. The burden of everyday work experience is so high that the workers do not see themselves having any opportunity to familiarize themselves with policy papers: "We are so overburdened with our work, that we do not have time to find out what is being said and where." (ANM12)

On mentioning that they might have heard of the policy documents during their training program, one ANM mentioned, "We only remember being trained on our day to day work, number of villages to be covered, and how we should report our daily work. We do not remember any discussion on the (national or state) policy." (ANM9)

Even local level Male Supervisors and Lady Health Visitors, who have a supervisory role, were ignorant about policy papers. When asked about the National Population Policy, a Male Supervisor countered: "What does it say? We have no knowledge of it." (MS2)

Implementation of the policy document seems to be missing at the grassroots level in rural India with none of the village level interviewees being aware of the state population policy, the National Population Policy or even the AIDS situation in the state, although they reportedly had undergone training on these issues. The health workers in rural Madhya Pradesh give the impression that they are ignorant of the present strategies concerning male involvement in reproductive health.

Despite general ignorance on the strategic guidelines and policies among local health workers, some of the respondents understood well the importance of male involvement. One interviewee recognized the need and willingness of rural men to know more and to participate. She understood the reason behind the need to involve men as one of strong decision-making power in the rural setting, which affects the health of women:

"Men do want to know and be informed about these issues. But in the village, the men are not aware, they are shy to discuss such issues, and do not come out openly. And the problem here is that they are the decision makers in the family. It is a male-dominant society; the wife is dependent on the husband. So, it is very important that they be well informed". (ANM9)

Another male village worker shared the same view and stressed how the involvement of males would also benefit females in rural areas: "Both men and women are partners for life. However in our societies, the man is dominant and so without his support, no service is possible. Therefore, involving both of them equally is very important for successful service delivery". (MPW5)

Consequently, we may say that the health workers who are responsible for the outreach to



villagers are unaware of the strategic objectives of reproductive health policies in India. However, many male as well as female workers have come to understand the importance and motivation for male involvement in reproductive health through their activities in rural areas.

*b. Access to men*

One of the most evident explanations to the lack of interaction with village men relates to the access to men. The village workers are expected to make their rounds in villages and to visit houses, where they mostly discuss reproductive health issues with females. Men are expected to be away from their homes during the day, busy in their fields or in town. One of the ANMs explained: "Husbands are mostly never available when we visit, so it is impossible to involve them in such discussions." (ANM3)

Sometimes discussions are held in the Anganwadi centers (child health centers) or in the fields, but even then, men are rarely encountered. Most health workers reported that men were usually busy at their fields or away from their homes when they went for home visits.

Some village-level workers also had suggestions for improving male involvement by more privacy and more individual interaction: "I think that the best way to get men talking about the sexual and reproductive health issue is to discuss with them individually, in privacy. They do not open up in a group or even in front of other family members at their homes." (MPW5)

*c. Provider bias against men*

Studies from various parts of the world have brought out reasons why men are not involved in reproductive health issues, or even if they are, their interaction is limited. Firstly, a programmatic exclusion criterion may lead to directing project activities to women only. Secondly, there is evidence of provider bias against male clients and of providers making men feel uncomfortable and unwelcome.<sup>13</sup> Provider bias may lead to health providers failing to give men accurate information about male contraceptive methods such as vasectomy<sup>14</sup> and violating their rights to privacy and confidentiality.<sup>16</sup>

Provider bias against men comes clearly through in the interview data as one of the reasons why outreach to village men remains limited. One of the basic tenets of a number of interviewees was that men are simply uninterested in reproductive health issues: "Men are less participatory or seem not interested in such issues when we visit their homes for discussions. However, in isolation/privacy, the men do discuss among themselves." (ANM3)

Some of the interviewees thought that lack of active participation from men was due to them already having the information they needed and that they would ask for information and services if they required: "Men are themselves wise and understanding. They do not need to know much. If the men want any specific information, they come to the ANM themselves." (ANM6)

Health workers believed that men are not expected to be interested in family planning since women take the lead role in reproductive health issues. According to the male supervisors, men are more eager to let their wives get sterilized: "The viewpoints of the men in the community are traditional and both men and women themselves also endorse these viewpoints due to misconceptions." (MS2)

Although the government of India has a clear objective of reducing reliance on women's methods, male sterilization even in its new non-scalpel form is not gaining popularity in India. To

understand what the health providers' perceptions were with regard to men's 'disinterest' when it came to reproductive health issues, they impromptu spoke about the governments' recent program to intensify the popularity of non-scalpel vasectomy (NSV) among men. This, according to them, is a good method to make men take responsibility of family planning. But according to them, this program too has not helped holding men's interest in family planning. Motivating men for the non-scalpel vasectomy has appeared as hard, due to the gender ideology which posits females as the ones to take the onus and risks of family planning on their own bodies. According to the Block Medical Officer, "NSV program has not picked up. Awareness itself is lacking about it. The health workers feel that motivating one man for NSV is equivalent to motivating fifty women for female sterilization, so why not get women for female sterilization, which is the easier option?"

The Block Medical Officer's comment pointed to the factor behind the weak motivation that male workers might have to address men in the first place: it is easy to give up when facing the prevalent gender ideology, which allocates family planning as a woman's duty. Men's participation was doubted also in the higher administrative level by pointing out the failures of the NSV campaign: "Last year, they performed only 6 NSVs of 6,000 sterilizations (the rest being female sterilization). So then where is the question of men's participation?" (Block Medical Officer)

One officer considered the whole task of addressing men very difficult due to cultural beliefs and the gender ideology: "Getting men involved in family planning promotion programs is like trying to bell the cat! It is more difficult than one can see. Men do not bear labour pains, so they are not guilty of not adopting family planning and do not take it as their responsibility. Even the women do not want their men to get sterilized due to misconceptions like men becoming weak after the procedure; they have to work hard so why should they bear this, and so on..." (Chief Medical Officer) Clearly, local health workers, both those who are responsible for the administration and those working in the field with communities, share the provider bias against males, which they explain by the local gender ideology and male disinterest.

## **Discussion**

There is unequivocal acknowledgement among local health workers about the lack of male involvement in reproductive health in rural Madhya Pradesh. Despite lack of awareness about the strategic objectives related to male involvement and the policy papers pertaining to them, they appreciate the importance of reaching out to both men and women for effective family welfare implementation. Women are mainly the point of contact for the female health workers. Although they do acknowledge the importance of reaching out to men, they are not confident about the means. The only opportunity for interacting with them is during the women's visits for antenatal or postnatal care along with their husbands, or when the husbands are at home during the health workers' home-visits. Grass root health care providers often construe men's non-participation as disinterest with regard to reproductive health issues. On the other hand, even though the male health workers mainly interact with men in the community, they too find it difficult to involve men in providing services and information on reproductive health, including family planning. The importance of provider bias is different for male and female health workers. While for female health workers, lack of interaction with community males is mainly due to organizational limitations, followed by provider bias, for male health workers, provider bias is a major hindrance as compared to organizational limitations. Although men do not suffer from the limitations of male interaction in the prevailing gender system as compared to women, they fail to engage males.

It is evidenced that rural men want more personal information about sexual and reproductive health<sup>20</sup>, and are worried about their wives' health.<sup>21</sup> Hence, there seems to be a huge mismatch between what the rural men feel and what the health workers think is the reality. At the moment, there is some contact with the men when women are being accessed. This combined outreach still does not serve the purpose as men would want specific answers to their questions. From the men's perspective, they feel that only the women are targeted and that there is no effort to reach out to them about their information needs.<sup>21</sup> Women, on the other hand, seem to be easily accessible in the rural community and therefore men are not specifically targeted in these programs.

The execution of the maternal and child health program in India is in need of a renewed understanding of practical forms of action that would best serve the strategic objectives of male involvement. The introduction of male village-level workers has evidently not been as effective as expected. The reasons why female workers have failed to address male's needs are mainly practical and cultural, as women can neither reach men at their homes nor can they easily take initiative in talking to them about reproductive health issues. The failure of the male village workers lies both in the organizational issues (absence of confidential one-to-one interaction) and provider bias against men. Organizational shortcomings relate more to health workers' current work pressures that preempt culturally possible contact with males. Couples are hardly addressed together, due to the fact that village workers go for home visits and men are rarely at home during the day. Reaching out to men through couple counseling would require meeting the males who accompany their wives for attending ante-natal or other services in health centers. Encouraging this practice would require major organizational drive as well as facilities where the couple can be met in privacy, which are lacking in most rural health centers.

More difficult than combating organizational issues is the provider bias which is rooted in local gender ideology. When the onus of reproductive health and family planning is on women, the program implementers easily give up their efforts to popularize such methods like non-scalpel vasectomy when facing resistance. If the local village workers themselves fail to believe in the possible active role of men in reproductive health issues, they may be transmitting their own skepticism in their interaction.

## **Conclusion**

Health care providers need to make a conscious effort of reaching out to men with complete information. Training and sensitization of the health workers at all levels, including training them on the existing national and state policies and guiding them to program implementation will go a long way in ensuring greater reach to men in the communities. This is the need of the hour and more and more innovative strategies need to be developed in order to reach out to target men.

## **Acknowledgments**

The authors thank the Academy of Finland (Grant No. SA205648) for supporting the fieldwork of this study and the Doctoral Program in Public Health, University of Tampere, Finland, and the Academy of Finland (Grant No. SA138232) for supporting the analysis and writing of this article. Project Mandi was funded by Vaestoliitto, the Family Federation of Finland, Helsinki, and DKT India. They are also gratefully acknowledged for their support during the fieldwork and data analysis.

## References:

1. Murphy, E., & Steele, C. 2000. Client-Provider Interactions in Family Planning Services: Guidance from Research and Program Experience, *MAQ Papers*, Vol. 1, No. 2.
2. Ringheim, K. 2002. When the Client is Male: Client-Provider Interaction from a Gender Perspective, *International Family Planning Perspectives*, 28(3).
3. Salem, R. 2004. Men's Surveys: New Findings. *Population Reports*, Series M, No.18. The INFO Project, Baltimore: Johns Hopkins Bloomberg School of Public Health.
4. Programme of Action of the 1994 International Conference on Population and Development, Chapters I–VIII. 2005. *Population and Development Review*, 21(1):187–213.
5. India: Ministry of Health and Family Welfare 2000. *National Population Policy*
6. Madhya Pradesh: Department of Health and Family Welfare. 2000. *Madhya Pradesh Population Policy*
7. Walston, N. 2005. *Challenges and Opportunities for Male Involvement in Reproductive Health* in Cambodia POLICY Project.
8. Bloom, S.S., Tsui, A.O., Plotkin, M. & Bassett, S. 2000. What husbands in northern India know about reproductive health: Correlates of knowledge about pregnancy and maternal and sexual health, *Journal of Biosocial Science*, 32(1), 237-251.
9. Kamal, I. 2001. Field experiences in involving men to promote safe motherhood: The Pakistan experience, Paper presented at the World Health Organization (WHO) Meeting of Regional Health Advisors on Programming for Male Involvement in Reproductive Health, Washington, D.C., Sept. 5-7.
10. Frank, K. 2001. *Indira, The Life of Indira Nehru Gandhi*, Harper Collins, London.
11. Raju, S., & Leonard, A. 2000. Non-governmental organizations pave the way. In Raju, S. and Leonard, A. (Eds), *Men as Supportive Partners in Reproductive Health, Moving from Rhetoric to Reality*, Population Council, New York.
12. CHETNA. 2000. Narrowing the gender gap by enhancing men's involvement in reproductive health, in: Raju S. and Leonard A. (Eds.), *Men as Supportive Partners in Reproductive Health, Moving from Rhetoric to Reality*, Population Council, New York.
13. Ringheim, K. 1999. Reversing the downward trend in men's share of contraceptive use, *Reproductive Health Matters*, 7(14), 83-96.
14. Pile, J.M., Bumin, C., Ciloglu, G.A., Akin, A. 1999. *Involving men as partners in reproductive health: Lessons learned from Turkey*, AVSC Working Paper, New York: No. 12.
15. Piet-Pelon, N., Rob, U., Khan, M.E. 1999. Men in Bangladesh, India and Pakistan: Reproductive Health Issues. Population Council, New Delhi, India, pp, 90-91.
16. AVSC and Profamilia. 1997. Profamilia's Clinics for Men: A Case Study. Colombia
17. India: Ministry of Health and Family Welfare. 2007. *Rural Health Care System in India*, New Delhi.
18. India: 2001. *Census of India*, New Delhi.
19. International Institute for Population Sciences. 2005. *National Family Health Survey*, ORC Macro, Mumbai, India.
20. Char, A., Saavala, M., & Kulmala, T. 2010. Influence of mothers-in-law on young couples' family planning decisions in rural India. *Reproductive Health Matters*, 18(35), 154-162.
21. Char, A., Saavala, M., & Kulmala, T. 2009. Male perceptions of female sterilisation in rural central India. *International Perspectives on Sexual and Reproductive Health*, 35(3),131-38.