Assessment Report 2003
Health Improvement Program

A SUMMARY REPORT ON
ASSESSMENT OF HEALTH SITUATION IN
EASTERN DEVELOPMENT REGION OF NEPAL

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Foreword

The Britain Nepal Medical Trust aims to assist health improvement in Nepal. Its work began in 1967 when a group of doctors from the UK received permission from the Nepal Government to work voluntarily in the Eastern Region of Nepal. It has developed to meet the changing demands it has encountered over the past 35 years. BNMT in the past tried to ensure that its services and programs were accessible to all members of the community. However, in an unequal society many community members are still unable to access services due to reasons of caste, extreme poverty and gender inequalities. It is committed to exploring new and more effective ways in which it can increase access to the poorest and most marginalized community members.

HMG has developed the Second Long Term Health Plan (SLTHP) for 1997-2017 based on the National Health Policy of 1991. The SLTHP focuses on equitable access of quality health services to all with special emphasis on the most vulnerable groups, particularly women children and the poor and marginalized population. However, the health system is failing to meet the needs of disadvantaged groups particularly women, children, dalits, rural poor, disadvantaged and socially marginalized groups.

This situation calls for various stakeholders including governmental, non-governmental, private, local government and donor organizations to work in a partnerships and participation approach on improving the access of disadvantaged groups by creating the demand for and the supply of quality health services.

BNMT with its key partners and community has adopted an approach called ‘Partnerships and Participation (P&P)’ to mobilize the local communities for developing a reliable and equitable system. It is working towards greater integration through the development and implementation of an integrated Health Improvement Programme (HIP) with four major health components:

- Infectious Diseases (IDs),
- Reproductive Health-Safe Motherhood (RH-SM),
- Tuberculosis (TB)/ Human Immuno-deficiency Virus (HIV) / (Acquired Immuno-Deficiency Syndrome (AIDS) & Sexually Transmitted Infections (STIs) and
- Essential Drugs (EDs).

In 2003 BNMT and its key partners actively participated to carry out detailed assessment of health utilization and health services provisions in more than 8,061 households in 203 villages in all 16 districts of Eastern Development Region of Nepal. The HIP has formed different committees/teams at central, regional, district and community levels to carry out the situation analysis.

The main objective of the assessment was to identify the current situation and the gap between service delivery and utilization on health with especial focus on four health components. The study was descriptive and analytic. Both quantitative and qualitative information were collected using questionnaires, in-depth interviews, focus group discussions and documentary analysis.

This is a summary report based on the key findings of the assessment. This report together with the separate main report provides the current/general situations of health care system in eastern region and establishes baseline information as a basis for developing plan, implementation of activities, monitoring and evaluation.
The data can be used to identify the gaps in the provision of quality services at different level of health care, and to identify community practices in utilizing the health care services in particular to accessibility to services, barriers to utilize existing services, barriers to change behaviors and, identification of specific health concerns /needs of community people.

HMG, development partners, local bodies and all the BNMT staff members were fully involved in the assessment process, together with the external consultants, partners, communities and key stakeholders. A series of community meetings were held before the data collection. The data collection has been completed in all districts of the Eastern Development Region. The data has been primarily processed by AC Nielsen (a consultancy firm). The results of the survey are being discussed and interpreted with the key partners and communities according to the following process before planning of the detailed activities:

- Health services available for the disadvantaged groups
  - Status of health facilities of the Government sector
  - Health services available for the disadvantaged groups
  - NGOs/Private sectors working in service provision and their status

- Utilization of available services
  - Types and quality of services available
  - Awareness on the availability of health facilities
  - Utilization of health services by disadvantaged groups

- Barriers to access
  - Support needed for disadvantaged groups
  - Major issues/problems being shared with partners for detailed planning

I would like to thank Dr. Mahananda Mishra, Director of Eastern Regional Health Directorate (ERHD) Mr. Yogendra Mandal, Act. Chief, RHTC, Dhankuta, Mr Nawaraj Subba, Public Health Administrator (ERHD), Mr. Ram Dhan Mehta, SPHO, Mr Pan Bahadur Chhetri, Chief of ERMS, Ms Bhagawati Chaudhari, President FORWARD, Ms. Manorama Adhikari, Research Executive (AC Nielsen Pvt.Ltd), Nischal Basnet, Project coordinator (ACNielsen Pvt.Ltd), Deepak Paudel, Freelance consultant and BNMT Staff and SMT members for their valuable input in entire process of the assessment. Thanks are also due to Mr. Lila Acharya, Sr. Field Executive, Mr. Ramesh Pradhan, Senior Analysis Executive, Ms. Sabina Pradhan, Research Officer of AC Nielsen Pvt. Ltd for their valuable support in data compilation and analysis.

I am grateful to all donors of BNMT for their kind support and valuable comments in carrying out this assessment.

Chanda Rai
Chief Executive, BNMT
Preface

The study to assess the health and health care delivery status in Eastern Development Region of Nepal was carried out by the Health Improvement Program of The Britain Nepal Medical Trust (BNMT) in close collaboration and coordination with Eastern Regional Health Directorate. This study is expected to provide insights in the current status of health; gaps in availability, accessibility and utilization of health care services; current and potential aspects that affect health and thus to guide health managers and partners to identify appropriate interventions to improve health status in the Eastern Development Region of Nepal through strengthening the capacity of local communities.

This assessment was funded by BNMT and facilitated jointly by BNMT and Eastern Regional Health Directorate. Information was collected from households, health facilities, private clinics, nursing homes, private drug retailers and traditional faith healers from all 16 districts of the region. This is probably the first assessment of this kind covering wide range of information collection approaches in all districts of the region. AC Nielsen Nepal Private Limited provided technical support for tools development, training of supervisors and enumerators, data entry and preliminary analysis of the data.

This report includes the key findings of the assessment. It is a summary for dissemination to the central level partners. At this moment, we would like to thank all members of central, regional, district and community level assessment teams for their contribution in the entire process of assessment. We would also like to thank officials from AC Nielsen Private Limited and the Eastern Regional Health Directorate for their immense and continued support and encouragement. We are also thankful to all the field staff of BNMT for their hard work during the assessment.

Finally, we hope this report together with the main report will be fruitful to develop, review, revise and monitor the programs aiming to improve health status in the Eastern Development Region of Nepal. The results will guide to develop a strategic way, for both government and non-governmental sectors, to fulfil immediate needs and to establish basic rights to health of the people living in the eastern region through sustained health care delivery and empowered community systems.

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Summary

In 2003 BNMT staff worked with partner organisations and communities to conduct a wide-ranging survey of health needs in 16 districts of the Eastern Development Region in November-December 2003. The topics covered include health status, community knowledge and practices, community needs, gaps in services, quality of provision and barriers to service use. The survey also analysed access to health services for women, excluded castes, ethnic minorities and the poor. The information will be used to make plans for future work and it will also serve as a benchmark for measuring progress. The sample included 8,061 households (4,026 disadvantaged and 4,035 general), 18 hospitals and 185 PHC outlets (primary health care centres, health posts and sub health posts). It also included in-depth interviews with 48 traditional healers, 93 HI-Incharges, 32 FGDs with community people and 16 FGDs each with health committee members and 16 with FCHVs/TBAs. Quantitative data were analyzed between male-female and disadvantaged-general population segments using computer soft wares. The qualitative data were analysed by content analysis method.

At community level, the survey found:
- The proportion of children under five years of age is higher among the disadvantage households.
- Low level of awareness of various diseases, especially HIV, their symptoms and treatment.
- About one third households belonged to dalit.
- Only 42% of households (60% general and 24% disadvantaged) visited had a toilet.
- Health workers are not accessible, especially to disadvantaged groups.
- People felt the most urgent need was for trained manpower, medicines and equipment to be available in health institutions.
- Only about one fourth of sick household members visit health institutions.
- Large communication gaps between service providers and users.
- About one third of disadvantaged households were aware about free drugs for treatment of TB.
- About nine out of ten deliveries take place at home, but only one mother out of three mothers who gave birth at home used a safe delivery kit.
- People expressed dissatisfaction with health institutions and health workers, saying that often health workers were not available when they visited.
- Women hesitate to visit the health institution because of a lack of female health workers.
- Reasons given for not going to health institutions included caste discrimination and an inadequate supply of medicines.

Among service providers, the survey found:
- Most health institutions had unfilled posts. The staff shortage puts service providers under extreme pressure, as they cannot provide quality services with adequate time for the patients.
- Facilities and infrastructure in hospitals was satisfactory and almost all available facilities were in use.
- In health institutions without drug schemes about 70% of key drugs were available (range 41 to 97%)
- Only 55% of pregnant women visiting hospitals received iron and folic acid tablets, although 79% of pregnant women were anaemic.
- Service providers noted the increase in people going to health institutions for treatment, and gave credit for this to the female community health volunteers, traditional birth attendants and community health education.
- Service providers agreed that short opening hours and the capacity and behaviour of health workers were also reasons why people did not visit health institutions.
Background and Methodology

- The study on Assessment of Health Status in Eastern Development Region (EDR) of Nepal was conducted with the joint effort of The Eastern Regional Health Directorate and Britain Nepal Medical Trust. The objective of the survey was to support the Health Improvement Programme of Eastern Regional Health Directorate/Britain Nepal Medical Trust. Field work was carried out during November-December 2003.

- It provides insights to develop innovative approaches to build the capacity of communities and partners to improve the 'demand for', 'access to' and 'supply of' quality health services for most needy people especially at remote areas of the Eastern Development Region of Nepal.

- At first, a regional level assessment team was formed to design survey method and tools. Then, district level assessments teams were formed for the overall of the fieldwork. A committee was also formed in each Village Development Committee (VDC) for facilitating and monitoring the assessment activities. The study constitutes both quantitative and qualitative tools. The quantitative tools were used to collect information from households, Non Governmental Organizations (NGOs)/Community Based Organizations (CBOs), health care facilities, private clinics/nursing homes, drug retailers and exit patients from health facilities. Qualitative tools were used to collect information from traditional healers, health facility in-charge, community people, local health committee members and Female Community Health Volunteers.

- The assessment study was conducted in all the 16 districts of the Eastern Region of Nepal. Overall 203 VDCs of Eastern Region were covered for the household survey whereas in terms of assessing the health institutions, the research team had visited more than 203 VDCs. On an overall the household study enumerated 8061 households (4,026 from disadvantaged and 4,035 from general households) using structured questionnaires. The disadvantaged and general groups of households were listed using social mapping (the local village level assessment committee categorised the total households of the village into general and disadvantaged segments). Then, 20 households from the general list and 20 households from the disadvantaged list were randomly selected for the data collection.

- In-depth interview with 48 traditional healers, 93 health facility in-charges, and 32 Focus Group Discussions (FGDs) with community people, 16 Focus Group Discussions with health committee members and 16 with Female Community Health Volunteers/Traditional Birth Attendants (TBAs) were also conducted.

- Interview with 1,311 exit patients was also conducted using structured questionnaires. Twenty exit-patients from each hospital and 5 exit-patients from each health facilities were selected. Data were also collected from 59 nursing homes/ private clinics, 83 drug retailers, 84 NGOs and 75 CBOs using structured questionnaires.

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Findings

DEMOGRAPHY

- Overall a large proportion of EDR's population (50%) is under 19 years of age; the proportion of the same is marginally higher in the disadvantaged segment (54%). The proportion of children under five years of age is higher among the disadvantaged segment as compared to the general segment which suggests lower fertility rate among general as compared to disadvantaged group.

- On an overall sex ratio, the number of males per 100 females is 97.9. About 28% of the households belonged to dalits. The proportion of dalits was higher in the disadvantaged segment (47%) as compared to the general segment (9).

- About 45% of the respondents were illiterate and the proportion of illiterates was higher in disadvantaged segment (61%) as compared to general segment (29%).

MORBIDITY

- About 5.7% of the surveyed population (household members) had fallen sick within the last 15 days of the interview; the incidence was marginally higher in disadvantage segment. Among those who were sick, most of them were suffering from fever (40%) followed by diarrhoea (8.5%), gastritis/abdominal pain (7.4%), Acute Respiratory Infections (7.3%) and skin diseases (4.1%).

- When inquired about health seeking behaviour, 23.5% reported visiting a health institution, 35.4% visiting private clinic/doctor/drug retailers and 16% visiting traditional healers. Only about 19% of the disadvantaged females visited health institutions for treatment compared to 26% of females from general segment. Family members (45%) seem to be the main source of advice to visit health facilities.

- Out of the total cases (household members) suffering from pneumonia, diarrhoea, dysentery and typhoid and who visited health facilities for treatment, 35% had prescriptions. Among them about 70% were prescribed with at least one antibiotics. However only 48% of such patients completed the full-course of antibiotic therapy and 39% were still continuing with the course.

"I cannot say exact number of how much I treated in a year. But I am sure that I have cured more than 150 patients this year and some 30-35 patients were referred to doctors or health institutions. Common diseases here found are cough, asthma, undernutrition, fever, headache, diarrhoea, paralysis etc"

- A Traditional Healer

TUBERCULOSIS

- About 89% of respondents from the general segment and 73% from the disadvantaged segment had heard about Tuberculosis. Of them, about 47% from the general segment and
43% from the disadvantaged segment correctly stated signs/symptoms of Tuberculosis (cough for more than two weeks, blood in cough, fever, and weight loss and chest pain).

- About 85% of the respondents (90% general and 80% disadvantaged) reported that they would contact health institutions if suffered from cough for more than two weeks. The respondents from general households were more likely to contact health institutions as compared to those from disadvantaged households. Besides, about one third of the respondents reported that they would follow home therapy.

- Though the drugs for treatment of TB are freely available at health institutions, only 46% of respondents (59% general and 33% disadvantaged) were aware about free drug availability for treatment of TB.

- About 66% of the respondents (76% general and 56% disadvantaged) correctly reported the mode of TB transmission. Only about 3.5% of respondents (6% general and 1% disadvantaged) had heard about Directly Observed Treatment Shortcourse (DOTS).

FAMILY PLANNING

- About 87% of respondents were aware about family planning; however the level of awareness was lower among disadvantaged households (81%) and disadvantaged females (80%). About 85% of respondents could mention two or more types of family planning methods. Depo-provera was the commonly reported (83%) method of family planning followed by oral pills (71%) and condom (64%). Majority of respondents were aware about the place for availability of temporary family planning methods. Among total married couple living together, about 8% were using condoms, 9% using pills and 36% were using depo injection.

HIV/AIDS/STI

- About 61% of the respondents had heard of HIV/AIDS and which was lower among disadvantaged segment (46% as compared to 75%). More females from general households had heard of HIV/AIDS as compared to females of disadvantaged households (70% as compared to 41%).

- The main source of information on HIV/AIDS was electronic media like TV/radio (87%), followed by family members/neighbours/relatives (54%), and health workers (23%).

- About 45% of the respondents could report at least two ways of HIV/AIDS prevention. The knowledge on HIV/AIDS prevention was higher among general than in disadvantaged segment (60% as compared to 31%).

- Nearly half (46%) of the respondents (59% general and 33% of disadvantaged) had heard about STIs. Most of them reported to visit health institutions (71%), followed by private clinic/drug retailers (27%) for treatment of STIs. About 21% of respondents expressed that using condoms prevents STIs.

SAFE MOTHERHOOD

- About 66% of the respondents were aware of the danger signs of pregnancy. Of them about 48% mentioned vaginal bleeding as the danger signs during pregnancy. The other danger signs reported were lower abdominal pain (47%), headache (40%), and swelling of limbs (38%),
weakness (24%), unconsciousness (11%) and high fever (4%). Besides, 63% of the respondents were aware of the danger signs during delivery. Majority of them (68%) expressed vaginal bleeding as the danger signs during delivery. The other danger signs reported were prolonged labour (49%) followed by mal-presentation (27%), swelling of limbs (26%), headache (25%), weakness (23%), unconsciousness (21%) and lower abdominal pain (7%). Of the total respondents, vaginal bleeding (42%) followed by swelling of limbs (20%), headache (20%), weakness (20%), high fever (15%), unconsciousness (14%), vomiting (9%) were the reported danger signs after delivery.

- Of the total respondents, about 30% reported that pregnant women should visit 2-3 times for health check-up during pregnancy. About 23% of the respondents reported that pregnant women should visit 4-5 times for health check-up during pregnancy.

- It was found that, among the deliveries in last three years, about 87% were carried out at home and 11% were carried out at hospitals. Significantly a less number of disadvantaged households had used hospital for the delivery.

- Of the deliveries carried at home, most of the cases were assisted by family members/relatives/neighbours (65%).

- Clean home delivery kit was used in 30% of the cases that, general households were more likely to use households. Out of the deliveries carried out at home without using clean home delivery kit, only about 1.3% used clean blade and the remaining reported the use of iron made cutting instruments and bamboo stick.

**INFECTIOUS DISEASES**

**Diarrhoea**

- Majority of the respondents (69%) reported diarrhoea as more than three loose motions in 24 hours. Dry mouth (46%), thirst (38%) and sunken eyes (33%) were commonly reported symptoms of dehydration.

- About 60% of the respondent (67% general and 53% disadvantaged) reported that a child suffering from diarrhoea should be treated with ORS.

- ORS was found in only 8% of the total households (general 10% and disadvantaged 5%). Of 1161 respondents of Morang and Udayapur, about 73% reported that they could prepare ORS. But when asked to prepare it, only 77% of them could prepare the solution correctly.

**Pneumonia**

- About 84% of respondent had heard about Pneumonia. Most of them reported fever and cough (62%) as the symptoms of pneumonia followed by wheezing (58%), fast breathing (30%) and chest indrawing (24%). Majority (87%) of the respondents reported that they would take a child suffering from pneumonia to a health institution/worker, and about 34% stated that they would consult private clinic/drug retailers. However quite a number of respondents (14%) said that they would consult a traditional healer for the same (general 9% and disadvantaged 19%).
Malaria

- Of the total respondents, 69% had heard of Malaria. Among those who heard of Malaria, fever with chills (70%) and high fever (69%) were the reported symptoms for malaria. Of all the respondents, about 43% reported that malaria is transmitted through bite of a mosquito (general 55% and disadvantaged 30%). The use of mosquito net (62%) and use of mosquito coil (22%) followed by maintaining sanitation (16%) and use of insecticides (19%) were reported as the methods of prevention against malaria. General household members were more likely to use mosquito net compared to disadvantaged households (58% as compared to 34%).

Kala-azar

- More than half of the respondents (53%) had not heard of Kala-azar, and only about 14% of the respondents mentioned that the disease is transmitted through the bite of sand fly. Of the respondents who had heard of Kala-azar, high fever (59%), fever with chills (43%), sweating (9.6%) and stomach-ache (3%) were the frequently reported symptoms. With regard to the source of getting drugs for Kala-azar, health institutions was the frequently described source (72%) followed by drug retailer/private clinics (31%) and traditional healers (0.7%).

Japanese Encephalitis

- Only about 21% of the respondents had heard about Japanese Encephalitis. High fever (49%), no movement of limbs (48%), headache (40%) and vomiting (13%) were the most repeated responses regarding symptoms of Encephalitis. About 16% of all respondents stated that the disease is transmitted through the bite of a mosquito. With regard to the source of getting drugs for Encephalitis, health institution (58%) was the frequently described source followed by drug retailers (24%).

ACCESS TO HEALTH SERVICES

- The average time to reach the nearest health facility by walking was about 38 minutes (27 minutes in general segment and 49 minutes in disadvantaged segment). About 12% of households (5% general and 18% disadvantaged) reported that they have to walk more than 60 minutes to reach the nearest health facility.

SATISFACTION TOWARDS HEALTH SERVICES

- About 36% of respondents were fully satisfied and about 38% were partially satisfied with the services of the government health institutions. Few households (14%) showed dissatisfaction towards the services of the health institutions. The main reasons for dissatisfaction were unavailability of medicines, and poor quality of medical treatment and check up.

- About half of the respondents reported to be partially satisfied and about 16% reported to be fully satisfied with the services of traditional healers. The main reasons for satisfaction were the efficiency of traditional healers to cure some diseases that could not be treated by modern medicine.
The respondents reported that headache (38%), fever (30%), stomach-ache (27%) and dizzy spells (12%) were the common health problems for visiting the traditional healers.

- About 42% of households (60% general and 24% disadvantaged) possessed toilet in their households. Of them, only about 31% had water facility.

- About 47% of households stated that they used a pit to dispose waste materials. About 24% stated that they burn the wastages.

**REPRESENTATION IN NGO/CBO**

- The participation of female and *dalit* members in the executive body of local NGOs was found to be poor (about 3.3 females and 0.7 *dalits* per NGO), though the majority (94%) of NGOs reported that they were working for community empowerment. Similarly, the participation of female and *dalit* in the executive body of CBO was only 7.6 and 3.1 respectively.

**DISTRICT HOSPITAL**

- Of the total 670 sanctioned posts in district hospitals, only 83% were filled. Of the total filled positions, 90% were present on the day of visit. Medical Superintendent was found present in 50% hospitals, and Medical Officer was found present in about 81% of hospitals on the day of the visit.

- Out of the total 16 hospitals, 10 had displayed IEC materials on essential drugs, 16 on reproductive health, 14 on infectious diseases, 14 on HIV/AIDS/STIs and 11 on Tuberculosis. Fourteen district hospitals were working as DOTS centres. All district hospitals had laboratory services (including sputum microscopy facility), 15 had malaria testing and pregnancy testing facilities and only 9 had ELISA testing facility.

- Six district hospitals had implemented drug schemes. On average, about 86% of key drugs (range 77 to 97%) were available in those hospitals. In the remaining 10 hospitals, on average, the key drugs availability was about 71% (range 41 to 97%). Of the 6 hospitals with drug scheme, on average the balance of revolving drug-fund was about Rs. 315,000.00

- All district hospitals were equipped with labour room and fourteen hospitals had separate room for ANC/PNC. Functional toilet was also found in all district hospitals.

- Although 79% of pregnant women were found anaemic, about 55% of them received iron and folic acid tablets.

**PUBLIC HEALTH OFFICE / SECTION**

- Of the total 356 sanctioned posts for the Public Health Offices/Sections of EDR, about 86% were filled. Of the filled posts, about 66% of the employees were present at the day of visit.

- Medicines were found organised according to FEFO system in the stores of 14 public health offices/sections.
Annual plan of action was found prepared in 13 public health offices/sections, and annual plan for supervision/monitoring was found prepared in 12 public health offices/sections.

HEALTH FACILITY SITUATION: PHC OUTLETS

- Total of 185 health facilities (26 PHCs, 80 HPs and 79 SHPs) were visited for health facility survey. Out of total sanctioned post, only 72% were filled in PHCs, 84% in HPs and 90% in SHPs. Of the total sanctioned posts of key health workers for providing maternal and child health services, about 23% (6/26) staffs was present at the day of visit in PHCs, 48% (38/80) in HPs and 64% (50/79) in SHPs.

- Out of 26 PHCs visited, 78% of the key drugs\(^1\) were available. Of the Health Posts surveyed, about 59% (47/80) had all key drugs recommended by WHO\(^2\), whereas about 58% (43/79) of Sub-Health Posts had all such key drugs.

- Drug storage system was found poor in most of the health facilities. The average value of expired/damaged drugs was Rs. 5,876 in PHC, Rs 3,428 in HPs and Rs 3,344 in SHPs.

PRIVATE CLINICS/NURSING HOMES

- Of the total 59 private clinics/nursing homes, 69% had OPD services, 10% had in-patient services and 56% had emergency services. Emergency service was available in at least one Nursing Home/Private Clinic of all surveyed districts except Udaypur.

- The private clinics/nursing homes were found providing services on safe motherhood (68%), and treatment for malaria (27%), Kala-azar (12%), Tuberculosis (10%) and Japanese Encephalitis (7%). About 95% of the private clinics/nursing homes reported to refer patients to government hospital for further treatment and care.

DRUG RETAILERS

- A majority of (85% of the total 83) drug retailers had completed their SLC (10 years of schooling); 46% had received health related technical training (e.g. HA, CMA, ANM etc) and 45% had received the orientation training for drug retailers.

- Majorities of the drug retailers had key drugs to treat common health problems (94% had Amoxycillin, 79% had Cotrimoxazole, 51% had Iron/Folic Acid Tablets, 57% had Mebendazole, 90% had ORS and 80% had Doxycycline.

- Only 41% of the retailers could report at least four characteristics of rational use of drugs\(^3\).

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\(^1\) Key drugs selected by Regional Assessment Team
\(^2\) ORS, Cotri-moxazole, PPF, Iron / Folic acid, Mebendazole, Paracetamol, Tincture Iodine, Eye / Ear Drop, Benzyl Benzoate.
\(^3\) Right patient, right drug, right dose, right duration, affordable cost and right prescriber

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For a child below 3 years suffering from acute diarrhoea, about 26% of retailers recommended ORS only.

**EXIT POLL**

- Of the total 1311 patients interviewed in the exit-poll, about 393 (30%) were from hospitals, 118 (9%) from PHCs, 380 (29%) from HPs and 420 (32%) from SHPs. Of them, 48% were males and 52% were females. Of the total patients, about 39% were less than 15 years, and 51% were between 15 to 50 years and about 10% were above the age of 50 years.

- The top-ten health problems diagnosed were fever (12.9%) followed by cough (8.2%), abdominal pain (6.2%), wound/abscess (6.1%), headache (5.3%), diarrhoeal diseases (4.2%), ARI (4.1%), worm infestations (3.6%), peptic ulcer syndrome (3.4%), and otitis media (3.2%).

- On average, 2.14 drugs (range: 1.7 to 2.8) were found prescribed for each patient. Of the total prescribed drugs, about 68% were dispensed from the health facilities but about 20% of patients did not receive any drug. About 58% of prescriptions included at least one antibiotic drug. About 7.5% of dispensed drugs were completely labelled. About 56% of the exiting patients had correct knowledge of dosage (dose, frequency of dosing and duration) of all drugs received at the health institution.

- 84% of the patient reported that health workers provided sufficient consultation time for their check-up and 68% of the patients were satisfied with the advice given by health workers. Similarly, 49% of the patients were asked for a follow-up.

- Ensuring efficient and trained health workers available at health facilities (48%), ensuring availability of essential medicines and equipment (47%) and better infrastructure of health facilities (5%) were the key suggestions provided by the patients for service improvement.

**KEY FINDINGS FROM QUALITATIVE SURVEY**

The following contents/excerpts of the qualitative data serve as the key findings.

**Perceptions towards local health institutions**

- People felt that the most urgent need was for trained manpower, medicines and equipment to be available in health institutions. Health workers are not accessible, especially to disadvantaged groups.

- People expressed dissatisfaction with health institutions and health workers, saying that often health workers were not available when they visited.

**Perceptions of health workers towards service delivery and utilization**

- Service providers noted the increase in people visiting to health institutions for treatment, and gave credit for this to the female community health volunteers, traditional birth attendants and community health education.
Service providers agreed that short opening hours and the capacity and behaviour of health workers were also reasons for people not visiting to health institutions.

Cost of treatment from Traditional healers

- "I don't take any kind of fee for my treatment. After getting well, people come back and give some clothes, money, fruits, meat or Kalash with flower to satisfy my deity. I take some money (Rs.51) for a Buti (herbs/thread) if someone needed it to wear."

- "I don't say anything for my fee. I take 5-10 rupees if people offered me." 

- "I do not take money but some people do repay my service fees as their labour work in my field (Khetala)."

- "I don't ask for my treatment fees. But people give me Rs. 150 (maximum) in cash and one Pathi rice (about 3 Kg) in goods."

Barriers to access health services

- Women hesitate to visit the health institution because of a general lack of services through female health workers. Other reasons given for not going to health institutions included caste discrimination and inadequate supply of medicines and medical supplies.

- People do not prefer to visit health institutions due to regular unavailability of medicines and even if they visit, they have to buy medicine from private drug retailers.

- Household leaders do not like to send their sick members to hospital; they prefer to consult a traditional healer.

- Most of the women don’t know what the office time of local health post is.

Suggestions for improving access

- There should be a provision of female health worker to examine the female cases at the health institution.
- Health awareness and referral training should be provided to traditional healers also.
- Women should be called in meetings held at local health institutions.
- Skill development training should be provided to the female health volunteers and midwives.
- General public should participate in meetings related to the improvement of services at the local health institutions.
- If a patient is serious health personal should visit his/her home and provide treatment.
- Required medicine should be available throughout the year.
- Every activity of health institutions should be transparent.
- 24-hour health care facility should be available at the village.
- There should be a provision of free medical facility for poor people/households.
- Additional programmes should be implemented for disadvantaged people.
Conclusion and Recommendations

- The study was carried out in 16 districts of Eastern Development Region to assess the present levels of health status so as to guide in developing detailed plan of Health Improvement Programme.

- Information were collected from different sources and analyzed between male-female and disadvantaged-general population segments. The qualitative data were analyzed by content analysis method.

- Majorities of respondents were found illiterate and significantly higher among disadvantaged segment. Major illness affecting population were fever, diarrhoea, gastritis/abdominal pain, ARI and skin diseases. Though health facilities was reported as the main place of contact for seeking health services, significant proportion of population were still visiting traditional healers.

- Prescribing antibiotics for illnesses like pneumonia, diarrhoea, dysentery and typhoid was significantly higher but only a part of them were completing full-course of medication. Though majorities of the population had heard about common diseases (like Tuberculosis, HIV/AIDS, Diarrhoea, Pneumonia, Malaria, Kalaazar and Japanese Encephalitis); only few of them could report correct signs/symptoms and measures of their prevention.

- Wide gap was observed between knowledge and practice of family planning methods among married couples living together. Use of depo-provera was common method of spacing. Knowledge regarding danger signs during pregnancy, during delivery and after delivery; and regular antenatal checkups; delivery by trained persons; use of clean delivery kit needs improvements. Audio visual mass media and local health workers and volunteers are potential media for imparting knowledge and motivating community members to improve their practices.

- Very few female and dalit members were found involved in managing local non governmental organization and community based organizations.

- The study suggests that knowledge, practice and coverage on health was poor in the communities of EDR and significant disparity was observed between disadvantaged and general segments of the population. Thus, appropriate interventions, especially targeting to disadvantaged population, are essential to improve the knowledge and practice on health issues and to maximize the utilization of health services.

- The study results also demonstrate some good practices in health care delivery systems. However there is still enough room for improvement in strengthening drug management system, filling up staff for providing MCH services and supervision based on plan. Private Clinics/Nursing Homes/Drug retailers were found potential sectors to fill the gap of health service delivery from public health system.

- The study also suggests need of implementing appropriate interventions for improving consultation, prescribing and dispensing practices at health facilities.

- Programmes need to be focussed on disadvantaged since the assessment has revealed remarkable gaps in terms of access and utilization of health care services between disadvantaged and general population.
# Fact Sheet

<table>
<thead>
<tr>
<th>Indicator</th>
<th>General</th>
<th>DAG</th>
<th>Odds Ratio (95% Confidence Interval)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Household Survey</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex Ratio (male per 100 female)</td>
<td>96</td>
<td>99</td>
<td></td>
</tr>
<tr>
<td>Population depending on agricultural occupation (%)</td>
<td>44</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Literacy (%)</td>
<td>71</td>
<td>38</td>
<td>3.84 (3.50 – 4.21)</td>
</tr>
<tr>
<td>Morbidity rate (last two weeks)</td>
<td>5.4</td>
<td>6.0</td>
<td>0.88 (0.81 – 0.95)</td>
</tr>
<tr>
<td>Treatment from traditional healers</td>
<td>11.3</td>
<td>20</td>
<td>0.51 (0.14 – 0.63)</td>
</tr>
<tr>
<td>Completed full dose of antibiotic therapy (%)</td>
<td>50</td>
<td>46</td>
<td>1.15 (0.43 – 3.1)</td>
</tr>
<tr>
<td>Knowledge on availability of free drugs for tuberculosis treatment (%)</td>
<td>59</td>
<td>33</td>
<td>2.90 (3.17 – 2.65)</td>
</tr>
<tr>
<td>Knowledge on at least two methods of family planning (%)</td>
<td>91</td>
<td>79</td>
<td>2.62 (2.28 – 3.01)</td>
</tr>
<tr>
<td>Contraceptive Prevalence Rate (%)</td>
<td>44</td>
<td>33</td>
<td>1.63 (1.46 – 1.81)</td>
</tr>
<tr>
<td>Knowledge on at least two ways of HIV AIDS prevention (%)</td>
<td>60</td>
<td>31</td>
<td>3.25 (2.97-3.57)</td>
</tr>
<tr>
<td>Deliveries conducted at home (three years history recall) (%)</td>
<td>80</td>
<td>93</td>
<td>3.97 (3.05 – 5.16)</td>
</tr>
<tr>
<td>Using clean delivery kit in home delivery (%)</td>
<td>39</td>
<td>24</td>
<td>2.07 (1.75 – 2.45)</td>
</tr>
<tr>
<td>Knowledge on using ORS for diarrhoea management (%)</td>
<td>66</td>
<td>53</td>
<td>1.76 (1.61 – 1.93)</td>
</tr>
<tr>
<td>Households with ORS packets available (%)</td>
<td>10</td>
<td>5</td>
<td>0.12 (0.10 – 0.13)</td>
</tr>
<tr>
<td>Households using mosquito nets (%)</td>
<td>34</td>
<td>58</td>
<td>2.66 (2.43 – 2.91)</td>
</tr>
<tr>
<td>Average time to reach nearest health facility (in minutes)</td>
<td>27</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>Satisfaction with the services of health facilities (%)</td>
<td>77</td>
<td>70</td>
<td>1.45 (1.32 – 1.61)</td>
</tr>
<tr>
<td>Households with toilet facility (%)</td>
<td>60</td>
<td>24</td>
<td>4.84 (4.40 – 5.33)</td>
</tr>
<tr>
<td>Households with access to piped water supply (%)</td>
<td>55</td>
<td>46</td>
<td>1.42 (1.30 – 1.55)</td>
</tr>
<tr>
<td><strong>Exit Poll</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Average number of drugs prescribed</td>
<td></td>
<td></td>
<td>2.14</td>
</tr>
<tr>
<td>Encounters with at least one antibiotics prescribed (%)</td>
<td></td>
<td></td>
<td>58</td>
</tr>
<tr>
<td>Patients with correct knowledge on dosage (%)</td>
<td></td>
<td></td>
<td>57</td>
</tr>
<tr>
<td>Dispensed drugs with complete labelling (%)</td>
<td></td>
<td></td>
<td>7.5</td>
</tr>
<tr>
<td><strong>Health Facility Survey</strong></td>
<td>PHC</td>
<td>HP</td>
<td>SHP</td>
</tr>
<tr>
<td>Staff present on the day of visit (% of filled positions)</td>
<td>72</td>
<td>84</td>
<td>90</td>
</tr>
<tr>
<td>Key drugs availability (%)</td>
<td>65</td>
<td>59</td>
<td>55</td>
</tr>
</tbody>
</table>


