

Effectiveness of a multiple-strategy community intervention to reduce maternal and child health inequalities in Haryana, Nort India

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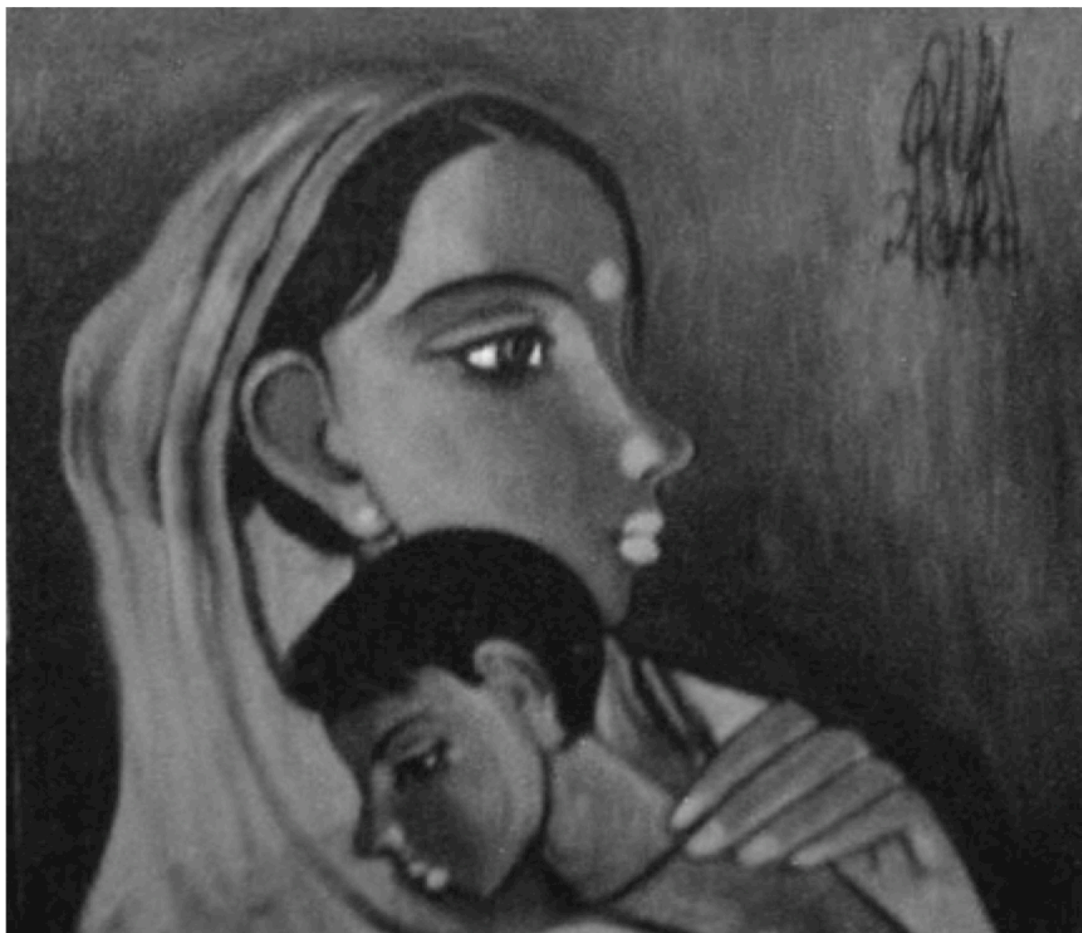
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Valorization



Valorization

The research conducted within the scope of this PhD trajectory has not only led to scientific output, but has also contributed in offering new knowledge about the way the national maternal and child health programs (NRHM) are assessed holistically by using a mixed methods approach. This approach has comprehensively provided information on the extent of implementation of NRHM's health sector plans and its effectiveness in improving MCH outcomes and reducing the inequalities across geographical, socioeconomic and gender gradients in Haryana state in India (quantitative study), and also given explanation to these findings (qualitative study). In this chapter the relevance of this study and the recommendations for the program implementers, managers and policy makers are given. Lastly, future directions for effective implementation of national maternal and child health programs are also dwelled upon.

Relevance

Maternal and child health (MCH) inequalities across socioeconomic, geographical and gender gradient is a public health concern worldwide and more so in developing countries [1]. In India, the maternal mortality ratio (MMR) is still as high as 167 per hundred thousand live births [2] and the infant mortality rate (IMR) is 40 deaths per thousand live births [3]. There is geographical inequality in MCH outcomes, like IMR is higher in rural (44 per thousand live births) as compared to urban areas (27 per thousand live births) [3]. The persistence of MCH inequalities indicates the need to assess how the existing national health programs on MCH are being implemented and for studies presenting evidence on the effectiveness of these programs, as these are highly resource-intensive interventions. Government of India had launched a multiple-strategy community intervention known as National Rural Health Mission in the year 2005, to provide primary health care to all and to carry out necessary organizational changes in the basic health care delivery system. The aim of NRHM was to improve the availability of and access to quality health care by people, especially for those

residing in rural areas (to reduce geographical inequality), the poor (to reduce socioeconomic inequality), women and children (to reduce gender inequality) [4]. NHRM was implemented till 2012 and later continued as part of National Health Mission to cover urban poor (2013 to 2017) [5]. The objective of this PhD research was to ascertain the extent of implementation of NRHM's health sector plans and its effectiveness in improving the maternal and child health outcomes and reducing geographical, socio-economical and gender based MCH inequalities in Haryana, North India by using a mixed method approach. In the previous chapters the advantage of using this approach for program assessment and its results are described in detail. Recommendations based upon holistic program assessments are likely to deliver a more complete and complex picture, and hence to be more relevant for policy making.

Target Groups

The results presented in this thesis are of relevance to several sectors/groups in the society. Of course, first of all to the implementers (medical officers, auxiliary nurse midwives or accredited social health activists) of the program themselves so that they know about the interventions that are delivered effectively by them and the ones that needs to be improved. Secondly, to the program managers who are responsible for getting the program implemented in the district and at the state level. Thirdly, to the policy makers who are involved in the five year strategic planning for improving the maternal and child health and reducing MCH inequalities in the state so as to achieve the intended goals.

Program implementers

Program implementers include accredited social health activists at the village level, auxiliary nurse midwife at the subcenter level and medical officers at primary and secondary health care facility level. For the accredited social health activists, this study provides the evidence that their work is deeply appreciated by their seniors (doctors and nurses). It's due to their counseling and behavior change communication with the mothers and pregnant women that women are increasingly utilizing the public health facilities for MCH services like

immunization and institutional delivery. They are the major catalyzing factors for increasing the institutional delivery rate. However, they need to provide complete information regarding the MCH schemes, as there was information gap regarding the knowledge of schemes between mothers and health care providers. For auxiliary nurse midwives, this study provide the evidence that community is linked with them through accredited social health activists in the villages, and they are the first point of contact at the health facilities. Hence, they should be well prepared for delivering the services like immunization and antenatal care. Also, that government health schemes related to MCH are accepted by the community, hence these are utilized more. She should plan her activities in close coordination with accredited social health activists. However, awareness about village health nutrition days among women is low, and also funds allocated to the functioning for village health and sanitation committee remains unutilized. Therefore she should involve the accredited social health activists in mobilizing the pregnant women and mothers for attending the village health and nutrition days. Also she should plan the village health need based activities to utilize the funds under the committee along with other members from the village. For the medical officers, this study provide the evidence that people in rural areas are increasingly mobilized to utilize the MCH services, and hence the number of patients are increasing in the health facilities. Access to the health facilities is also increased through availability of free ambulances. Therefor they should prepare the health facilities with adequate logistics like drugs and medicines, functioning equipments and availability of supportive staff and along with referral facility for smooth functioning of health facility and uninterrupted delivery of MCH services. It also provides them with information on the implementation status of various MCH schemes of NRHM.

Program Managers and Policy Makers

This study provide useful information for the program managers regarding extent of implementation of various MCH health sector plans of NRHM, and also about the barriers and facilitating factors of these plans. Under health system strengthening component of

NRHM, the schemes like provision of ambulance services and drugs and logistics were implemented fully in the state, and as a result utilization of maternal and child health services had increased considerably. However, there was insufficient number of ambulances per district especially in Mewat. There was no system of repair or maintenance of existing ambulances. Human resources were inadequate. There was acute shortage of health care providers. Although there was provision of hiring the contractual staff to fill the gap in human resources, however this was not enough to meet the requirement of the health care facilities due to increase in number of patients. Hence effective measures need to be adopted to increase the number of health care providers at all health care delivery levels. Some of these measures are suggested by the stakeholders in this study like appointment of health care providers from the local area, redistribution of human resources in relation to the need of the area, career incentives to doctors working in rural/ difficult areas, financial incentives to all paramedical staff working in difficult areas, etc. Mobile Medical Units were observed to be non functional. To make these functional it was suggested, by district program managers in the study, that AYUSH (Ayuurveda, Sidha, Unani and Homeopathy) doctors in alternate medicine can be deployed in these mobile units in the absence of availability of allopathic doctors for increasing the access in difficult areas.

Under communitization, accredited social health activists scheme and patient welfare committee schemes were fully implemented and rest of the schemes were partially implemented like, celebration of village health nutrition days and formation of village health and sanitation committees. The financial incentives of the social health activists may be increased, as was also desired by them, to further strengthen this scheme. Nutrition days in the villages were not celebrated monthly due to shortage of staff and lack of monitoring. Those involved in providing alternate vaccine delivery may be involved in celebrating these days in the villages and close monitoring and supervision of these days by the concerned medical officers needs to be done. Funds under the village health and sanitation committee

remained underutilized due to lack of coordination among the members. Hence, simpler coordination mechanisms should be there between grass root level workers and village heads to utilize these funds.

All the maternal health care strategies were partially implemented. Financial incentive scheme (*Janani Suraksha Yojna*) was implementing quite well, but after the administrative hitch in disbursement of funds to the pregnant ladies like linking of benefits with having an unique identification number or bank account of pregnant woman, the funds remained only partially utilized under this scheme. Stakeholders (medical officers, program managers and community representatives) had suggested opening of bank accounts of pregnant women at zero balance. Scheme for free hospital delivery and treatment for infant sickness in the hospitals (*Janani Sishu Suraksha Karyakaram*) was not fully implemented due to shortage of medical officers or staff nurses. Both these schemes however did motivate the pregnant women to go to institute for delivery. Child health Care strategies were also partially implemented. All these efforts have led to decline in maternal and child mortality in Haryana during NRHM implementation period, but it still lags behind the intended goal of reducing these mortalities. Concerted efforts to increase the availability of maternal and child health services and communitization in the villages have led to reduction in geographical and socioeconomic inequalities.

Overall the NRHM's maternal health schemes that had aimed at increasing the institutional delivery rate among the poor women and in rural areas was implemented well and effectively during the evaluation period of NRHM from 2005-06 to 2012-13. These schemes were free referral transport/ambulance services, free hospital delivery, financial incentives for institutional delivery, improved access to delivery points and availability of accredited social health activists in the villages linking the community with the health care delivery system.

Hence it is recommended that these schemes should be further strengthened. While schemes aimed at improving child health like integrated management of neonatal and childhood illness needs more attention at the implementation level in terms of strengthening the health system to provide the necessary logistics like weighing scales to measure weight of the child etc., and supportive supervision of the health care providers. Reported bottlenecks should especially be targeted, and improved planning and implementation should be done after carefully considering the recommendations suggested in this study, during the implementation of NRHM in the second phase (2013-14 to 2017-18). These results also have implications in terms of continuation of the program implementation in the rural areas with a special focus on poor women and children with the same rigor in India during the second phase of NRHM from 2013-14 to 2017-18.

A policy brief was submitted to Haryana state officials and policy makers after the completion of this study so as to take immediate actions. Consequently the Haryana government had decided to delink the disbursements of the financial incentives to the pregnant woman with the unique identification number and had also started the bank account at zero balance for the pregnant woman. State also has taken control of running the mobile medial units and these were managed centrally at the state level (for the qualitative interview with the Mission Director, NRHM). Ambulance services were strengthened with maintenance services and additional purchases. More accredited social health activists were recruited especially in district Mewat. A separate division to strengthen communitization component of NRHM was created at the state level, which included monitoring and supervision of celebration of village health and nutrition days and village health and sanitation committees (for the qualitative interview with the Mission Director, NRHM).

Future Directions

The results of this study have important public health implications globally since, monitoring inequality is becoming an emerging health priority post 2015 [6, 7]. The post 2015 sustainable development goals stress leaving no one behind and focus on inequalities within and among countries. The results of this study also have implications in terms of continuation of the program implementation in the rural areas with a special focus on poor women and children with the same thoroughness as was done during the evaluation period. As we know that there are political preferences in what should be implemented or not at the national or state level, the program component, which is being implemented successfully, should be continued irrespective of political party in power at that moment [8]. This is quite pertinent to India as NRHM was implemented by the previous government as one of their major thrust area and also as part of commitment to meet Millennium Development Goals 4 and 5. The present government should take decisions or mend program implementation after carefully considering and deliberating upon what good the existing program has done in reducing maternal and child mortality statistics in future.

Based upon the results of this study it is recommended that defined annual targets regarding budget expenditures on maternal and child health interventions should be set at the state level and, regular monitoring and evaluation by an independent agency should be done to strengthen the program implementation at the state level. Since the major barrier in the implementation of NRHM schemes was the acute shortage of the health care providers, the existing policies regarding human resource management should be reviewed and revised accordingly. The results of this study have provided following suggestions in managing human resource crunch. The local residents from the respective districts should be empowered, educated and qualified enough to work in their respective health systems in the districts. There should be a state policy to offer the health care providers the place of posting

of their native area. This will not only increase the number of local health care providers but also reduce attrition rate among them. Since overall socio-economic development of the district was observed to be an important determinant of maternal and child health (from district Mewat's experience), health policy makers should take this aspect into account while framing future policies related to maternal and child health.

Overall it can be said that Haryana is on the right track for improving MCH outcomes along with reduction in MCH geographical and socioeconomic inequalities to some extent, but the pace of achievement needs to be heightened to achieve sustainable development goals post 2015. Results of the this study indicates that increasing the pace of the achievement will be possible by not merely focusing on spending more budget on the implementation of the NRHM's scheme from the government's side, but also by improving the basic underlying socioeconomic conditions of the mother and children and further increasing the demand and utilization of maternal and child health services.

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