



Reproductive health research priorities in India: a framework for action

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REPRODUCTIVE HEALTH RESEARCH PRIORITIES IN INDIA: A FRAMEWORK FOR ACTION

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I. INTRODUCTION

As India marches ahead with policy and programmatic interventions for achieving National Population Policy (2000), Tenth Five Year Plan (2002-2007) goals, there is increasing recognition of accelerating the pace of interventions to ensure access to quality reproductive health services with special emphasis on equity parameters. In 2000, India joined the countries of UN in adapting Millennium Development Goals as part of the road map for achieving millennium declaration. These goals commit international community to an expanded vision of development that vigorously promote human development as the key to sustain social and economic progress and recognise the importance of building a global partnership for development. The ICPD goal of universal access to quality reproductive health services by 2015 is not one of MDGs, yet attainment of reproductive health and reproductive rights are fundamental for development for fighting poverty and meeting MDG targets. Conversely poor reproductive health undermines development by *inter alia*, diminishing quality of womens live, weakening and in extreme cases killing poor women in prime ages and placing heavy burden on families and communities¹.

The Reproductive and Child Health programme Phase 2 starting 2005-2009 in India has been designed as a programmatic response to accelerate achievements of MDGs 4 & 5 as well as proposed additional target of universal access to reproductive health services. The RCH2 programme clearly spells out set of technical and institutional strategies to achieve programme objectives. The RCH Project (1997-2004) was introduced in India to address critical concerns regarding population stabilization and maternal and child mortality. The major points of departure in the second phase of the RCH -II, include “using evidence to prioritize interventions” with a focus on improving access and quality. The provision of a essential package of services, and delivery of this package, will be made more sensitive to client needs, maintaining minimum standards to ensure equitable, responsive and quality service provision².

This paper proposes a research framework that needs to be pursued in order to achieve RCH goals in time bound manner. It is being argued that need for additional research inputs largely stems from the current gaps in programme performance. Each country will have to refocus the research efforts to address specific performance gaps. It is important that where ever possible country level research should strengthen national health care delivery system and enhances body of knowledge. Sound research and information is also essential for tracking progress, evaluation impact, allow mid course changes in different interventions.

II. CURRENT REPRODUCTIVE HEALTH SCENARIO

Current reproductive health scenario indicates that maternal mortality and child mortality rates still remain unacceptably high in the country. The number of estimated HIV infected people has steadily increased from 3.47 million in 1998 to 5.16 million in 2004. Though the decline of fertility has been registered over the years the pace of decline is not satisfactory in many states. Analysis of data on equity parameters indicates that the population in lower quintiles has shown very little improvements over the years. Also there are substantial regional inequities in health outcomes. The poor and marginalised populations face a disproportionately greater share of burden of ill health as reflected in key health parameters and coverage levels for preventive and promotive interventions.

India has been witness to a very rapid expansion of health infrastructure in past decades. The new policy environment places emphasis on addressing inequities in health and stepping up public investments. The National Rural Health Mission launched recently, promises to provide comprehensive integrated health care to rural people, in states with weak public health indicators and/or weak infrastructure³.

In following paragraphs an attempt has been made to reflect on key performance problems and challenges in achieving the specific programme and policy goals with reference to India. It is argued that pursuing the proposed research agenda will enhance programme effectiveness leading to achievements of the RCH 2 programme goals.

Interim report of Millennium task force #4 on child and maternal health of the millennium project calls for shift in perceptions in addressing two major types of research needs⁴. There has to be evidence based understanding of what is to be done within the range of medical, behavioral and public health interventions to address, maternal, child mortality, unsafe sex and high unmet demand for contraceptives⁵. The evidence emerging from child survival and newborn care, skilled attendance at birth and emergency obstetric care, role of expanded and informed contraceptive choices clearly sets out the range of technical strategies. Second part of evidence is required to establish how to make these interventions accessible to communities those needs them most. Given this context, it will be critical to spell out a research framework for India to address both categories of research clusters.

III. HIGH UNMET DEMAND FOR CONTRACEPTION:

The millennium task force has made a recommendation to include a target for universal access to quality reproductive health services including family planning. This has also been echoed in Delhi Declaration adopted during a high level meeting of partners in April 2005⁶.

Inadequate knowledge of contraceptive methods including rampant myths and misconceptions, and incomplete or erroneous information about where to obtain methods and how to use them are the main reasons cited for not accepting family planning or discontinuation. Contraceptive use in India is characterized by:

- the predominance of non-reversible methods, particularly female sterilization;
- limited use of male-/couple-dependent methods;

- high discontinuation rates; and
- negligible use of contraceptives among adolescents.

Despite improved availability and access to contraceptive services, a considerable proportion of pregnancies (21 per cent of all pregnancies that result in live births) are mistimed or unplanned. While the family planning needs of the majority (86 per cent) of women who wish to stop childbearing are being satisfied, the needs of women who wish to delay or space childbearing remain largely unsatisfied (only 30 per cent of these women have their needs met). For this reason, young women are more likely to report an unmet need for contraception. The desire to limit family size and to space the next birth are the main reasons given by the majority of those who seek an abortion, highlighting the large unmet need for contraception among women in India⁷.

There are wide inter-state variations in terms of contraceptive prevalence rate and intensity of programme efforts. The major areas which needs research inputs can be grouped as follows:

a. *Health Behaviour Research:*

As per NFHS-2 (1999), unmet need for contraception has been estimated to be nearly 16 percent.⁸ Empirical evidence suggests that a significant proportion of unmet need can be met through service delivery interventions. However still there will be a sizable chunk of couples, where elements of communications such as inter spousal communication, informed decision making, expanded choices does influence contraceptive acceptance. Research inputs from understanding nuances of decision making process, role of peer groups and satisfied clients will help in more effective organization of communication activities in different socio-cultural and ethnic settings.

b. *Expanding contraceptive Choices:*

Post-Cairo there is increasing recognition of the fact that contraceptive basket needs to be expanded to meet different client profiles and needs during various stages of reproductive life cycle. Indian programme offers a limited range in choices for reversible contraception. Research inputs from clinical trials on newer hormonal contraceptives and drug delivery systems will benefit the programme. Similarly there is need to invest in research for developing and testing out dual protection methods. There are some encouraging leads emerging from preliminary work in progress on male contraception especially use of co-polymer styrene maleic anhydride (SMA). This polymer generates electrical charge, which alters normal negative charge of sperm head, results in developing defective sperm membrane. Because of these defects sperm enzyme leaches out from acrosome and sperm loses its fertilizing ability⁹.

c. *Quality of Care in Programme Delivery*

Another major question for research relates to operationalisation of quality of care in delivery of contraceptive services. Health systems need to mainstream quality assessment processes in a sustained manner. We need more evidence-based understanding for developing institutional mechanisms to monitor service quality from providers and clients' perspectives. Also growing role of social marketing and commercial sector in provision of family planning services also calls for structures for accreditation and

certification of providers. In many states family planning camps are major source of contraceptive services. Despite existence of service delivery guidelines, programme managers and the providers find it difficult to adhere with guidelines. The research inputs will be required come up with feasible operational guidelines to adhere with service delivery protocols.

d. *Service Delivery models for Newly married couples.*

Low age at marriage and consequent high adolescent fertility rates are a cause of concern. Unmet demand for contraception is high for newly married couples. The mainstream service delivery mechanisms are lacking in proactively reaching out to these target groups. Research inputs will specifically help in designing appropriate service delivery mechanisms to specifically reach out to adolescents.

IV. HIGH MATERNAL MORTALITY AND MORBIDITY:

Concerns are being raised on stagnant levels of maternal mortality ratio and morbidity in India for nearly two decades. MDG Goal of reducing MMR to-75 percent by 2015 and universal access to skilled attendance at birth needs to be attained. The new programme recognizes importance of universal access to skilled attendance at birth and quality emergency obstetric care. Though there is better comprehension and understanding of technical design of interventions, major operational problems persists with increasing access to evidence based interventions. It is proposed to organise research needs as per following framework.

a. *Demand Side Interventions:*

Nearly 50 percent deliveries still takes place in homes and are attended by relatives and traditional birth attendants. There is considerable delay in seeking services for management of obstetric complications at higher levels of care, with the result that many avoidable deaths cannot be prevented. Services of ANMs and other health functionaries are poorly utilized. This calls for design of cost effective demand side interventions to organize community demand for seeking care in time at appropriate facilities. Emergence of vibrant self-help groups in rural areas provides an opportunity to effectively engage these groups in organizing community action for safe motherhood. Hence research inputs will help in designing feasible community based interventions with involvement of a vast number of stakeholders. One has to acknowledge that given the diversity of the programme settings in India, different models needs to be tested out for effectiveness.

b. *Supply side interventions:*

Govt of India has recently taken up policy interventions for empowering peripheral service providers in use of life saving drugs in obstetric emergencies. These initiatives have been hailed as a major step forward in reducing maternal mortality. The major challenge lies in skill up gradation of the vast cadre of existing ANMs in new guidelines¹⁰. Several concerns are raised about the poor quality of pre service trainings for these workers. Operational research models will help the programme managers to decide on the effective ways of organizing training programmes, monitor post training performance of the providers and changes in outcome indicators.

RCH 2 programme lays emphasis on strengthening a network of health institutions in providing basic and comprehensive emergency obst care services. Pilots have been undertaken in the past. However there are knowledge gaps in assessing unmet need for obst care, effective mechanisms for monitoring movement on the UN process indicators and ensuring quality of care in EmoC services. Research inputs in these areas will help in firming up the design of programme interventions.

Over the year's private sector emerged as a dominant player in medical care. There is need to recognize pvt providers as a national resource and engage them in delivery of emergency obst care services through public private partnerships models. Presently available experience is limited. Operational research studies will help in guiding the design of effective PPPs to achieve the programme goals. Such mechanisms should also have a very strong equity orientation.

V. PREVENTION AND MANAGEMENT OF RTIS/ STIS:

The World Health Organisation estimates that approximately 340 million new cases of four main curable STIs occurs each year, 75-80 percent in developing countries. STIs impose an enormous burden of morbidity and mortality in developing countries, both directly through impact on reproductive and child health and indirectly through their role in facilitating sexual transmission of HIV infections. Evidence from community and hospital based studies indicate a very high level of burden attributable to RTIs and STIs.¹¹ Research inputs will help in firming up emerging service delivery interventions in RCH 2 as well as in National AIDS Control Programme phase 3.

a. *Behavioural Interventions:*

In Indian context aim of behaviour interventions is to modify sexual behaviour so as to promote safe sex, which include reduction in number of sexual partners. Also because of unequal gender relations, most women do not seek the services for management of these infections. This is particularly true for adolescents, both married and unmarried population groups. In many cases poverty, gender and other barriers diminish individuals' ability to act as his/her interventions.

Behavioural research in domain of primary prevention of STI will help in designing outreach interventions in communities, whereas discussions on sex and sexuality are still seen as a taboo subjects. Impact of life skills education programmes in encouraging delayed onset of sexual debut, use of condoms, mutually faithful partnership needs to be demonstrated.

b. *Case Management for RTIs/STIs:*

Research inputs are required in following areas:

- Screening for RTIs/STIs coming routine reproductive health services clients etc women coming for ANC, FP services or in adolescents reproductive and sexual health programs.
- Piloting and developing evidence based clinical protocols, using sensitive point of care diagnostic methods.
- Effective partner management strategies
- Surveillance systems for monitoring anti microbial resistance to common STI pathogens

c. *Role of Periodic Presumptive treatment:*

The role of core groups and bridging population has been very well documented in STI epidemiology. As India, witnesses an emerging AIDS epidemic, especially making inroads in rural India and also consequences of migration in wake of economic opportunities, it is important to design context specific interventions. Periodic presumptive treatment for core group and bridge population and preventive education has been seen as a major strategy. However, it is not clear as how long these interventions can be sustained as STIs quickly get reestablished in these target groups. Intervention research should clearly help in designing effective periodic presumptive treatment strategies to reduce prevalence of common STIs¹².

VI. CONCLUSION:

The importance of pursuing a research agenda in key reproductive health programme delivery design and implementation is crucial in context of India's programme. Too often researchers in academic institutions are insulated from commonly perceived performance problems encountered by programme managers on a regular basis. National Essential research agenda should incorporate emerging needs for research inputs in health behaviour, health systems and operational research domain. There should be conscious effort to ensure that research findings to be ploughed in the design of programmatic interventions.

REFERENCES

1. Achieving MDGs: Population and Reproductive Health as critical determinants, UNFPA No. 10, 2003
2. RCH Phase II, National PIP, Ministry of Health and Family Welfare, Government of India, 2005.
3. National Rural Health Mission (2005-2012), Mission Document
4. Millennium Project Task Force – Child Health and Maternal Health, Who's got the power? Transforming health systems for women and children – Achieving the Millennium Development Goals
5. Ministry of Health and Family Welfare, Government of India, 2005
6. Delhi Declaration adapted during High Level Meeting on Maternal, Newborn and Child health, Delhi, April 2005
7. Regional Working Paper 2003, No. 17, Changing family planning scenario in India: An overview of recent evidence, South and East Asia, Population Council, New Delhi
8. National Family Health Survey II, 1998, IIPS, Mumbai
9. Guha, S.K. et al, phase 1, clinical trials of an injectable contraceptive for male contraception, 1993: 48: 367-375.
10. Guidelines for Ante Natal care and skilled attendance at Birth by ANMs & LHVs. Maternal Health Division, Department of family welfare, Government of India, 2005.
11. Reproductive Tract Infections – A Guide for Programme Managers, UNFPA and Population Council, New Delhi, India, 2001
12. Steen R, Vuylsteke B, DeCoito T, et al, Evidence of declining STD prevalence in a South African mining community following a core-group intervention Sex Transm Dis 2000; 27:1-8.