

The interrelationship between gender and malaria among the rural poor in Jharkhand

Sama—Resource Group for Women and Health*

**Small Grants Programme on Gender and Social Issues in Reproductive Health Research,
Achutha Menon Centre for Health Science Studies,
Sree Chitra Tirunal Institute for Medical Sciences and Technology,
Trivandrum 695011, Kerala, India**

A project supported by the Ford Foundation

* G-19, second floor, Saket, New Delhi-110017.

© 2005

Sama- Resource Group for Women and Health

Published by

Achutha Menon Centre for Health Science Studies (AMCHSS)
Sree Chitra Tirunal Institute for Medical Sciences and Technology
Medical College
Trivandrum- 695 011
Kerala, India
www. sctimst.ac.in

Recommended citation:

Sama- Resource Group for Women and Health;
The interrelationship between gender and malaria among the
rural poor in Jharkhand,
Trivandrum,
Achutha Menon Centre for Health Science Studies, Sree Chitra Tirunal
Institute for Medical Sciences and Technology, 2005.

Members of the Small Grants Programme Team:

TK Sundari Ravindran, Honorary Professor, AMCHSS, Trivandrum;
Co-ordinator
Tara Sadasivan, Jr. Research Assistant, AMCHSS, Trivandrum.

Team of resource persons:

Amar Jesani, CEHAT, Mumbai;
Mala Ramanathan, AMCHSS, Trivandrum;
Renu Khanna, SAHAJ, Baroda;
Shagufa Kapadia, MS University Baroda;
TK Sundari Ravindran, AMCHSS, Trivandrum,
Sunita Bandewar, CEHAT, Pune;
KR Thankappan, AMCHSS, Trivandrum;
Uday Shankar Mishra, Centre for Development Studies, Trivandrum.

Occasional technical support was also provided by

Geetanjali Misra, CREA, New Delhi and
Radhika Chandiramani, TARSHI, New Delhi.

Acknowledgements

We would like to thank Achutha Menon Centre for Health Science Studies (AMCHS), Thiruvananthapuram, for giving our organisation the opportunity to undertake this study in Jharkhand.

We would like to thank the Sir Dorabji Tata Trust, Mumbai, for co-supporting this project.

We specially thank Dr. TK Sundari Ravindran and Dr. Mala Ramanathan, the advisors to this project, for their critical observations, concrete suggestions, and constant support and encouragement.

We are grateful for the suggestions given by the other advisers, Dr. U Mishra, Dr. Amar Jessani, and Renu Khanna during the workshops. We also thank Tara Sadasivan for all her encouragement and assistance.

We sincerely thank Dr. Vandana Prasad and Dr. Ravi Duggal, who were on the Ethics Committee, for their time and advice.

We would like to thank Dr. MC Kapilashrami, Dr. Sunita Reddy, Dr. Sunil Kaul, Dr. Rama V Baru, Nandita Bhatla and Dr. Subhamitra Das for their valuable contribution during the initial phase of the study.

We would like to thank the library staff at Jawaharlal Nehru University, the World Bank, UNDP, and Voluntary Health Association of India (VHAI) for providing access to their libraries and documentation units.

In the field, we are thankful to all those who gave their time and cooperation in providing pertinent information and data on malaria: officers at the Block Development Office (in Gomia), and the staff at the District Magistrate's Office and Malaria Office at Bokaro.

We are deeply indebted to all the respondents for their faith in us and for sharing their experiences. Their patience and cooperation made the study possible.

The study would also not have been completed without the efforts of Helen, Bimla, Manju, Meena and Rosy, the Field Investigators from Mahila Jagriti Sanstha (MJS) at Gomia. We would also thank Guddi and Rani from the Sanstha for their support during the field visits.

We would like to especially acknowledge our colleagues and the coordinators of this study, Rinju Rasaily and Anuj Kapilashrami, for bringing out such a valuable document on an issue that has not received enough attention.

We would like to acknowledge NB Sarojini for conceptualising this project and overseeing the progress the project. We would like to thank Ranjan De for his critical observations, suggestions and editing.

We would like to thank Krishna Dev, who helped us in compiling the literature. We would like to thank Parul, Manjeer and Arpita for their contribution during the process of analysis, and Beenu, Neha, Richa, Anthony and Anil Aggarwal for their support.

Contents

	Page
Acknowledgements	iii
Contents	iv
Glossary and list of abbreviations	vii
Executive summary	ix
CHAPTER 1 Introduction and review of literature	1
1.1 Introduction	1
1.2 Review of literature	2
1.3 Gender differences in vulnerability to diseases, specifically malaria	5
1.4 Linkages between gender, poverty, and the physical and economic burden of malaria	9
CHAPTER 2 Methodology	11
2.1 Background to the study	11
2.2 Characteristics of the study area	11
2.3 Timeline of the study	13
2.4 Sampling	13
2.5 Methods used for primary data collection	14
2.6 Methods used for secondary data collection	15
2.7 How the study was conducted	15
2.8 Ethics committee	16
2.9 Limitations of the study	17
CHAPTER 3 Malaria and health services in Gomia	18
3.1 The prevalence of malaria in Gomia	18
3.2 Preventive measures for malaria	20
3.3 Health care services	21
3.4 Government hospitals	21

	Page
3.5 Private health facilities	22
CHAPTER 4 Compounded vulnerabilities: communities and individuals	24
4.1 Experience of malaria	25
4.2 Health-seeking behaviour	31
4.3 Where is the treatment sought?	32
4.4 When is treatment sought?	36
4.5 Physical impact of malaria	39
4.6 Economic burden of illness and coping mechanisms	42
4.7 Care and support	47
CHAPTER 5 Conclusions and recommendations	51
5.1 Recommendations	52
REFERENCES	55
BACK GROUND DOCUMENTS	57
CHARTS	
Chart 1 Number of malaria positive cases in India, 1990-2003	3
Chart 2 Malaria mortality from 1990-2003	3
Chart 3 Number of blood slides examined from Jan-Nov 2003	19
TABLES	
Table 1.1 Rural-urban break-up for illnesses	2
Table 1.2 Prevalence of malaria in the BPL states	4
Table 3.1 Total number of malaria cases in Gomia	18
Table 3.2 Malaria Progress Report for Gomia block, Jan-Oct 2003	19
Table 4.1 Distribution of respondents across different age groups	24
Table 4.2 Social composition, marital status, family size, and educational level among respondents	24
Table 4.3 Occupational distribution among respondents	25

	Page	
Table 4.4	Reproductive histories of pregnant women respondents	29
Table 4.5	Percentage distribution of ever-married rural women aged 15-49 by distance from the nearest health facility, India, 1998-99	35
Table 4.6	Household income distribution among respondents	42
 ANNEXURE		
Annexure 1	Consent form and statement of consent	58
Annexure 2	Instructions for the Field Investigators	59
Annexure 3	Background profile (for all respondents)	61
Annexure 4	Interview schedule guidelines and check-list for men and women	65
Annexure 5	Interview schedule guidelines and check-list for pregnant women	67
Annexure 6	Data of Jharkhand, Bokaro district, and Gomia block	69
Annexure 7	i. Map of Tulbul	71
	ii. Map of Tenu Ghat	72
	iii. Map of Bartua	73

Glossary and list of abbreviations

Adiya system	:	Sharecropping
ANM	:	Auxiliary Nurse cum Midwife
Bagan	:	Garden
Bojha	:	A person from whose body blood is taken for performing certain rituals
Bora	:	Gunny bag
CCL	:	Central Coalfields Limited
Chatai	:	Mat
Chiretta (<i>andrographis paniculata</i>)	:	Medicinal plant, taken during fever
DDC	:	Drug Distribution Centre
Devi Maa	:	Goddess
DMO	:	District Malaria Office
FPAI	:	Family Planning Association of India
Gendra	:	Made from old clothes stitched together and used as a blanket
Gamla	:	Pot-shaped iron containers
Ghar bhadhna	:	To keep the house "intact" by performing certain rituals
Gur	:	Jaggery
IEL	:	Indian Explosives Limited
Jhar	:	Shrub
Karkat	:	Asbestos
Khajoor	:	Date
Khapra	:	Burnt brick/tile
Khatiya	:	Cot

Khoya	:	A medicinal plant
Majdoor	:	Labourer
MTP	:	Medical Termination of Pregnancy
Mukhia	:	Village headman
Nala	:	Drainage outlet
Ojhas/ Bhagats/ Shokhas	:	Traditional healers / shamans
Parvat	:	Mountain
PHC	:	Primary Health Centre
Phus	:	Type of grass
Phutiya	:	Basket
Pora koila	:	Burnt coal
Pual	:	Hay
Pucca house	:	Cemented house
RMP	:	Registered Medical Practitioners
Sarkar	:	Government
Sarkari	:	Government bodies
SC	:	Sub-centre
Sikri	:	A long chain made of iron
Soup	:	Winnow
Tabeez	:	Amulet
Talab	:	Pond
Tard	:	Open field
TBA	:	Traditional Birth Attendant
Vaid	:	Ayurvedic healer

Executive summary

This is a qualitative study conducted by Sama in collaboration with Mahila Jagriti Sanstha, a community-based organisation in Gomia, Jharkhand. The aim of the study was understand the interrelationship between gender and malaria among the rural poor of Jharkhand. The study area was Gomia, one of eight blocks of Bokaro district in Jharkhand.

The specific objectives of the study were: a) To examine how gender, poverty, and reproductive biology influence vulnerability to and the experience of malaria; b) To examine how these factors influence health-seeking behaviour, the social, economic and physical consequences of malaria; c) To examine the responses of health care providers to malaria.

The study was based on in-depth narratives of 39 respondents and 11 key informants. The 39 respondents comprised 14 men, 14 women, and 11 pregnant women. This number was arrived at through random sampling from a list collated through house-listing. The criteria for selecting the sample were: (a) The respondents had malaria in the last two years (backwards from August 2003), and (b) They belonged to a population living below the poverty line. The second criterion was dropped for pregnant women due to limitations in number.

Other data collection methods include mapping of villages and health services, and observation. Apart from the tools used to collect primary data, secondary data was collected from official records, and newspaper cuttings were maintained to gather an overall epidemiological profile of the area.

The vulnerability and experience of malaria was examined at two levels — the community and the individual— that placed respondents at risk to frequent episodes of malaria. The geophysical characteristics of Gomia, seasonal employment, hazardous occupations, and dependence on natural resources for livelihood, contributed to making malaria endemic. These factors also resulted in economic and food insecurity. Poverty emerged as an overarching factor across all categories of respondents. This was reflected in their dietary intake, mainly of starch (*maar*) rice, lack of warm clothing, and poor living conditions. These constituted the larger risk factors experienced by the communities.

Individual vulnerabilities included age, family size, and household income. Gender and the reproductive biology of women placed them in a far more vulnerable position. This study reveals that even in comparable economic situations (poor households) men were better positioned as compared to women in terms of vulnerability to and impact of malaria because they got more rest and care.

The impact of malaria on women was made more severe because of their social, economic, and psychological burdens. Women, especially in the age group of 35-40 years, faced harassment from their husbands and in-laws for expenses incurred on their illness and their inability to continue with the household work. Daughters and girls were forced to become the main caregivers. The economic burden caused due to prior health conditions and the marriage expenses of daughters added a great deal of psychological and emotional stress. Pregnant women reported loss of appetite during malaria, which resulted in low birth weight babies. They reported miscarriages and stillbirths due to malaria medication. Early marriage and frequent pregnancies further increased their vulnerability.

The distant locations of public health services and inadequate delivery of health care compelled respondents to rely on the ad-hoc treatment given by the “compounders” who visited the village, and on traditional healers. Men sought some form of immediate treatment (such as medicines from chemists). Better access to cash, credit, and the power to make decisions about pawning household assets gave them an edge with regard to treatment-seeking. Vulnerability was pronounced among men in the age group of 48-60 years because of their role as bread-earners or because they were dependent on their children for support. It was worse for women in a similar age group because of a decline in their “productive capacity” to earn and make ends meet.

Women depended on the “compounders” for treatment because they provided flexible payment arrangements. They took recourse in traditional healers for treatment and advice. This was true among pregnant women too, who had experienced miscarriages or stillbirths. Five pregnant women sought treatment from recognised medical doctors for fear of losing the child. Expenses on treatment and the level of care received were directly linked to support from the natal family. The burden on the maternal family was pronounced not only among pregnant women; men too were dependent on their wives’ natal family for support.

A lack of power to make decisions within the household, economic and household work burden, and prior health conditions placed women in a position more vulnerable to frequent episodes of malaria. Gender and reproductive biology played a significant factor in influencing the experience of malaria among women. These factors cut across overarching factors of poverty, and living and working conditions, placing women at greater risk.