

Reproductive, Maternal, Newborn, and Child Health in the Community: Task-sharing Between Male and Female Health Workers in an Indian Rural Context

Sara J Elazan, Ariel E Higgins-Steele¹, Jean Christophe Fotso, Mila H Rosenthal, Dharitri Rout²

Concern Worldwide US, Innovations for Maternal, Newborn and Child Health, New York, USA, ¹United Nations Children's Fund (UNICEF), Kabul, Afghanistan, ²Women's Organization for Socio-Cultural Awareness, Keonjhar, Odisha, India

ABSTRACT

Background: Male community health workers (CHWs) have rarely been studied as an addition to the female community health workforce to improve access and care for reproductive, maternal, newborn, and child health (RMNCH). **Objective:** To examine how male health activists (MHAs) coordinated RMNCH responsibilities with existing female health workers in an Indian context. **Materials and Methods:** Interviews from male and female CHWs were coded around community-based engagement, outreach services, and links to facility-based care. **Results:** Community-based engagement: MHAs completed tasks both dependent and independent of their gender, such as informing couples on safe RMNCH care in the antenatal and postnatal periods. MHAs motivated males on appropriate family planning methods, demonstrating clear gendered responsibility. Outreach services: MHAs were most valuable traveling to remote areas to inform about and bring mothers and children to community health events, with this division of labor appreciated by female health workers. Link to facility-based services: MHAs were recognized as a welcome addition accompanying women to health facilities for delivery, particularly in nighttime. **Conclusion:** This study demonstrates the importance of gendered CHW roles and male-female task-sharing to improve access to community health events, outreach services, and facility-based RMNCH care.

Keywords: ASHA, CHW pair, child health, male community health worker, reproductive, maternal, newborn

Introduction

Large strides have been made to achieve the United Nations (UN) Millennium Development Goals (MDGs) by 2015. However, many countries are not on track to reach the maternal and child health MDGs.⁽¹⁾ The worldwide estimated maternal mortality ratio decreased

from 400 to 210 maternal deaths per 100,000 live births, a reduction of 47.5% compared to the 75% MDG target from 1990 through 2010.⁽²⁾

India is one of the five countries that collectively account for half of the world's deaths in children under age 5 and over half of the world's neonatal deaths.⁽³⁾ Odisha is one of India's six states with a low development index, and Keonjhar, with a predominantly rural population, is a development-constrained district in Odisha. In Keonjhar, 57 infants die per 1,000 live births, and the neonatal death rate is 43 per 1,000 live births.⁽⁴⁾

Community health workers (CHWs) have been instrumental globally by performing diverse functions

| Access this article online | |
|---|--|
| Quick Response Code:  | Website: www.ijcm.org.in |
| | DOI: 10.4103/0970-0218.170963 |

Address for correspondence:

Jean Christophe Fotso, Associate Director Research, Monitoring and Evaluation, Innovations for Maternal, Newborn and Child Health, Concern Worldwide US, 355 Lexington Avenue, 19th Floor, New York, NY 10017, USA. E-mail: jean-christophe.fotso@concern.net

Received: 01-02-14, **Accepted:** 21-04-14

at the community level, which often involve informing women about safe reproductive, maternal, newborn, and child health (RMNCH) practices.⁽⁵⁻⁸⁾ However, in many settings, especially in low- and middle-income countries, women have restricted power to influence their own health practices given their marginalized status in society. The UN declared that men's responsibility and involvement in RMNCH should be emphasized to improve health outcomes.⁽⁹⁾ There is great opportunity to reach men, the main decision makers influencing women's health status, which has been largely unrealized. Currently, few studies assess the contributions of male and female CHWs tasked with community-based responsibilities across the continuum of RMNCH care.

One of the cornerstones of India's National Rural Health Mission is to provide every village in India with a female CHW, named Accredited Social Health Activist (ASHA). ASHAs counsel expectant mothers on safe maternal practices, promote universal immunization, and provide referral and escort services for RMNCH care.⁽¹⁰⁾ Responsible for community health, ASHAs work alongside auxiliary nurse midwives (ANMs) and Anganwadi workers (AWWs).⁽¹¹⁾ The female CHW workforce focuses on women, with little emphasis placed upon males who may be ill-informed of appropriate care.

As part of the Concern Worldwide US' "Innovations for Maternal, Newborn and Child Health" initiative, a male CHW project, called male health activists (MHAs), was implemented to align with ASHAs in Keonjhar District, Odisha. The MHA project consisted of recruiting and training MHAs and pairing them with ASHAs with the aim of improving coverage of RMNCH services delivered by the formal healthcare system, and improving home-based management of RMNCH and care-seeking for prevention and treatment services.

The aim of this paper is to examine, in the context of RMNCH, the extent of task-sharing between male and female CHWs in Keonjhar District, Odisha State of India. Specifically, the study investigates the activities and responsibilities of MHAs, ASHAs, AWWs, and ANMs and explores gender dynamics related to task-sharing for improved home-based care practices and increased use of facility-based services.

Materials and Methods

The data for this study are from the evaluation of the MHA project, which was piloted in six rural blocks of the Keonjhar district: Champua, Ioda, Banspal, Telkoi, Harichandanpur, and Ghatagaon. The project was implemented between October 2011 and March 2013, and

the evaluation was conducted at the end of 2012 with the goal to assess whether MHAs contributed to overcoming gender barriers and strengthening work performed by ASHAs. This work was guided by the Ethical Guidelines for Biomedical Research on Human Participants (2006) of the Indian Council of Medical Research.

The data used in this study include semistructured in-depth interviews with MHAs ($n = 16$), ASHAs ($n = 11$), AWWs ($n = 4$), and ANMs ($n = 3$). Purposive sampling was used to identify study participants: MHAs were selected to include a range of villages/blocks, distances from health facility, and income levels; ASHAs, AWWs, and ANMs were selected from across a similar geographic and socioeconomic spread. Interviews were coded in Dedoose software 4.5.99 thematically around responsibilities relating to the three channels of primary healthcare delivery: Community-based engagement, outreach services, and links to facility-based care.⁽¹²⁾

Results

Community-based engagement

A core element of the work of both ASHAs and MHAs is interpersonal communication with community members to improve knowledge and uptake of recommended home-based and care-seeking behaviors. Some tasks cited by the CHWs demonstrate sharing responsibilities by health workers with no emphasis on gender, while others indicate that CHWs divide responsibilities along gendered lines across the continuum of care.

During the antenatal period, MHAs understand their roles as motivating pregnant women and/or husbands to be prepared for facility birth, with MHAs indicating that they communicate with males twice as frequently as they do with females.

"We have a PSV (Purusha Swasthya Vahini: MHA-led meeting for men in the area) monthly meeting... we counsel men. Earlier only women used to know about pregnancy. Because of the PSV, men also know now."
CB1_MHA

MHAs note that ASHAs more frequently counsel pregnant women directly on recommended antenatal care (ANC) and birth preparedness. ASHAs rarely recognize MHAs as motivating males specifically in regards to ANC.

During the postnatal period, male and female health workers recognize that ASHAs conduct home visits to mothers with newborns, typically with MHAs. Each CHW motivates parents – often in separate conversations of the mother and ASHA, the father and MHA – on caring for the newborn and mother and on

options for family planning. The visits by both male and female health workers also ensure that parents are refraining from bathing the newborn or shaving the newborn's head, customs harmful to newborn health.

Clear gender-related division of labor and coordination occurs in how CHWs promote family planning. MHAs emphasize speaking with men about family planning methods, including birth spacing, temporary contraception, and non-scalpel vasectomy (NSV). AWWs and ASHAs recognize that MHAs should and currently are motivating males to take part in family planning activities. Female health workers consider themselves limited in discussing NSV adoption with men; MHAs perceive the same about female CHWs.

"Male counseling on adopting a temporary method cannot be done by ASHA." TD1_MHA.

All health workers discuss how community members can access family planning resources. MHAs explain that women and men receive condoms from ASHAs; some note that ASHAs have difficulties distributing condoms. Some MHAs indicate themselves receiving condoms from ASHAs to distribute, while others describe an unmet need for distribution to males. MHAs assert that female CHWs should supply condoms to MHAs more readily for efficacious distribution to men.

"ASHA has the condoms but she is unable to do anything with it. She cannot talk about them to men or give them to men. The men also do not want to ask her for it." GR1_MHA.

Outreach services

Substantial health worker coordination occurs for outreach services for women and children, called Village Health and Nutrition Days (VHNDs) and Immunization Days. VHNDs provide an opportunity for villagers to receive specific health services such as vaccinations. Social mobilization is an important aspect of these health events to influence attendance of women and children due for services.

MHAs most frequently cite their role as informing households with newborns and young children of immunizations and upcoming VHNDs along with ASHAs, and they subsequently accompany mothers and children to the events. Female health workers report MHAs as most helpful in these tasks, with MHAs also traveling to hard-to-reach habitations.

"During his one and half year of service he has done a lot in covering the distant habitation under Immunization and VHND." BM1_ASHA.

At VHND events, MHAs recognize their roles as helping to weigh and measure children and keep records. Male CHWs prepare lists of mothers and children with the ASHA or AWW. In meetings with men, MHAs discuss the importance of immunizing the children fully.

Unlike ASHAs and AWWs, the few ANMs interviewed generally have negative comments about MHA contributions, describing poor follow-through of responsibilities. ANMs mention lack of MHA assistance at VHNDs, and ANMs and AWWs indicate disappointment that MHAs lack assigned tasks at these events.

Link to facility-based services

Female health workers appreciate the presence of MHAs to assist in facility referral and transport coordination, given labor's unpredictable onset. All male CHWs identify their responsibilities in escorting pregnant women to health facilities for delivery, with or without accompaniment of an ASHA.

"ASHA maa and I accompany the pregnant woman to the hospital for delivery... During nighttime, if ASHA maa does not accompany... then I accompany the pregnant woman alone... during day time, if I have other work, she accompanies... I'll go next time." JJ1_MHA.

Female CHWs most frequently report the MHAs' value as helping to arrange vehicles and escorting women in labor to the hospital during nighttime. MHAs recognize that at night, many ASHAs travel alongside the pregnant woman and MHA.

"Nighttime deliveries – ASHA and I go together along with the family. Yes, the ASHA comes in the night... as well... but I am there as well so it is alright." GR1_MHA.

Some ANMs assert that female CHWs were accompanying women before engagement of MHAs. However, several ASHAs note feeling safer at night when accompanied by MHAs.

"Yes, change has taken place. Previously the male members were scolding me, but now after engagement of MHA they have stopped it. When I go alone they scold me but when I go with MHA they do not say anything." BU1_ASHA.

At facilities, ASHAs give instructions to MHAs. MHAs state that ASHAs should stay inside the delivery room; whereas, male CHWs cannot be inside and can instead coordinate logistics with doctors and retrieve medicine outside the room.

“To bring the medicines from nearby medicines shop at hospital, MHA is very much needed.” JJ1_ASHA.

Some ASHAs indicate instances of disappointment when MHAs did not provide the support they expected during the onset of labor of a woman in their community.

“Once the MHA had not helped me when I was seeking his help desperately. On that day I felt very sad. There was a poor girl in the village. She was pregnant. Her husband has deserted her. Before that day I had gone to hospital by taking another patient. And the MHA was not there.” CK1_ASHA.

MHAs generally express a sense of commitment to their village since their peers selected them, and they are satisfied with their contributions to community health.

Discussion

Our findings suggest that the MHA’s role is pivotal in promoting access to all stages of RMNCH care and complementing the work of ASHAs. Our results indicate potential buy-in of recommended RMNCH facility-based services through implementation of male CHWs. While men in India influence care seeking, they generally lack knowledge about pregnancy.⁽¹³⁾ Additionally, information received about the wife’s pregnancy is a determinant in seeking ANC and facility delivery.⁽¹⁴⁾

Of the three barriers to seeking facility-based care (i. e., delay in making decision, delay in transport to hospital, and delay in receiving care at the hospital),⁽¹⁵⁾ our findings suggest that male CHWs’ roles have potential to influence decision-making associated with the first two barriers. MHAs’ influence on men’s RMNCH attitudes and knowledge, alongside ASHAs sharing similar information with women, may increase support for facility-based care.

Similarly, our research shows that MHAs escort pregnant women to facilities for childbirth, especially during nighttime, often in close coordination with female CHWs. A previous study using female health workers in India found that educating women on antenatal health increased facility-based ANC, yet similar facility utilization was not observed during labor.⁽¹⁶⁾ In another study, distance to facilities was a barrier to institutional delivery and a constraint on the work of ASHAs in Odisha.⁽¹⁷⁾ Our findings suggest that this barrier can be overcome by implementation of male CHWs responsible for identifying transport and escorting pregnant women to facilities, often with an ASHA who can focus on the woman in labor.

With regards to family planning, our data imply that contraceptives may be inadequately supplied to men

in the target villages. MacDonald *et al.*, stated that low rates of condom use in some communities could be relatively simple to address by making the source more appropriate and comforting.⁽¹⁸⁾ Our findings show that male CHWs like to distribute condoms given demand among men, and they believe having adequate supply could lead to increased utilization. Prevailing cultural norms seem to indicate that men are preferred sources of family planning information and condoms than female health workers in places where MHAs were introduced.

In our study, a clear division of labor also emerged among male and female health workers, where MHAs were charged to cover remote households that female health workers had difficulty reaching, informing them about, and bringing them to community health events. This outreach may have increased attendance of women and children at health events. Given that India lags behind many other developing countries in immunization coverage,⁽¹⁹⁾ increasing access to hard-to-reach communities is vital for reducing vaccine-preventable illnesses.

Conclusion

This study demonstrates the importance of male-female task-sharing during community health events and outreach services, as well as for improved access to facility-based RMNCH services. Acknowledging that in many settings across India, men are responsible for critical decisions and exhibit behaviors that directly affect the health of women and newborns, the study lends support to reproductive health programming efforts being promoted at national and international levels to engage men.^(20,21) Use of male and female CHW pairs in areas with poor RMNCH outcomes can also be a strategy to target hard-to-reach populations. Planning and implementation of such an approach must include particular attention to coordination, division of labor, and incentives for both male and female CHWs to promote collaboration that benefits communities. Within a rising global accord on the need for male-oriented RMNCH programs, the MHA design proves a feasible model for promoting health in the Indian context.

Acknowledgements

The authors would like to acknowledge the Women’s Organization for Socio-Cultural Awareness (WOSCA) for their critical role in project planning and implementation, as well as for facilitating aspects of the evaluation. Options Consultancy Services, UK conducted the evaluation of the MHA project.

References

1. United Nations News Service [Internet]. UN News - Millennium Development Goals Are Within Reach, but Stronger Efforts Needed – UN Report. 2013 July 1. UN

- News Service Section. Available from: <http://www.un.org/apps/news/story.asp?NewsID=45308&Cr=millennium%20development%20goals%20&Cr1=#.UkCALrzFbTX> [Last accessed on 2014 Jan 26].
2. UN Maternal Mortality Estimation Inter-Agency Group [Internet]. Maternal Mortality Ratio. c2004-2013. MME Info. Available from: http://www.maternalmortalitydata.org/inner.html?country_selection=R [Last accessed on 2013 Nov 17].
 3. Liu L, Johnson HL, Cousens S, Perin J, Scott S, Lawn JE, *et al.* Child Health Epidemiology Reference Group of WHO and UNICEF Global, regional, and national causes of child mortality: An updated systematic analysis for 2010 with time trends since 2000. *Lancet* 2012;379:2151-61.
 4. Vital Statistics Division, Office of the Registrar General and Census Commissioner, India [Internet]. Annual Health Survey 2011-12 Fact Sheet: Odisha. Census of India. Available from: http://www.censusindia.gov.in/vital_statistics/AHSBulletins/AHS_Factsheets_2011_12/OdishaFactsheet_2011-12.pdf [Last accessed on 2014 Jan 25].
 5. Hossain MB. Analysing the relationship between family planning workers' contact and contraceptive switching in rural Bangladesh using multilevel modelling. *J Biosoc Sci* 2005;37:529-54.
 6. Dynes M, Buffington ST, Carpenter M, Handley A, Kelley M, Tadesse L, *et al.* Strengthening maternal and newborn health in rural ethiopia: Early results from frontline health worker community maternal and newborn health training. *Midwifery* 2013;29:251-9.
 7. Rotheram-Borus MJ, le Roux IM, Tomlinson M, Mbewu N, Comulada WS, le Roux K, *et al.* Philani Plus (+): A Mentor Mother community health worker home visiting program to improve maternal and infants' outcomes. *Prev Sci* 2011;12:372-88.
 8. Lewin S, Munabi-Babigumira S, Glenton C, Daniels K, Bosch-Capblanch X, van Wyk BE, *et al.* Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases. *Cochrane Database Syst Rev* 2010;CD004015.
 9. United Nations. [Internet]. Report of the International Conference on Population and Development. United Nations Population Information Network; 1994. Available from: <http://www.un.org/popin/icpd/conference/offeng/poa.html> [Last accessed on 2014 Jan 25].
 10. National Rural Health Mission: About Accredited Social Health Activist (ASHA) [Internet]. Ministry of Health and Family Welfare, Government of India. c2013. Available from: <http://nrhm.gov.in/communitisation/asha/about-asha.html> [Last accessed on 2013 Nov 4].
 11. Patel AR, Nowalk MP. Expanding immunization coverage in rural India: A review of evidence for the role of community health workers. *Vaccine* 2010;28:604-13.
 12. Chopra M, Sharkey A, Dalmiya N, Anthony D, Binkin N. UNICEF Equity in Child Survival, Health and Nutrition Analysis Team. Strategies to improve health coverage and narrow the equity gap in child survival, health and nutrition. *Lancet* 2012;380:1331-40.
 13. Bloom SS, Tsui AO, Plotkin M, Bassett S. What husbands in northern India know about reproductive health: Correlates of knowledge about pregnancy and maternal and sexual health. *J Biosoc Sci* 2000;32:237-51.
 14. Chattopadhyay A. Men in maternal care: Evidence from India. *J Biosoc Sci* 2012;44:129-53.
 15. Thaddeus S, Maine D. Too far to walk: Maternal mortality in context. *Soc Sci Med* 1994;38:1091-110.
 16. Griffiths P, Stephenson R. Understanding users' perspectives of barriers to maternal health care use in Maharashtra, India. *J Biosoc Sci* 2001;33:339-59.
 17. Mishra A. The role of the accredited social health activists in effective health care delivery: Evidence from a study in South Orissa. *BMC Proc* 2012;6:P1.
 18. MacDonald L, Jones L, Thomas P, Thu LT, Fitz Gerald S, Efroymson D. Promoting male involvement in family planning in Vietnam and India: Healthbridge experience. *Gend Dev* 2013;21:31-45.
 19. District-Level Household Survey (DLHS-3). India 2007-2008: Fact sheet. [Internet]. International Institute for Population Sciences; 2008. Available from: http://www.rchiips.org/pdf/india_report_dlhs-3.pdf [Last accessed on 2014 Jan 25].
 20. United Nations Population Fund [Internet]. Promoting Gender Equality: Engaging Men and Boys. c2008. Available from: <http://www.unfpa.org/gender/men.htm> [Last accessed on 2014 Jan 25].
 21. Cohen SI, Burger M. Partnering: A new approach to sexual and reproductive health. Technical Paper No. 3. United Nations Population Fund 2000:1-181.

How to cite this article: Elazan SJ, Higgins-Steele AE, Fotso JC, Rosenthal MH, Rout D. Reproductive, maternal, newborn, and child health in the community: Task-sharing between male and female health workers in an Indian rural context. *Indian J Community Med* 2016;41:34-8.

Source of Support: Bill and Melinda Gates Foundation, **Conflicts of Interest:** None declared.