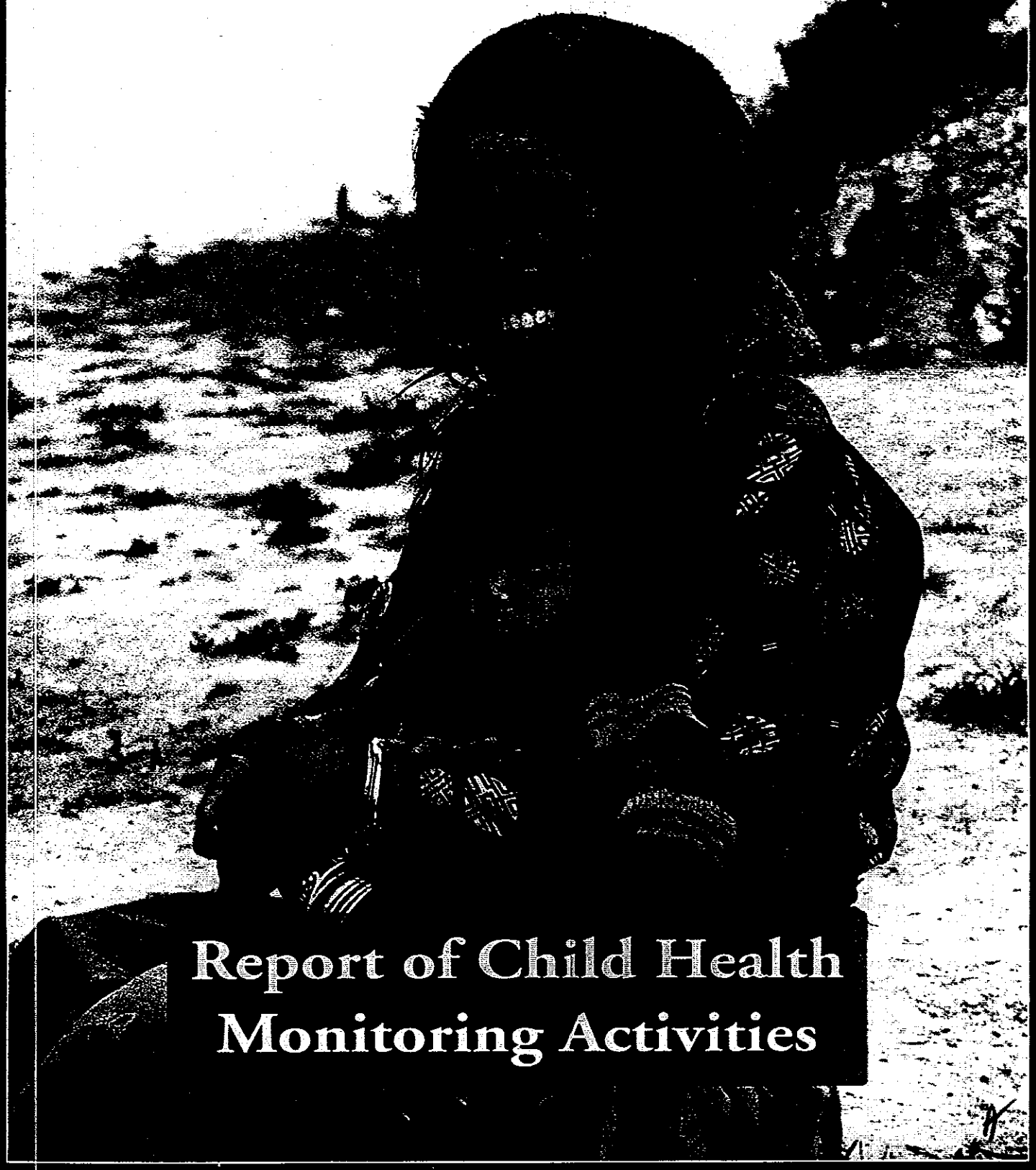
Logistics and Child Health Support Services Project (LCHSSP)



Report of Child Health Monitoring Activities

July 2000 - June 2001

Prepared by

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February 20, 2002

Ann Wickham
JSI/Boston

Subject: **Report of Child Health Monitoring Activities Conducted by JSI Child Health Staff – NFY 2057/58 (2000/2001)**

Dear Ann,

Through JSI's network of five Regional Field Offices, Child Health Field Staff conduct monitoring and supervision visits throughout Nepal to support the Ministry of Health's child health programs. All monitoring visits are guided by standardized checklists and whenever possible District Health Office and health facility staff accompany the JSI staff in the field.

During the fiscal year 2000/2001 (2057/58) they conducted 94 district level visits, 713 health facility level visits and conducted a total of 848 interviews with Village Health Workers and/or Maternal Child Health Workers. In addition, 729 general interviews, 882 Vitamin A program specific interviews and, in coordination with INGO partners, 2,703 ARI program interviews were conducted with Female Community Health Volunteers during this fiscal year. Through these visits, the health workers were given on-the-spot supportive guidance and data was collected about their service provision. Much of that data is summarized and analyzed in this report.

Feedback and comments would be much appreciated.

Yours sincerely,

Penny

Penny Dawson, MD,
Team Leader,
JSI/Nepal.

C

Logistics and Child Health Support Services Project (LCHSSP)

Report of Child Health Monitoring Activities

July 2000 - June 2001
(NFY 2057/58)

Prepared by
Penny Dawson
JSI/Nepal

Acknowledgments

It is a privilege to once again have the opportunity to present the results of the hardwork of the JSI Child Health team to our friends and colleagues. During this, the fourth year of the Logistics and Child Health Support Services Project, we have seen further expansion of the Community-Based Integrated Management of Childhood Illnesses (CB-IMCI) Program in Kanchanpur District and a further strengthening of the supports provided in the other 13 districts. Exciting innovations in the areas of cost recovery and sustainability initiatives have been developing, training and monitoring and special studies have been conducted and the team has worked in harmony to carry out many different activities in a coordinated and effective manner. For all of this I would like to thank my colleagues within JSI, including all members of the Child Health, Logistics and Administrative teams in Nepal and the backstoppers and support network in JSI headquarters in Boston.

In the Ministry of Heath, I would like to extend my sincere thanks to many individuals for their hardwork and dedication. I would particularly like to express my thanks to Dr. Hukum Dev Shah, Director of the Child Health Division, Dr. Sun Lal Thapa, Chief and his staff within the CDD/ARI Section, CHD, Mrs. Sharada Pandey, Chief, Nutrition Section, CHD, Dr. S.S. Jha, Director, Logistics Management Division, Dr. L. R. Pathak, Director, Family Health Division and Mrs. L. Malla, Director, NHTC.

In the Child Health Division there is a very special working group comprised of organizations and individuals who work together with a real commitment to improve child health in Nepal. We are referred to as the CB-IMCI Working Group and the members include: USAID, particularly Lyndon Brown and D. P. Raman; WHO, represented by Drs. Merel Mattousch and Tekendra Karki; UNICEF and our old friends, Padma Raj Rajbhandari and Rajendra Karki; JICA, primarily Dr. Kato; CARE; SAVE (US); ADRA; PLAN; MASS. This year NEPAS, NTAG and AusAID have also participated in various aspects of program planning and implementation. I would like to express my appreciation to all of these people and their organizations for their efforts in working together to make the CB-IMCI initiative a success in Nepal.

Special thanks go to Ms. Rebecca Rohrer, Director, O/HFP, USAID, Mr. Stewart McNab, Representative, UNICEF and Dr. Klaus Wagner, WR, WHO for their support behind the scenes for all aspects of the CB-IMCI working group's endeavors.

My thanks go to the Regional and District Health Office personnel and all staff of the MOH health facilities who are facing the day to day challenges of program implementation. Without their efforts many program successes would not be possible. Local leaders at the DDC, VDC and ward levels are also making very serious decisions and acting on them to ensure the sustainability of health programs in their jurisdictions. I wish to extend my thanks to them for their initiatives and commitments.

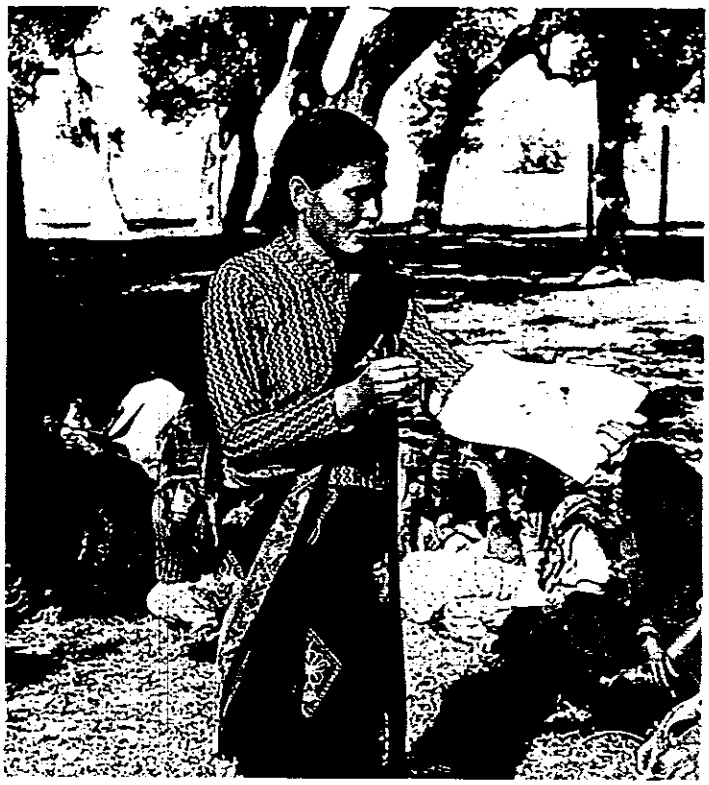
Special studies and publications this year were made possible through the efforts of a few individuals working closely with JSI. Our thanks go to Dr. Robin Houston, Ms. Nadia Carvalho and Ms. Fiona McNab for their efforts in preparing special reports on various aspects of JSI's work this year. My thanks and recognition are also extended to Ms. Naramaya Limbu, Ms. Laxmi Bhattarai and Ms. Bishwa Shanti Malla, and their SAVE (US) team in Kathmandu and Siraha for their commitment to the conduct of the study on Cost Recovery in Siraha.

A lot has been achieved in 2000/2001 but there is still a long way to go to ensure that child mortality in Nepal continues to decline at the fastest rate possible. The National Vitamin A Program is almost nationwide (covering 72 of 75 districts in April 2001). Thanks to the perseverance of the NTAG team and the excellent coverage which has been achieved and maintained this intervention alone is contributing to saving at least 30,000 lives per year. The CB-pneumonia program, now in 14 districts is contributing to saving an additional 6,838 lives per year, but what about the children in the other 61 districts? We still have a long way to go to bring pneumonia treatment to their villages.

In order to bring these and other essential interventions to the children of Nepal, to whom do we turn? In addition to all of the people whom I have acknowledged thus far, I cannot neglect to recognize the very important role played by over 46,000 Female Community Health Volunteers, living in villages all across this great country. It is from their hands that the children receive their vitamin A capsules, their polio drops, their ORS packets and the majority of their cotrimoxazole tablets (in CB-pneumonia program districts). I offer my utmost respect and gratitude to these women and I continue to believe in them as the backbone of community-based health programs in Nepal. Let us ensure that we do not overburden them but constantly search for ways to support, encourage, uplift and acknowledge them at every turn.

Penny Dawson

Penny Dawson, MD
Team Leader,
JSI/Nepal.



An FCHV from Kanchanpur newly trained in the case management of pneumonia

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Acronyms/Abbreviations

ADRA	Adventist Development and Relief Agency
AHW	Auxiliary Health Worker
AIDS	Acquired Immune Deficiency Syndrome
ANM	Assistant Nurse Mid-wife
ARI	Acute Respiratory Infections
AusAID	Australian Agency for International Development
BPC	Blue Plastic Cup
BRAC	Bangladesh Rural Advancement Committee
CHW	Community Health Workers (FCHV/VHW/MCHW)
CBAC	Community-Based ARI/CDD
CB-IMCI	Community-Based Integrated Management of Childhood Illnesses
CDD	Control of Diarrheal Diseases
CHD	Child Health Division
CHFS	Child Health Field Staff
DDC	District Development Committee
DHO	District Health Office
DFID	Department for International Development
EPI	Expanded Program for Immunization
FCHV	Female Community Health Volunteer
HF	Health Facility
HMG/N	His Majesty's Government/Nepal
HMIS	Health Management Information System
HP	Health Post
HPI	Health Post Incharge
I/NGO	International Non-Governmental Organization
IEC	Information, Education and Communication
IMCI	Integrated Management of Childhood Illnesses
JICA	Japan International Cooperation Agency
JSI	John Snow Incorporated
KAP	Knowledge, Attitude, Practice
LCHSSP	Logistics and Child Health Support Services Project
MASS	Management Support Services
MCHW	Maternal Child Health Worker
MGM	Mothers' Group Meeting
MIRA	Mother and Infant Research Activities
MOH	Ministry of Health
NHTC	National Health Training Center
NID	National Immunization Day
NTAG	Nepali Technical Assistance Group
NVAP	National Vitamin A Program
O/HFP	Office / Health and Family Planning
OPD	Out Patient Department
ORS	Oral Rehydration Salt
ORT	Oral Rehydration Therapy
PATH	Program for Appropriate Technology in Health
PD	Prolonged Diarrhea
PPC	Postpartum Case
RR	Respiratory Rate
SHP	Sub-Health Post
SHPI	Sub-Health Post Incharge
SM	Severe Malnutrition
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VAC	Vitamin A Capsules
VAD	Vitamin A Deficiency
VDC	Village Development Committee
VHW	Village Health Worker
WHO/ WR	World Health Organization / WHO Representative
Xero	Xerophthalmia

EXECUTIVE SUMMARY

This annual report summarizes the results of monitoring visits conducted by JSI's Child Health Field Staff (CHFS) during Year 4 (July 2000 – June 2001) of the Logistics and Child Health Support Services Project (LCHSSP). Each section of the report concludes with a short summary which has been reproduced here to form the Executive Summary. Some other highlights of the year are also summarized in this report, such as main training activities, cost recovery and sustainability initiatives, field studies and publications, staff participation in international conferences and visitors to the field in Nepal.

JSI Child Health Team and Friends in Pokhara, September 2000
Standing (from the left) – P.Dawson, P.N. Sherpa, S.Karki, T.P.Pant, S.Tamang, I.K.Bhattarai, D.Karki, N.Paudel, B.R.Acharya, H.Tiwari, B.B.Karki, S.H.Sharma, N.B.Swar
Sitting (from the left) – K.Gurung, R.C.Baniya, M.Chamlin, H.L.Rajbansh, P.M.Bomzon, R.Bhandari, D.D.Karki, D.C.Poudel, G.Gurung

Summary of General Information

Summary of Findings from General Monitoring Visits to Health Facilities

During monitoring visits in 399 health facilities, JSI's CHFS determined that the availability of ORS had increased slightly this year; other commodities (VAC, cotrimoxazole P and A, ferrous sulphate) showed little or no change from the previous year. The availability of functioning ORT corners increased slightly, with greater improvement seen at the Sub HP level.

It appears that HF staff knowledge about the conditions requiring treatment with high dose vitamin A has increased slightly between Year 3 and 4. Immediate efforts to improve this situation are needed, through training, written materials, supportive supervision and utilizing every opportunity to disseminate the correct information.

Summary of Findings from Nutrition Program-Related Monitoring at Health Facilities

The availability of iron tablets in health facilities has improved, even between Years 3 and 4 of the LCHSSP, with 91% of visited HFs having at least enough iron tablets on hand on the day of visit to correctly dose one woman, through 6 months of pregnancy and 6 weeks

postpartum. Knowledge that pregnant and lactating women should receive iron has improved and knowledge of the appropriate dosage has also improved, to 82% and 69% respectively, but there is still much room for improvement in actual provision of iron tablets to the women who need them.

Summary of Findings from VHW/MCHW General Interviews

There was little change in the VHW/MCHWs' knowledge about the danger signs of dehydration and pneumonia and about conditions which require treatment with high dose VAC. These cadres need to be included in some approach whereby these essential messages can be reinforced. It is encouraging to note that between Years 3 and 4 of the LCHSSP, the availability of pills, condoms, ORS and IEC materials appears to have improved with the MCHWs and VHWs.

Summary of Findings from FCHV General Interviews

Interviews with 729 FCHVs revealed little change in their knowledge about the three home rules for management of diarrhea. Seventy-two percent of FCHVs knew all three home rules but there is a need for some reinforcement during regular review/refresher meetings. Their knowledge of danger signs of dehydration and danger signs for pneumonia was already very good (89 % or above) and was proven to be better than the knowledge of the interviewed VHWs/MCHWs.

FCHVs who had blue plastic cups (BPCs) and used them to measure water for the preparation of ORS prepared it correctly in 100% of cases. Those who did not have a BPC were only correct for 85 % of ORS preparations.

There was a slight increase in the availability of pills (44%) and BPCs (85%) with FCHVs, a decrease in condom availability (39%) and a slight, but inadequate improvement in finding ORS packets (63%) with FCHVs. This latter problem was addressed last year at the central level, at both the Logistics Management Division and the Child Health Division and this probably led to the improvement seen in year 4. However, all FCHVs should have ORS at all times if we are to honour " No Commodities, No Program." There is no shortage of ORS but we must make a serious attempt to alter the practice of hoarding ORS at the health facilities.

The low availability of supplies (pills and condoms) with the FCHVs may be contributing to their apparent low level of service delivery for FP. IEC in this area could also be improved, so that villagers know that the FCHVs can resupply pills and provide condoms.

Summary of National Vitamin A Program (NVAP)-Related FCHV Monitoring

FCHVs' knowledge about the types of cases which require treatment with high dose vitamin A capsules needs immediate strengthening. While over 85% of FCHVs were aware that cases of nightblindness and postpartum cases require vitamin A, only 42% of FCHVs knew that cases of measles and prolonged diarrhea need immediate treatment with high dose VAC. Only fifty-two percent of interviewed FCHVs stated that cases of severe malnutrition need treatment with high dose VAC. This deficiency needs immediate attention during the fiscal year 2058/59 (2001/2002).

While there were slight changes in sources of support for FCHVs during the Vitamin A dosing campaigns, there is still much room for further improvement at the local level.

Regular, reliable resupply mechanisms for scissors, VAC, IEC materials to the FCHVs are needed. Guidelines have been sent from the Nutrition Section, CHD to all District Health Offices requesting them to inform their health facility staff to leave a balance of VAC with the FCHVs for treating postpartum cases. This needs to be followed up during regular monitoring visits and the implications on the national stock status of VAC considered.

Summary of Findings for Community-Based Pneumonia Control Program (part of the CB-IMCI Program)

For the purposes of analysis and comparison the 14 districts are divided into 3 separate groups as follows:

A districts: Makwanpur, Chitwan, Morang, Sunsari, Jhapa, Parsa
B districts: Siraha, Bara, Rauataha, Bajura, Rasuwa
C districts: Nawalparasi, Bardiya, Kanchanpur

For the detailed rationale regarding these groupings please read Section B. II of this report. Findings are summarized for both Health Facility Level and Community Level.

Health Facility Level

Five hundred and ninety-two monitoring visits were conducted to Health Facilities in the 14 program districts during Year 4. During these visits, cotrimoxazole availability was found to be very high, having increased from 88% in Year 3 to 94% in Year 4. Availability of timers and treatment registers was also excellent. The numbers of untrained/newly appointed or transferred staff remains a problem and will be addressed through trainings organized by the CDD/ARI Section under the 2001/2002 annual workplan.

The percentage of expected pneumonia cases receiving treatment from health facilities in program districts has continued to increase, with the largest percentage being treated in the "B" districts where 29% of expected cases received treatment in 2000/2001. In the 2 original "referral" districts of Morang and Sunsari, 28% of the expected cases were treated at HF level in 2000/2001. The lowest treatment at HFs was seen in Makwanpur and Chitwan, the 2 original "treatment" districts, where 21% of expected cases received treatment at the HF level. In non-program districts, HMIS data showed that in 2000/2001 only 24% of expected pneumonia cases received treatment at MOH health facilities.

Some other positive trends have been seen over time at the HFs in the program districts. The percentage of pneumonia cases seen at HFs which are classified as "severe pneumonia" or "very severe disease" has decreased. In 1995/96, 16% of all pneumonia cases seen at HFs were classified as "severe"; in 2000/2001, only 8% were classified as a severe type of pneumonia. While the exact cause is not known, the hypothesis is as follows: early detection and appropriate treatment of pneumonia cases in the community will decrease the likelihood that children will develop severe illness.

The trend in follow-up of pneumonia cases treated at HFs in program districts is also very encouraging. Starting from only 25% follow-up of treated cases in 1995/96 in program districts, there has been a steady increase and in 2000/2001, HF treatment registers indicated that 52% of pneumonia cases treated at the HF returned for a third day follow-up visit. While not nearly as high as the follow-up rate of over 90% at the community level, this is still very good.

2

In 2000/01, over 160,000 children received pneumonia treatment in the 13 program districts, with 91,248 (56 %) of these treated by CHWs. In the remainder of the country, 62 districts, only 173,564 additional cases of pneumonia were identified and treated. There is still a great need to expand the community-level program nationwide.

These numbers show not only the huge contribution made by the CHWs in extending treatment beyond the HFs, but also show that the HFs in the ARI program districts are also making a significant contribution.

Community Level

The number of interviews conducted with FCHVs, VHWs and MCHWs, referred to collectively as Community Health Workers (CHWs) increased to 3,319 from 2,575 in Year 3 of the LCHSSP. INGO staff made a very significant contribution, interviewing 1,438 of these CHWs. The same checklists are utilized for supervision allowing easy comparison of results, and there was little variation in the results received from different organizations.

CHWs are very active in treating pneumonia and of those interviewed, 81% had treated at least one case of pneumonia and 11% had referred at least one child with pneumonia. FCHV interview results suggest that overall they are more active in treating pneumonia than are VHWs and MCHWs. However on an individual basis, for "active" CHWs the average number of cases treated does not vary much. On average, FCHVs had treated 6.3 cases of pneumonia and referred 2.4; VHWs/MCHWs treated 6.9 cases and referred 2.4. Time frames were hard to define in establishing these averages, and could be either since the time of training in the new districts or since the last monitoring visit in the older districts.

Trends in follow-up of treated and referred cases has continued to increase since the LCHSSP began, and in Year 4 (July 2000 – June 2001) 92% of treated/referred cases were followed up on the third day by the CHW. This figure was obtained through an objective review of treatment book records and not from subjective information received during interviews.

CHW knowledge about danger signs of pneumonia, respiratory rate cut-off points for assessment and two cotrimoxazole dosages are very good as shown in various graphs within the report. More than 95% of CHWs showed the ability to count respiratory rate correctly. Their skills and knowledge are reinforced during annual monitoring meetings conducted at the health facilities and during monitoring and supervision visits.

Cotrimoxazole availability with CHWs has improved slightly, from 76% in 1999/2000 to 81% in 2000/2001. However, this also means that 19% of CHWs did not have cotrimoxazole available on the day of our monitoring visit and therefore were not ready and able to treat a child if they arrived that day with pneumonia. Various local cost recovery schemes are being put in place in different districts to ensure that funds are available to purchase cotrimoxazole if needed at the ward and VDC level, but more follow-up is needed to ensure that the medicine is always available.

The percentage of expected pneumonia cases receiving treatment is an important indicator of the real success of the program as our main goal is to decrease mortality through appropriate and prompt treatment. The results for 2000/2001 in the 13 program districts are summarized as follows: in Makwanpur and Chitwan, 45% of expected cases were treated (26% at the community level); in Morang and Sunsari, 72% of expected cases were treated (44% at the community level); in Jhapa and Parsa, 50% were treated (25% at the community level); in B

districts (Bajura, Rasuwa, Bara, Rautahat, Siraha), 67% were treated (38% at the community level); and in C districts (Nawalparasi and Bardiya,), 54% were treated (28% at the community level). Overall, 60% of expected pneumonia cases were treated in program districts in 2000/2001 and over half of these were treated at the community level, primarily by FCHVs. This is a truly amazing achievement!

Summary of Training Activities

During Year 4 of LCHSSP, community level training for CB-IMCI was conducted in Kanchanpur district. Health facility level training was conducted, with technical support from Nepal Pediatric Society (NEPAS) in Dhanusha.

Over 9,950 mothers attended Mothers' Group meetings conducted by FCHVs in Kanchanpur. During these meetings, 5,715 children under five were examined and 382 pneumonia cases were detected. A further 100 children were referred for further follow-up to the nearest health facility by FCHVs.

In the 13 "old" districts, JSI CHFS attended monitoring meetings and assisted HF/DHO staff in facilitating these meetings. A total of 7,216 FCHVs, 733 VHWs, 442 MCHWs and 4,337 VDC members participated in the community-level monitoring meetings conducted at the individual health facilities. At the district level meetings, 860 health facility incharges and 81 DDC members participated. These events are useful to help to institutionalize the process of record review and problem solving, using the CB-pneumonia treatment program as the focus of the discussion. The model could be used for any community-level monitoring and support activity.

Other Highlights

A new section, 'Working Towards a Sustainable Program', has been added in this year's annual report. JSI CH staff are actively involved in encouraging DDCs and VDCs to support the program and to make certain commitments. This section of the reports highlights some of the commitments made this year in the different program districts.

During this year, two reports, a booklet and an interactive CD-ROM were prepared by JSI. These are highlighted in Section B. V of this report along with a summary of the results of a study conducted in Kaski district examining the "KAP Gap" between Female Community Health Volunteers (FCHVs) and mothers, and an overview of the DDC and VDC orientation booklet.

Section B VI briefly describes trainings, workshops and conferences that JSI's CH staff attended during the year. Details of field visits made by key guests of JSI are provided in section B VII. The Annexes of this report provide information about JSI staff and tools used to monitor program activities.

3

A. Introduction to JSI and the LCHSSP

John Snow, Incorporated (JSI) provides technical assistance to the Ministry of Health (MOH) of His Majesty's Government (HMG) under the Logistics and Child Health Support Services Project (LCHSSP). JSI is funded through USAID's bilateral agreement with HMG to support logistics and child health programs from June 1997- June 2002. Annex 1 shows the LCHSSP organogram. Each year the Logistics and Child Health teams within JSI prepare separate annual reports to summarize program achievements and to highlight problems and outstanding issues.

During the Nepali fiscal year (2057/58) or English year July 2000 to June 2001, JSI provided technical assistance and support to the following child health related programs of the MOH:

- National Vitamin A Program (NVAP)
- National Control of Diarrheal Diseases (CDD) Program
- National Control of Acute Respiratory Infections (ARI) Program
- Community-Based Integrated Management of Childhood Illnesses Initiative
- National Female Community Health Volunteer (FCHV) Program

Through a subcontract with Nepali Technical Assistance Group (NTAG), JSI supports the Child Health Division in the implementation of the National Vitamin A Program (NVAP); and through a subcontract with Management Support Services (MASS) funding and logistical support is provided to implement supplemental workplans for USAID funding.

At the central/Kathmandu level, JSI is a member of the Child Health Division's CB-IMCI Working Group, along with USAID, UNICEF and WHO. The JSI Child Health team assists the MOH and partners with planning, training, budgeting, monitoring and analysis of program implementation. JSI team members also play an important role in coordination among donors and international non-governmental organizations (INGOs) working in child health.

At the field level, from one of JSI's five Regional Field Offices, Child Health Field Staff (CHFS) play very active roles in monitoring specific programs within their regions and giving support to community-based health workers (FCHVs, VHWs, MCHWs), health facility and district level MOH staff and feedback to all levels, including regional and central. Contact information for all field offices is provided in Annex 2. Their major role is to assist the District Health Office staff in program management for ARI, CDD, CB-IMCI, vitamin A and other child health related programs (nutrition, family planning, support for National Immunization Days (NIDs), and the FCHV program). The CHFS utilize standard checklists for monitoring and the data collected is analyzed not only at the Regional Field Office but also in the JSI office in Kathmandu. Copies of all current checklists are included as Annex 3 of this report.

B. Child Health Activities

I. General

This section of the report summarizes the results of monitoring visits conducted by JSI's CHFS during the fourth year of the LCHSSP (July 2000 – June 2001). The results are presented sequentially by level of facilities and/or workers visited: district; health facility; VHW/MCHW level; and FCHV level. Where appropriate, comparisons will be made between results obtained this year and previous years to highlight progress or problems.

The number of field visits and interviews conducted are summarized in Tables G #1 and G #2. During this year, JSI's CHFS visited 33 different districts and made a total of 94 district-level visits. They visited 713 health facilities, 592 of which were in the districts where the community-based (CB) pneumonia program has been implemented. See section B II for specific results of those monitoring visits. Fifty-three primary health care centers, 194 health posts and 466 sub-health posts were monitored. Three hundred and ninety-nine general child health interviews were conducted with health facility level staff.

Table G #1: Number of Visits to the District and Health Facility Level by Region

Region	# Dist Visits	# Dist Level Visit	Total # HF Visits	Interview Conducted			Type of Facilities		
				ARI + General	ARI Only	General Only	PHC	HP	SHP
Eastern	4	10	85	85	0	0	8	18	59
Central	12	39	347	169	158	20	24	96	227
Western	8	25	103	24	41	38	9	25	69
Mid-Western	3	9	65	0	44	21	4	19	42
Far-Western	6	11	113	0	71	42	8	36	69
Total	33	94	713	278	314	121	53	194	466

A total of 848 VHW/MCHW level interviews were conducted during monitoring visits with 699 VHWs or MCHWs. Six hundred and sixteen of these interviews were conducted in the CB-pneumonia program districts. Four thousand, three hundred and fourteen interviews were conducted with three thousand and fifty-eight FCHVs (729 on regular program activities, 2,703 on ARI program and 882 on vitamin A program issues).

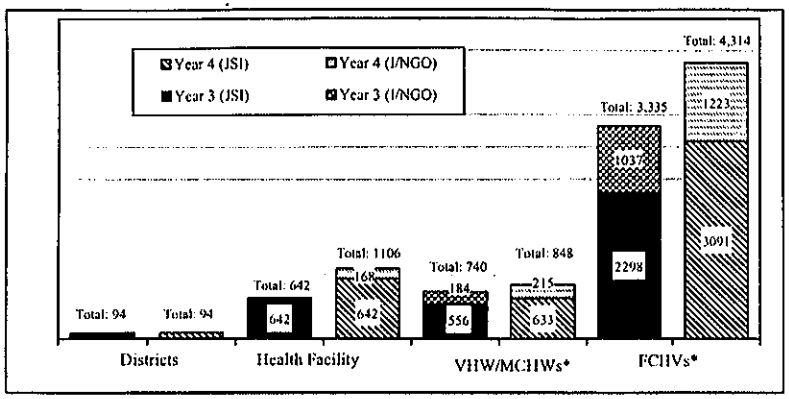
Table G #2: Number of Community Level Visits by Region

Region	VHW/MCHW Level Visits				FCHV Level Visits				
	Total # Persons Interviewed	Total # Interviews	Regular Program	ARI Program	Total # Persons Interviewed	Total # Interviews	Regular Program	ARI Dists	Vit A Dists
Eastern	95	171	79	92	249	659	221	236	202
Central	374	433	87	346	1,432	1,779	180	1,352	247
Western	77	89	34	55	344	624	166	267	191
Mid-Western	36	38	6	32	268	364	76	202	86
Far-Western	117	117	26	91	765	888	86	646	156
Total	699	848	232	616	3,058	4,314	729	2,703	882

Graph G #1 compares years 3 and 4 and shows that the number of interviews conducted by JSI's Child Health Field Staff at both health facility and community level increased during the fourth year of the project. Of the totals presented, 1,438 interviews (215 with

VHWs/MCHWs and 1,223 with FCHVs) were conducted by INGO field staff and data collated with the JSI CHFS monitoring results for presentation to the MOH and USAID.

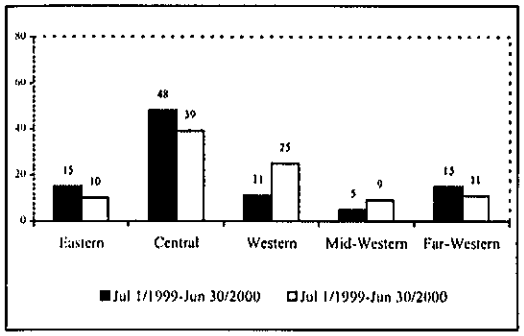
Graph G #1: Number of Interviews*/Visits Conducted by Year



FCHVs from Rasuwa district with CHFO

1. District Level

Graph D #1: Number of District Level Visits

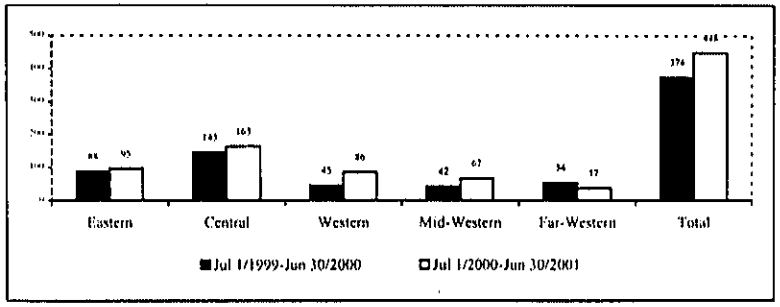


Graph D# 1 compares the number of district level visits by region between Years 3 and 4 of the LCHSSP. The number of visits increased in the Western and Mid-Western and decreased in the Eastern, Central and Far-Western The reason for this decrease in these two regions can be explained by the fact that JSI's CHFS were heavily involved in the monitoring of community level health workers.

During district level visits, the CHFS plan the supervision visit schedule with the District Health Office staff and also review any progress or problems since the last visit. They monitor the district store management and check the availability of particular commodities: family planning supplies (condoms, pills, depo provera), ORS packets, vitamin A capsules, pediatric cotrimoxazole tablets, ferrous sulphate, blue plastic cups and ORT corner materials.

In addition to their regular program monitoring activities, JSI's CHFS assist with the monitoring of the April and October rounds of vitamin A capsule distribution. Graph D #2 compares the number of sites visited during Years 3 and 4, and shows that overall the number of VAC distribution sites visited increased from 374 to 448.

Graph D#2: Number VAC Distribution Site Visited



2. Health Facility Level

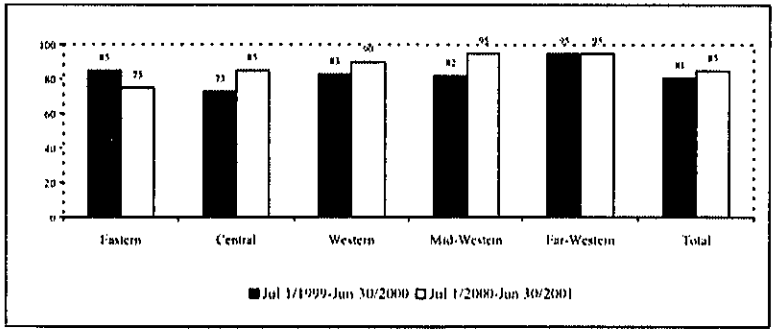
JSI's CHFS conducted a total of 399 general interviews at the health facility level during Year 4 of the LCHSSP. This represents a slight increase in visits over the previous year. A breakdown with specific information, by region, was shown in Table G #1.

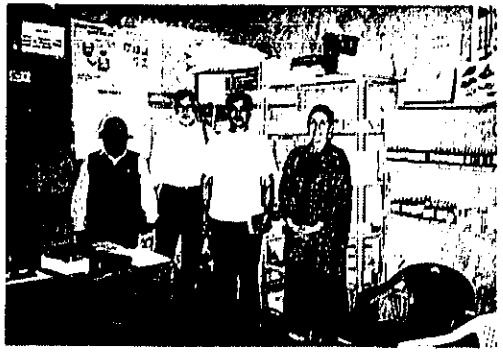
Table HF #1: Number of HFs Visited by CH Staff

Period	Eastern	Central	Western	Mid-Western	Far-Western	Total
July 1/1999-June 30/2000	86	184	24	11	84	389
July 1/2000-June 30/2001	85	189	62	21	42	399

The MOH's National Control of Diarrheal Diseases program promotes the establishment of Oral Rehydration Therapy (ORT) corners in all health facilities, where patients can be treated immediately to correct dehydration, and health education about correct preparation of ORS and home care of children with diarrhea can be conducted. Graph HF #1 shows the availability of ORT Corners in health facilities, by region and overall. There is a slight improvement between Year 3 (81%) and Year 4 (85%).

Graph HF #1: ORT Corners Available in HFs



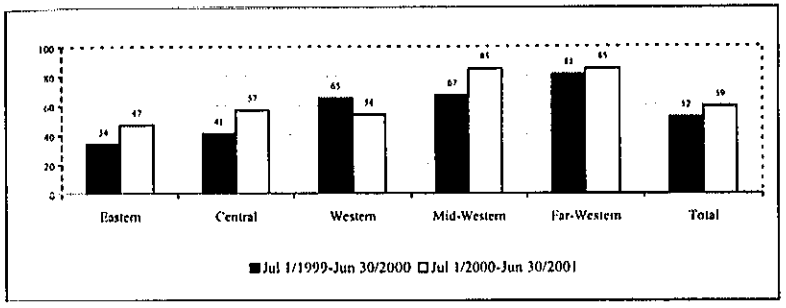


Sr CHFO JSI/Helmuth, Sr. Technical Advisor, JSI/Boston, SHPI, Nibuwatar SHP and Team Leader, JSI/Nepal in the Nibuwatar SHP

For an ORT corner to be defined as "functioning" it must be setup and ready for use when the HF is monitored. Although the availability of ORT equipment is quite good, the motivation of the HF staff to keep it set up and ready for use is lagging behind. As Graph HF #2 shows, overall 59% of facilities which had the necessary equipment, actually had it set up and ready to use when JSI's CH staff monitored the facility. There is slight improvement over the Year 3

results, and the results appear encouraging in the Mid Western and Far Western Regions; however, these results should be interpreted cautiously as the number of facilities visited in these Regions is lower than in other Regions (see Table HF #1).

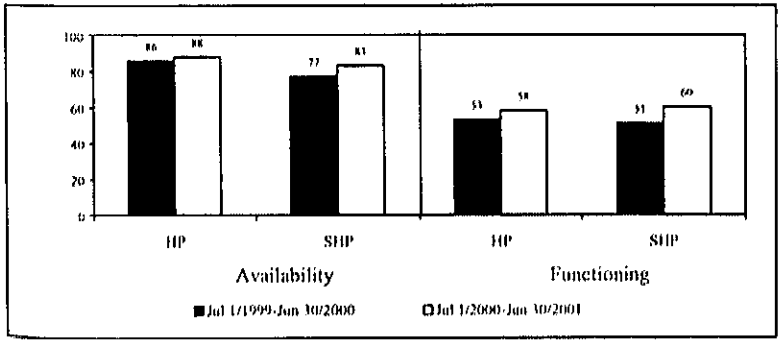
Graph HF #2: ORT Corners functioning in the HF



O/HFP/USAID Director and JSI Team Leader monitoring a HF in Morang

Graph HF # 3 compares the availability and functioning of the ORT corners by the level of the health facility, between Years 3 and 4 of the LCHSSP. There was slight improvement in all categories in Year 4; and ORT corners were more likely to be set up and ready for use in Sub-Health Posts than in Health Posts.

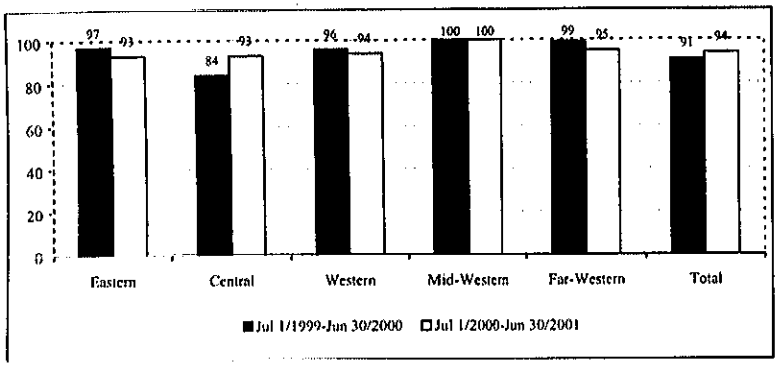
Graph HF #3: Availability and Functioning of ORT Corners by Level of HFs



6

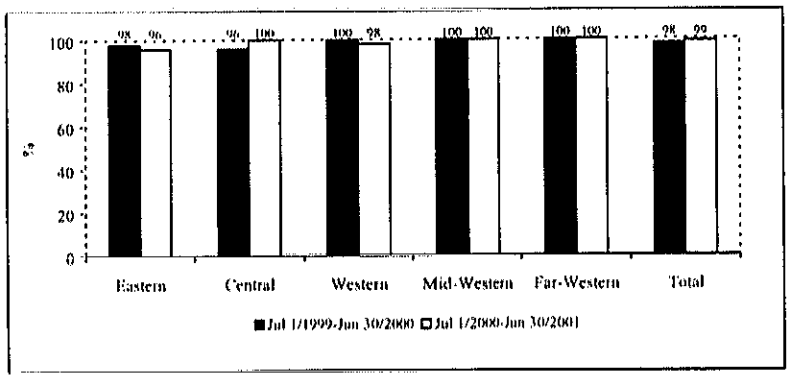
Graph HF # 4 shows that the availability of a correct measuring device for preparing ORS at the HFs visited has reached 94%. Nationwide this represents improvement over the previous year. How can we encourage HF staff to demonstrate correct preparation to caretakers?

Graph HF #4: Availability of Measuring Utensil



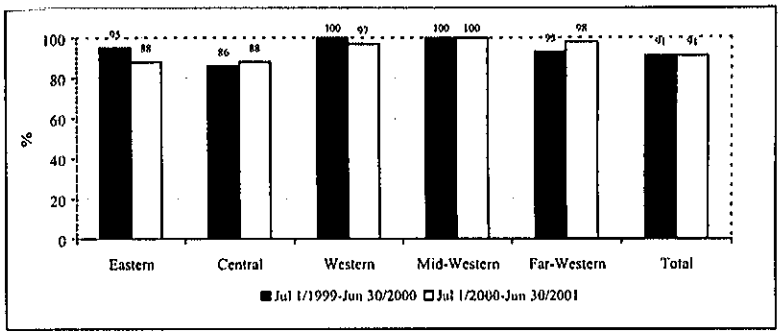
The WHO approved volume of water to be added to one packet of ORS is between 950-1200 mls. HF staff were asked to prepare ORS with the available utensil and the volume of water was measured using a graduated cylinder. Ninety-nine percent of the HF staff prepared ORS solution of correct volume as shown in Graph HF #5. As there is little room for further improvement this result will not be presented in the Year 5 report.

Graph HF #5: Measurement of Correct Volume of Water



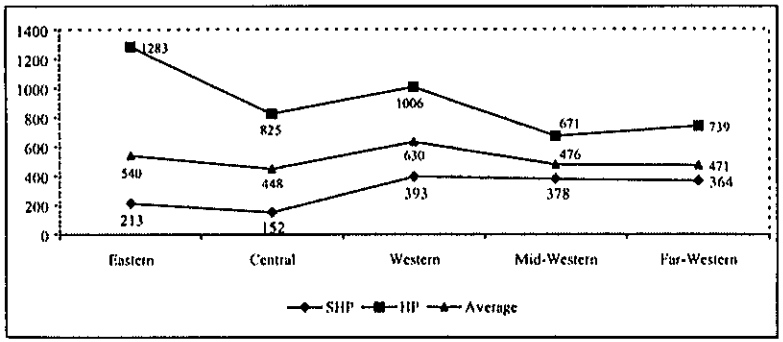
CHFS monitor the availability of some essential program items. Graph HF #6 compares ORS packet availability between Years 3 and 4 and shows no change overall with 91% of HFs having ORS in stock on the day of visit.

Graph HF #6: ORS Packets in Stock in HFs



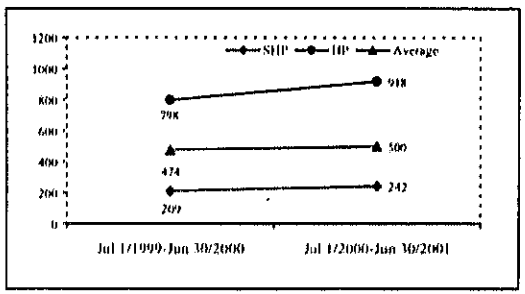
Graph HF # 7 shows the average number of packets available by level of health facility by Region.

Graph HF #7: Average Number of ORS Packets Available in HFs by Region



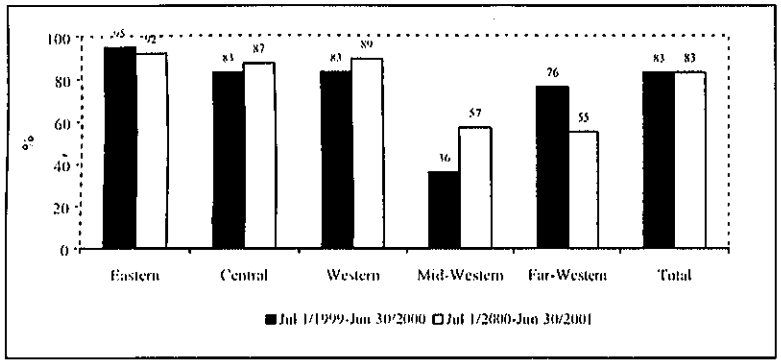
Graph HF #8: Average Number of ORS Packets Available in HFs by Year

On average, SHPs had 242 packets available, HPs had 918 packets, giving an average of 500 packets available at any HF on the day of visit, as shown in Graph HF # 8.



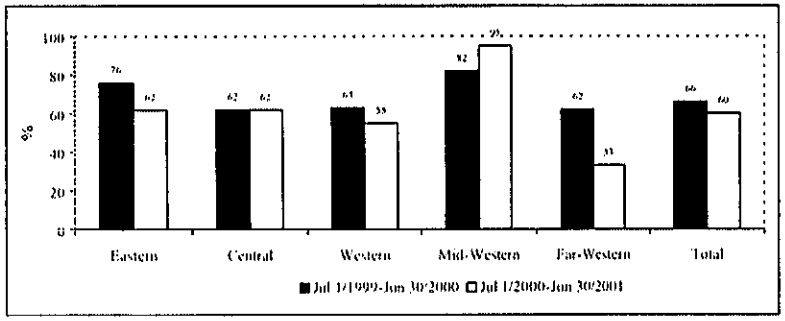
Availability of pediatric cotrimoxazole tablets improved dramatically between Year 2 (55%) and Year 3 (83%) but there was no further improvement in Year 4, as shown in Graph HF # 9. Problems still remain in trying to ensure that the MOH budget sent to the districts is, in fact, utilized to procure good quality cotrimoxazole. Dialogue will continue with the CDD/ARI Section on how to better monitor this part of the program.

Graph HF #9: Cotrimoxazole (Pediatric) Availability



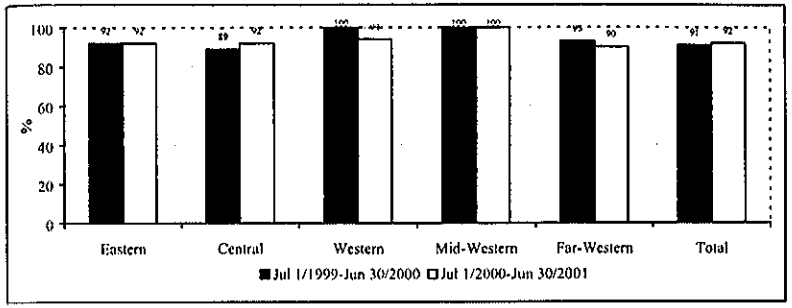
The availability of cotrimoxazole in adult strength did not improve this year and in fact decreased from 66% in Year 3 to 60% in Year 4, as depicted in Graph HF #10.

Graph HF #10: Cotrimoxazole (Adult) Availability

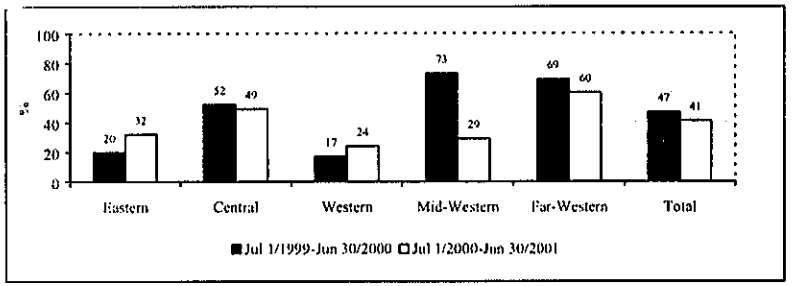


At the request of the Nutrition Section Chief, CHD, JSI's CHFS continue to monitor the availability of ferrous sulphate (iron) tablets at facilities. In all regions they found availability very high, as shown in Graph HF #11.

Graph HF# 11: Iron Tablets (Ferrous Sulphate) Availability by Region

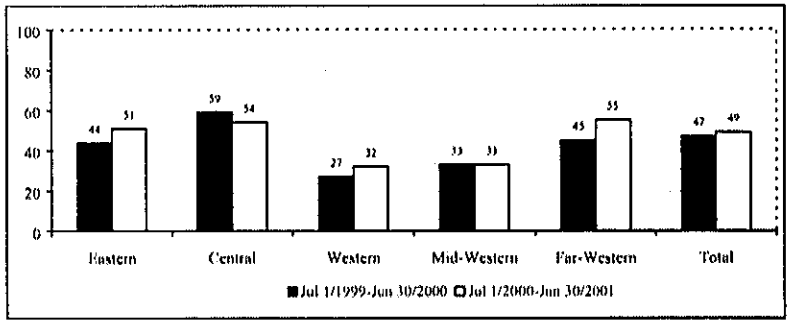


Graph HF #12: CDD Treatment Chart Displayed by Region



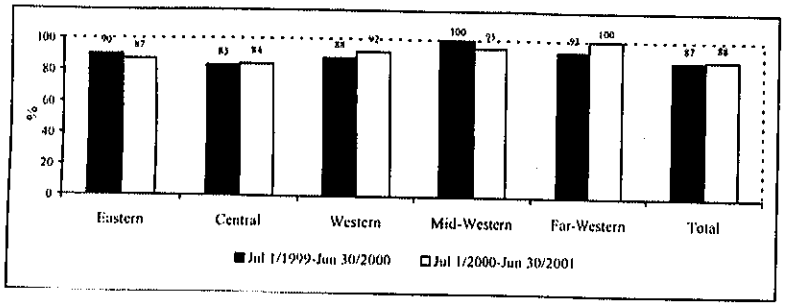
The CDD/ARI Section, CHD has printed Nepali versions of the WHO wall treatment charts for case management of diarrhea and pneumonia cases and has provided them to HFs. JSI CHFS have been monitoring the availability and use of these charts. Graphs HF #12 and # 13 show that there has been little change. As these wall charts are no longer regularly provided through the CHD, their availability will no longer be presented in subsequent reports.

Graph HF# 13: ARI Treatment Chart Displayed

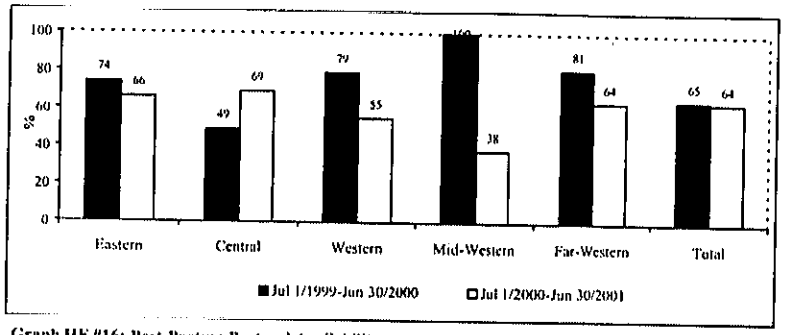


The availability of vitamin A capsules has remained high in Year 4, with 88 % of HFs having VAC on hand on the day of visit. This is shown in Graph HF #14. Graphs HF #15 and #16 compare the availability of case treatment and postpartum protocols in Years 3 and 4. There is not much change in the two years. The protocols are now combined into one "job aid", so next year these figures will be reported as a single percentage.

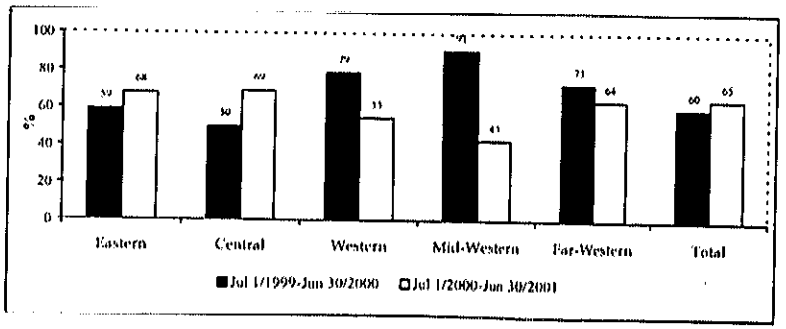
Graph HF #14: Vitamin A Capsules Availability



Graph HF #15: Case Treatment Protocol Availability

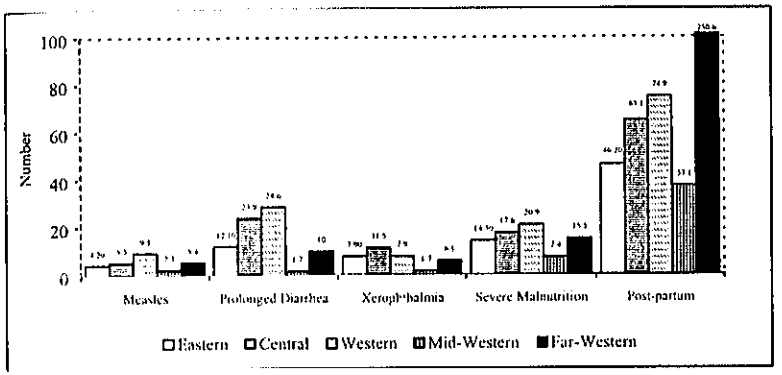


Graph HF #16: Post-Partum Protocol Availability



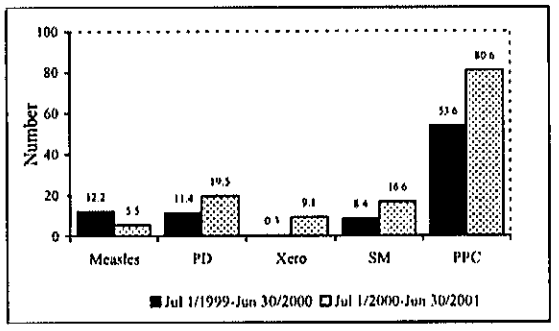
In support of the NVAP, JSI CHFS monitor the OPD registers and HMIS forms to determine the number of cases treated with high dose vitamin A capsules within the past one month. Some projections and extrapolations were made to estimate the number of cases which would be treated per health facility per year. Graph HF #17 shows the estimated number of cases that would be treated at a health facility, by Region, for Year 4 of the LCHSSP if the actual treatment figures for one month were just multiplied by 12. In the Far Western Region, a special program supported by PATH/Canada and implemented with assistance from Institute for Child Health, promoted post-partum dosing through various community-level mechanisms, which explains the larger number of cases dosed in the FW Region.

Graph HF #17: Estimated Number of Cases Treated with High Dose VAC per Health Facility over a One-Year Period in NVAP Districts by Region



Graph HF #18: Estimated Number of Cases Treated with High Dose VAC Per Health Facility over a One-Year Period by Year

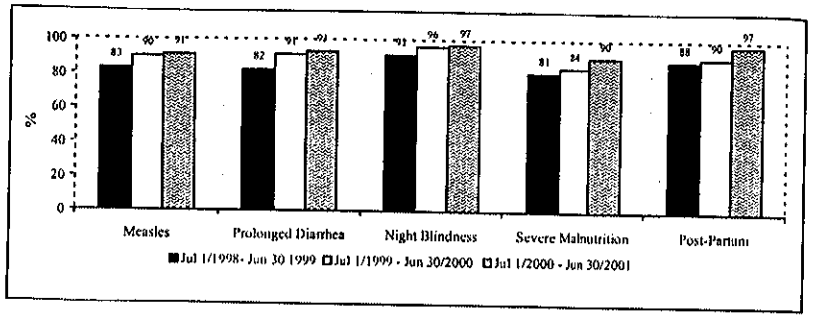
A comparison was made between treatment data obtained in Year 3 and Year 4. As can be seen in Graph HF # 18, the numbers of cases being treated in Year 4 has increased in all four conditions except for measles. The most notable increase is in the dosing of post-partum cases.



HF staff were asked about their knowledge of conditions which require treatment with high dose vitamin A capsules, with results summarized by year in Graph HF # 19. Knowledge about which kinds of cases require treatment with high dose VAC has improved from year 3 to year 4.

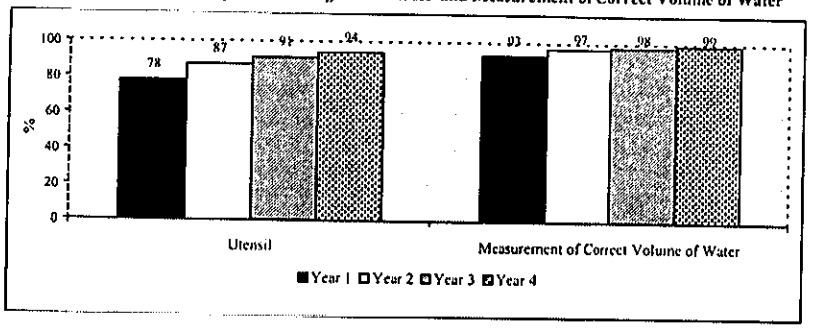
9

Graph HF #19: HF Staff Knowledge About Conditions Which Should Receive High Dose Vit A Capsules (VAC)



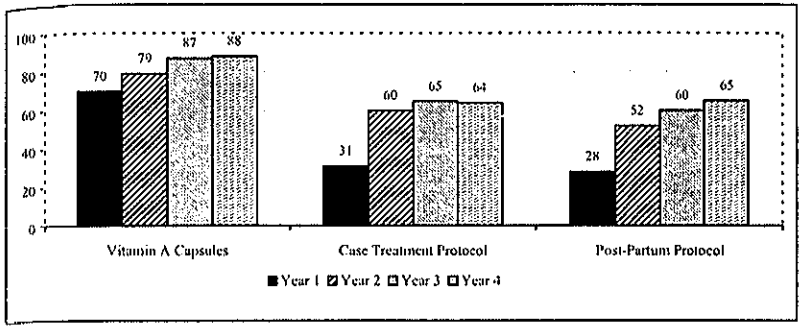
For certain indicators, trends over the four years of the LCHSSP have been presented in the two graphs below. Graph HF #20 shows that the availability of a measuring utensil has improved at HFs over time and is associated with an increase in the correct volume of water measured for ORS preparation.

Graph HF #20: Availability of Measuring Utensil at HF and Measurement of Correct Volume of Water



Similarly, Graph HF# 21 shows the incremental improvement in the availability of VAC, case treatment and post-partum protocols. However, the latter two appear to be somewhat stagnant and need further improvement.

Graph HF #21: Availability of Vitamin A Related Materials



Summary of HF-Level Monitoring Visit Results:

Availability of ORS increased slightly this year; other commodities (VAC, cotrim P and A, ferrous sulphate) showed little or no change from the previous year. The availability of functioning ORT corners increased slightly, with greater improvement seen at the Sub HP level.

It appears that HF staff knowledge about the conditions requiring treatment with high dose vitamin A has increased slightly between Year 3 and 4. Immediate efforts to improve this situation are needed, through training, written materials, supportive supervision and utilizing every opportunity to disseminate the correct information.

Two FCHWs from Bardiya district and JSI CHES after sharing their experiences with HF staff in Kanchanpur District

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3. Village Health Worker (VHW) / Maternal Child Health Worker (MCHW) Level

In Year 4, 232 general child health interviews were conducted with VHWs or MCHWs; a slight increase over Year 3 in which 223 were visited. See Table VM # 1. General interviews include questions to determine the health workers knowledge about FP, diarrheal disease, AIDs, signs of pneumonia and vitamin A deficiency and nutrition.

Table VM #1: Number of VHWs /MCHWs Monitored by CH Staff

Period	Eastern	Central	Western	Mid-Western	Far-Western	Total
July 1/1999-June 30/2000	95	56	18	5	49	223
July 1/2000-June 30/2001	79	87	34	6	26	232

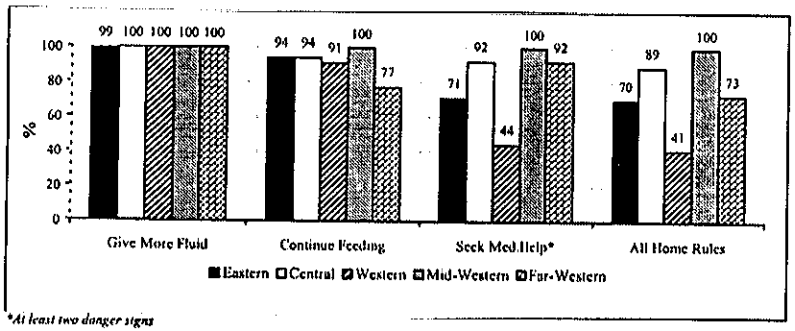
For correct home management of diarrhea, three home rules are stressed and the VHWs/MCHWs knowledge about them is always assessed. These three rules, which are to followed at home whenever a child gets diarrhea, are:

1. Increase the volume of fluids that the child receives. This means any kind of fluid: water, juice, liquid from preparing rice, lentils or vegetables or ORS.

2. Continue to feed the child throughout the episode and after recovery.

3. Watch for danger signs and take the child to the nearest health facility if they have one of the following danger signs: many watery stools, repeated vomiting, marked thirst, eating or drinking poorly, fever, blood in the stool.

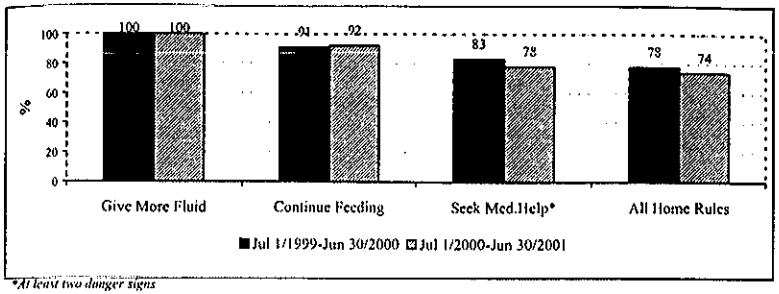
Graph VM # 1: VHW/MCHWs' Knowledge on Three Home Rules by Region



*At least two danger signs

Graph VM #1 shows the knowledge of this level of health worker, by region. In the Mid Western Region, very few interviews were conducted and therefore no final conclusions should be drawn from these figures. Greater emphasis needs to be placed on the conditions requiring referral to a health facility. Graph VM #2 shows that there is a slight decrease in knowledge of Rule # 3 between Years 3 and 4 of the project, and overall there is a slight decrease in knowledge of all three home rules.

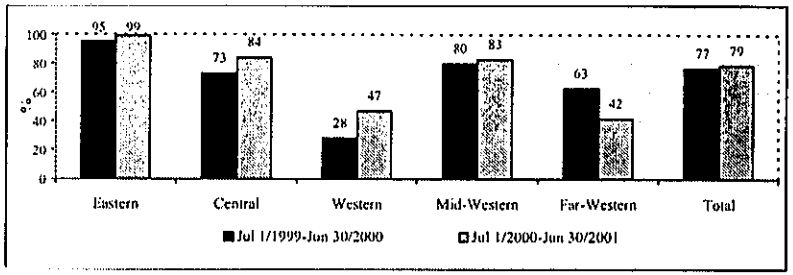
Graph VM #2: VHW/MCHWs' Knowledge on Three Home Rules by Year



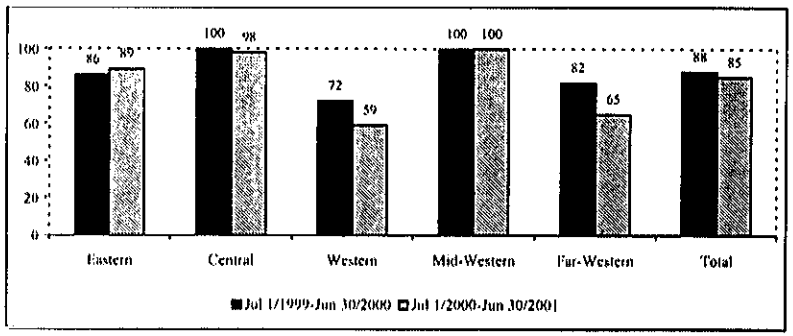
*At least two danger signs

VHWs and MCHWs were also asked about their knowledge of danger signs for pneumonia. Graph VM # 3 shows that there was a slight overall improvement between Years 3 and 4, with 79% of interviewees knowing at least three danger signs of pneumonia in Year 4. Similarly, Graph VM # 4 compares, by region and year, the VHW/MCHWs' knowledge of at least three danger signs of dehydration. There is a slight decrease in Year 4, with 85% of interviewees stating at least 3 danger signs correctly as compared to 88% in Year 3.

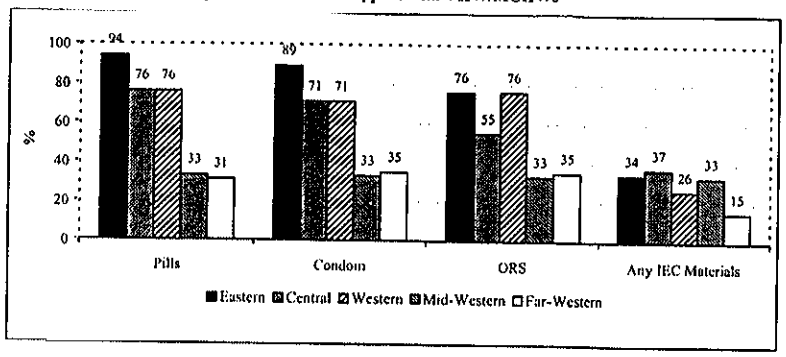
Graph VM #3: VHW/MCHWs' Knowledge on Three /More Than Three Danger Signs of Pneumonia



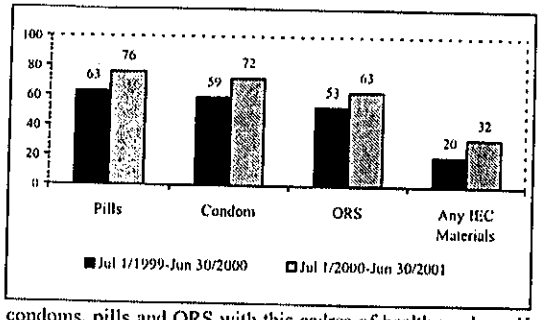
Graph VM #4: VHW/MCHWs' Knowledge on Three/More Than Three Danger Signs of Dehydration



Graph VM #5: Availability of Materials and Supplies with VHW/MCHWs

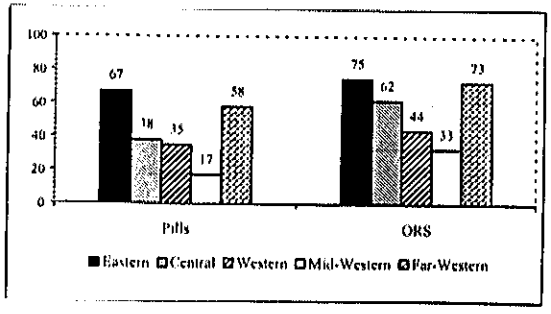


Graph VM #6: Availability of Materials and Supplies with VHW/MCHWs by year



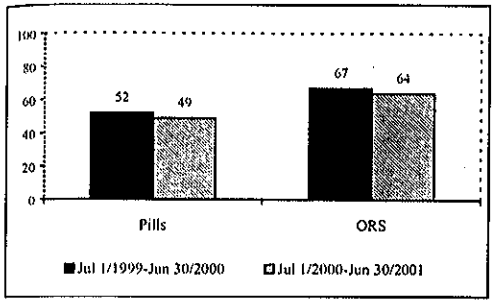
Village Health Workers and Maternal Child Health Workers should have certain supplies with them, such as pills, condoms, ORS, IEC materials. The availability of these items by region and by year is shown in Graphs VM #5 and #6. IEC material availability is poor in all regions; Mid-Western and Far Western regions show poor availability of condoms, pills and ORS with this cadres of health workers. However, overall availability of all of these commodities improved between Years 3 and 4.

Graph VM #7: Pills and ORS Distribution to FCHVs and Clients (in last month)



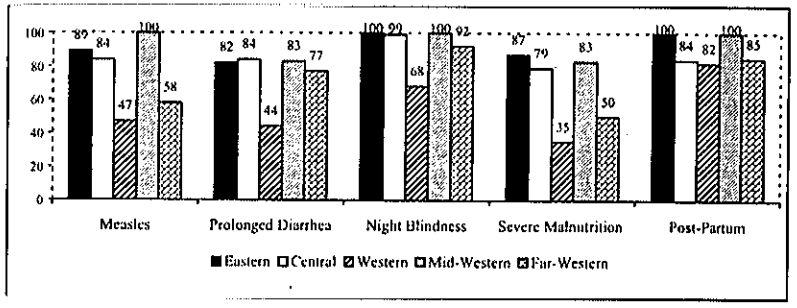
Graph VM # 7 reflects the results of interview questions in which VHWs and MCHWs were asked if they supplied pills and/or ORS to clients and/or FCHVs during the past one month. ORS distribution was reported to be higher than distribution of pills.

Graph VM #8: Pills and ORS Distribution to FCHVs and Clients (in last month) by Year



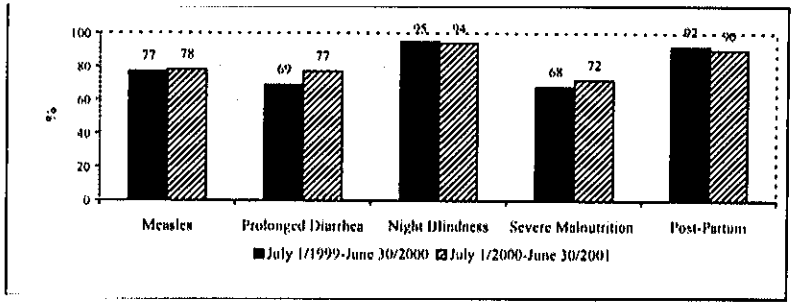
In Graph VM # 8 we see that there has been a slight decrease in distribution for both pills and ORS between Years 3 and 4.

Graph VM #9: VHW/MCHWs' Knowledge on Conditions to Receive High Dose Vitamin A, by Region



Graph VM # 9 shows, by region, the VHW/MCHWs' knowledge about the types of conditions which should be treated with high dose VAC. There has been slight improvement in knowledge for some conditions and this is shown in Graph VM # 10. The need to dose cases of measles, prolonged diarrhea and severe malnutrition still need to be stressed.

Graph VM #10: VHW/MCHWs' Knowledge on Conditions to Receive High Dose Vitamin A by Year



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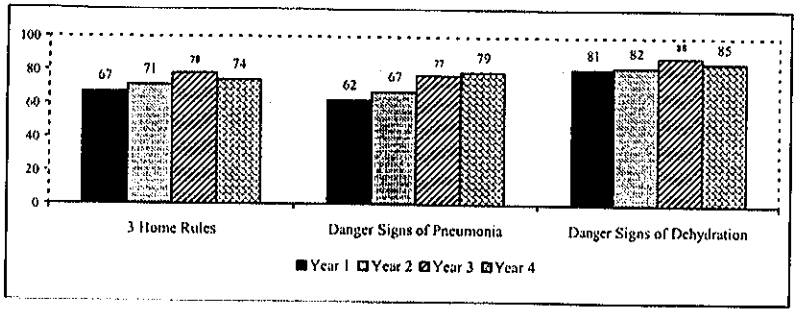
Graph #1 shows trends over 4 years of VHWs/MCHWs' knowledge, with slight increase over the first three years then either a slight decrease or plateau. This cadre of worker needs to be targeted in future for specific refresher training and support.

Graph VM #11: VHW/MCHWs' Knowledge on three Home Rules and three or More Danger Signs of Pneumonia and Dehydration



Summary of VHW/MCHW-level Monitoring Visit Results:

There was little change in knowledge of VHW/MCHWs about danger signs of dehydration and pneumonia and about conditions which require treatment with high dose VAC. These cadres need to be included in some approach whereby these essential messages can be reinforced. It is encouraging to note that between Years 3 and 4 of the LCHSSP, the availability of pills, condoms, ORS and IEC materials appears to have improved with the MCHWs and VHWs.

JSI Assistant CHFO interviewing a MCHW in Makwanpur District

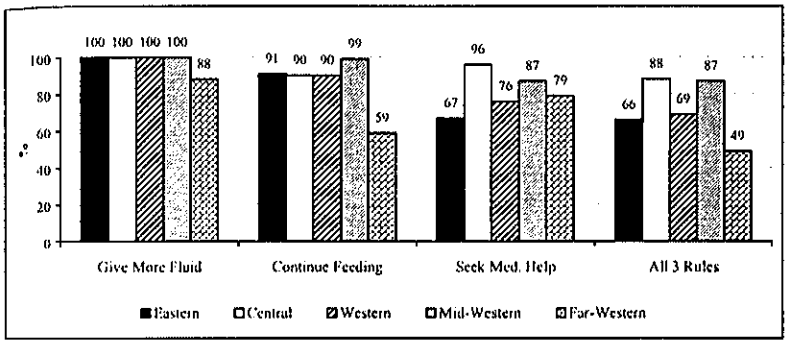
4. FCHV Level

In the year July 2000 through June 2001, JSI's Child Health Field Staff conducted a total of 729 general interviews with FCHVs. JSI CHFS usually travel to the home of the FCHVs and conduct interviews there. Whenever possible they are also accompanied by Health Facility and/or staff of the District Health Office. The content of these interviews can be seen in Annex 3. Table F # 1 summarizes the interviews conducted by Region and Year.

Table F #1: Numbers of FCHVs Visited by Child Health Staff

Period	Eastern	Central	Western	Mid-Western	Far-Western	Total
Jul 1/1999-Jun 30/2000	267	156	49	13	180	665
Jul 1/2000-Jun 30/2001	221	180	166	76	86	729

Graph F #1: FCHV's Knowledge on Three Home Rules



Graph F # 1 shows the knowledge of FCHVs about the three home rules for management of diarrhea. Small numbers of interviews in some regions make comparisons difficult. From this graph, it appears that FCHVs in the Far Western Region have poorer knowledge than in other regions, but this may also be a result of the fact that in this region more remote-area FCHVs were interviewed as compared with other regions.

FCHVs from Morang present OHFP/USAID Director with a Bouquet of Flowers

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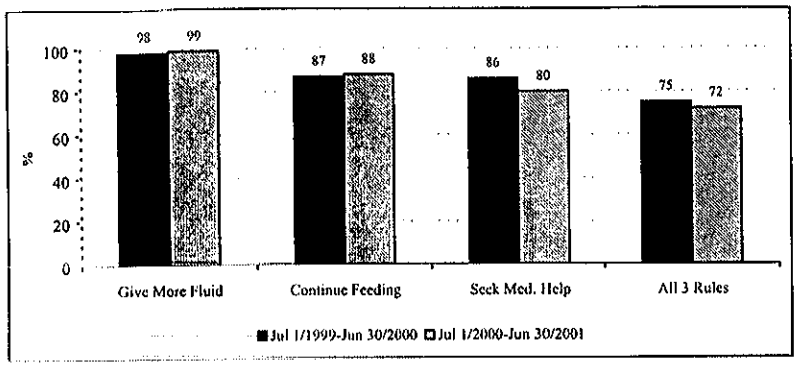
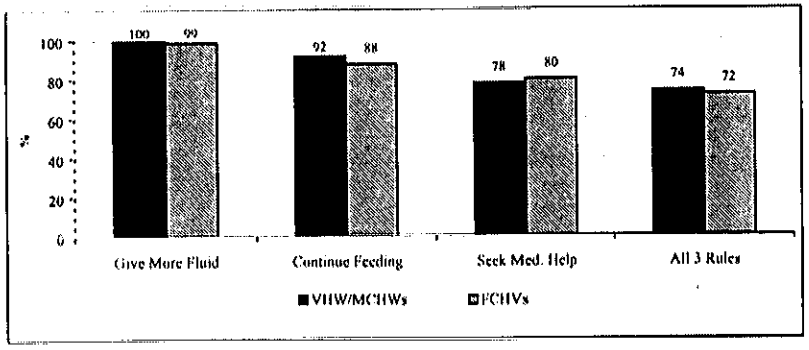
Graph F#2: FCHVs' Knowledge on Three Home Rules by Year



Program Officer/FCHV interviewing an FCHV in Ilam

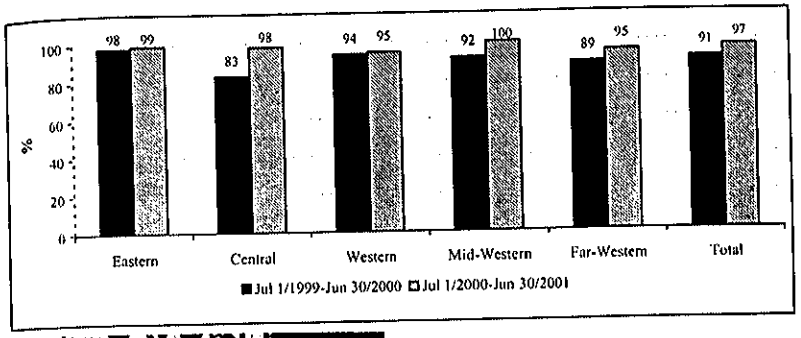
When comparing the average knowledge between Years 3 and 4 of the LCHSSP, as shown in Graph F # 2, it can be seen that overall there has been no change in knowledge. Awareness of all 3 home rules has fallen slightly from 75% to 72%.

Graph F #3: Comparison between VHW/ MCHWs' and FCHVs' Knowledge on Three Home Rules



Graph F # 3 compares the FCHVs' knowledge of three home rules with that of VHWs/MCHWs. The latter are paid, literate (partially educated) MOH staff and this graph clearly shows that the FCHV knowledge is almost on par with this other cadre.

Graph F #4: FCHVs' Knowledge on 2 /more than 2 Danger Signs of Dehydration by Region and Year

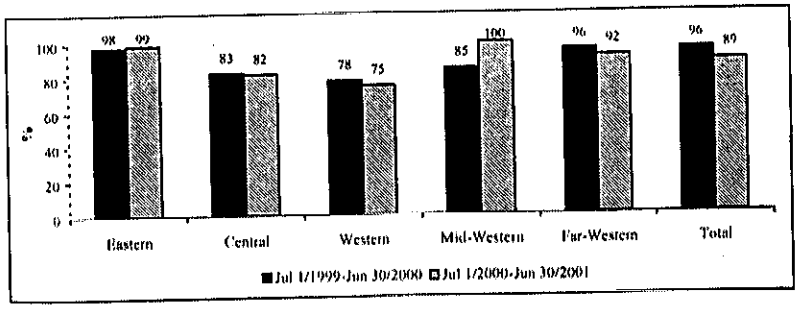


FCHV in Morang sharing her work with Director, O/HFP/USAID and JSI CHFO

Graph F # 4 looks at the FCHVs' specific knowledge about danger signs of dehydration, by Region. Overall results are very good and show little variation between Years 3 and 4 of the LCHSSP, although there is a suggestion of some improvement.

Similarly, FCHVs' knowledge about danger signs of pneumonia are compared by region in Graph F # 5 and this shows some decrease in Year 4 (89%) as compared to Year 3 (96%). This change probably reflects that more FCHVs in non-ARI program districts were interviewed in Year 4.

Graph F #5:FCHVs' Knowledge on 2/More than Two Dangers Signs of Pneumonia by Region and Year



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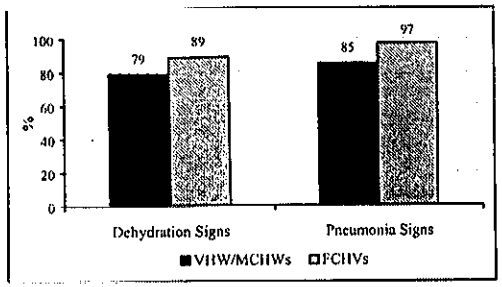
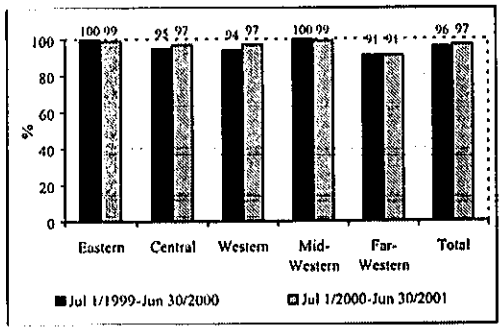
Graph F #6: Comparison of VHW/MCHWs' and FCHVs' Knowledge on Danger Signs of Pneumonia and Dehydration



FCHVs had better knowledge about the danger signs of pneumonia and dehydration than did the interviewed VHWs/ MCHWs. This can partly be explained by the fact that FCHVs are allowed to use a reminder card when asked these questions for pneumonia, but actually most FCHVs immediately rhyme off the danger signs without use of the card. FCHVs are asked to name two or more danger signs while the VHWs/MCHWs are asked to name three or more. Results for the two different groups of workers are compared in Graph F # 6.

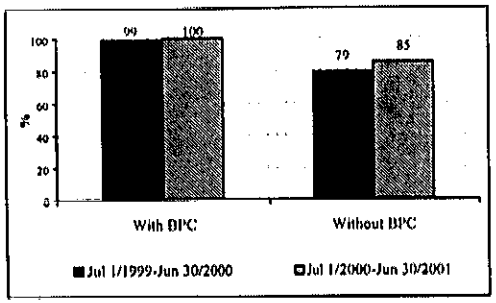
Graph F #7: FCHVs' Skill on Measurement of Correct Volume of Water by Year



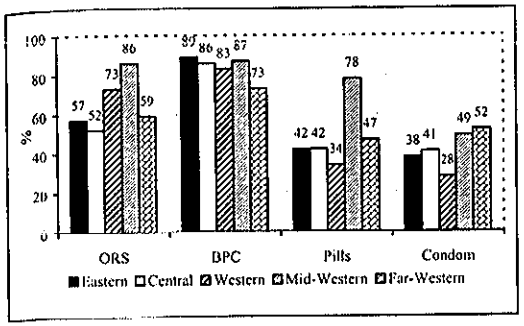
In order to assess their ability to correctly prepare ORS, FCHVs are asked to prepare ORS. The volume of water is measured and feedback given by JSI CHFS. Graph F # 7 shows the results of this assessment by region and by year. Overall there was slight improvement, although the results are excellent for both years. A main contributor to correct preparation is the availability of a standard measuring device.

Graph F #8: FCHVs' Measurement of Correct Volume of Water for ORS Preparation by Blue Plastic Cup (BPC) Availability

Graph F # 8 shows that when the FCHV used a blue plastic cup (BPC) to measure the water she had the correct volume 100% of the time. When she had no BPC, the volume was only correct for 85 % of cases.



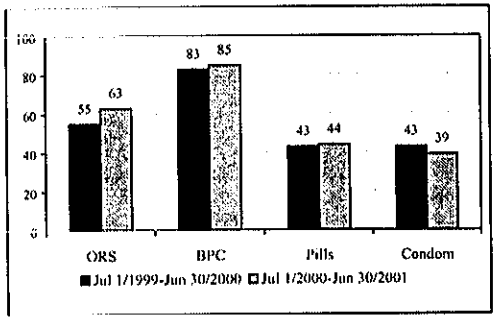
Graph F #9: Availability of Supplies with FCHVs



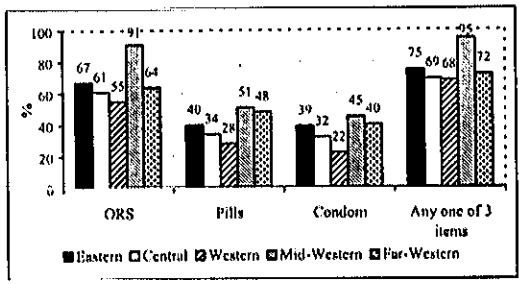
In order to provide services in their communities, FCHVs require certain commodities and their availability is monitored by the JSI CHFS. Graph F # 9 shows that the commodity availability varies a great deal, but overall shows that the resupply mechanism to FCHVs is not working as well as it should.

Graph F # 10: Availability of Supplies with FCHVs by Year

When comparing Years 3 and 4 of the LCHSSP (Graph F # 10) we can see minor improvements in the availability of pills and BPCs, a decrease in condom availability and a slight improvement in ORS. The MOH has a policy that 40% of the ORS stock should be given to the FCHVs, as needed, and that they should always have a balance of 10 packets on hand. They are to be resupplied by the VHWs/SHPs according to their need. This is obviously not happening, even though there is no ORS shortage in the country.



Graph F#11: Supplies Distributed by FCHVs During Past 1 month



From this fiscal year (2057/58), the HMIS has been modified to include a section where FCHV service delivery can be recorded. In Year 3 of the project this had not been initiated. In Years 3 and 4, to determine which services the FCHVs were providing, JSI's CHFS asked FCHVs what supplies they had distributed to clients during the past one-month. Wherever possible this was substantiated through a review of their FCHV registers. Graph F # 11 shows the supplies distributed by FCHVs: ORS packets, pills, condoms, or any one of the three items. Results varied widely by region with the highest in the Mid-Western Region, but interview numbers were low.

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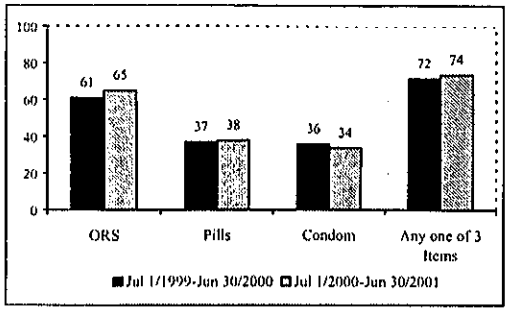
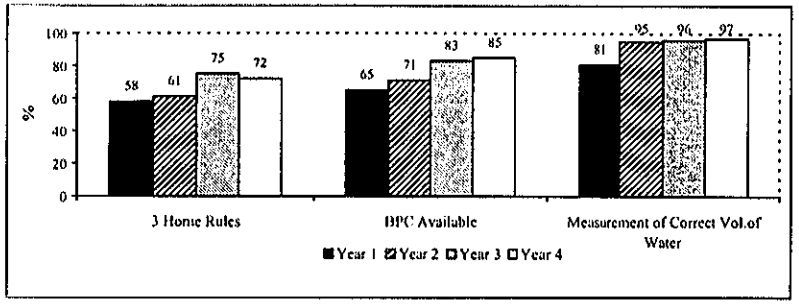
Graph F #12: Supplies Distributed by FCHVs during Past One Month by Year



When these results are compared with the previous year (Graph F #12) we see slight improvement in all areas except condom distribution.

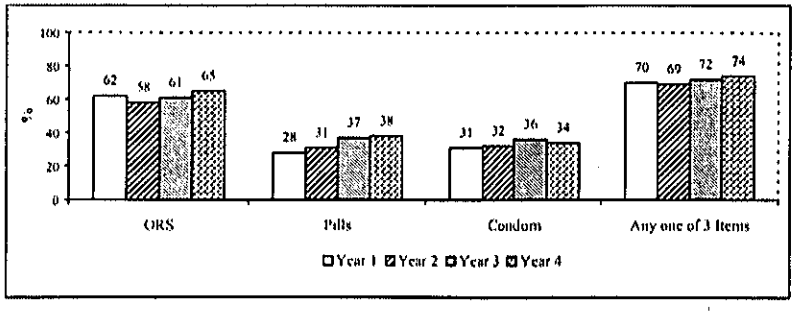
The four-year trend in knowledge of FCHVs on three home rules, availability of BPCs and correct measurement of water for ORS preparations are shown' in Graph F #13. Most show an encouraging trend.

Graph F #13: Knowledge on Three Home Rules, BPC Availability and Skill of Measuring Correct Volume Water

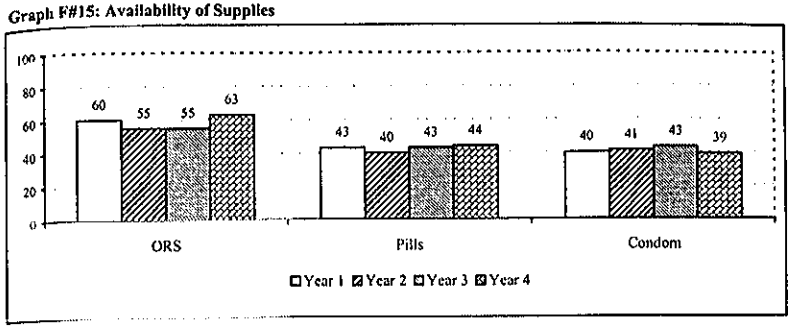


The resupply of commodities to FCHVs remains poor and therefore their distribution is less than desired, as shown in Graphs F #14 and #15.

Graph F #14: Supplies Distributed by FCHVs during Past One Month by Year



Graph F#15: Availability of Supplies



Summary of FCHV General Interview Results:

Interviews with 729 FCHVs revealed little change in their knowledge about the three home rules for management of diarrhea. Seventy-two percent of FCHVs knew all three home rules but there is a need for some reinforcement during regular review/refresher meetings. Their knowledge of danger signs of dehydration and danger signs for pneumonia was already very good (89 % or above) and was proven to be better than the knowledge of the interviewed VHWs/MCHWs.

FCHVs in Makwanpur wearing Saris provided by their VDC

FCHVs who had blue plastic cups (BPCs) and used them to measure water for the preparation of ORS prepared the solution correctly in 100% of cases. Those who did not have a BPC were only correct for 85 % of ORS preparations.

There was a slight increase in the availability of pills and BPCs with FCHVs, a decrease in condom availability and a slight, but inadequate improvement in finding ORS packets with FCHVs.

This problem was addressed last year at the central level, at both the Logistics Management Division and the Child Health Division and this probably led to the improvement seen in year 4. However, all FCHVs should have ORS at all times if we are to honour " No Commodities, No Program." There is no shortage of ORS but we must try to change the practice of hoarding ORS at the health facilities.

The low availability of supplies (pills and condoms) with the FCHVs may be contributing to their apparent low level of service delivery for FP. IEC in this area could also be improved, to ensure that villagers know that the FCHVs can resupply pills and provide condoms.

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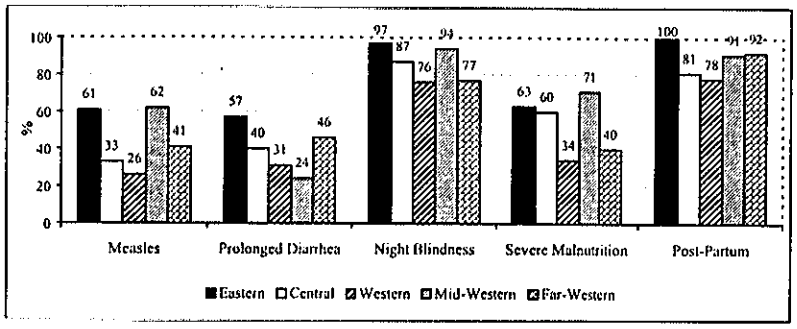
FCHV Level – National Vitamin A Program Districts (NVAP)

Table Fvit # 1 compares the number of Vitamin A related interviews conducted in Years 3 and 4. The total number has increased in Year 4 to 882, as compared to 612 in Year 3.

Table Fvit#1: Number of FCHVs Interviewed by CH Staff

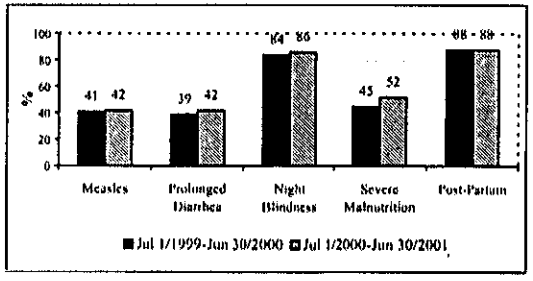
Period	Eastern	Central	Western	Mid-Western	Far-Western	Total
July 1/1999-June 30/2000	300	83	36	13	180	612
July 1/2000-June 30/2001	202	247	191	86	156	882

Graph Fvit #1: FCHVs' Knowledge on Conditions to Receive High Dose Vit A in the NVAP Districts by Region



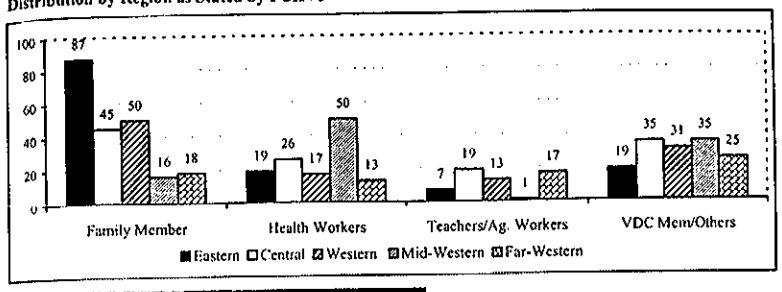
Graph Fvit # 1 compares the FCHVs' knowledge about conditions requiring high dose vitamin A treatment by region. While in most locations, the messages about the need for Vitamin A to treat night blindness and postpartum cases seems to have been well disseminated, knowledge that cases of measles, prolonged diarrhea and severe malnutrition also require vitamin A treatment needs to be reinforced.

Graph Fvit #2: FCHVs' Knowledge on Conditions to Receive High Dose Vit A in the NVAP Districts by Year



Graph Fvit # 2 compares FCHV knowledge in Years 3 and 4, making it apparent that almost no progress has been made in this area. A concerted effort is needed to improve the FCHVs' (and HF staff and caretakers) knowledge that cases of measles, prolonged diarrhea and severe malnutrition require treatment with high dose vitamin A.

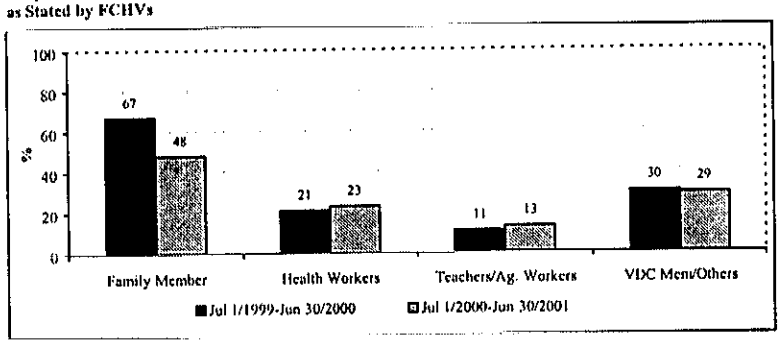
Graph Fvit #3: Source of Assistance provided to the FCHVs during the Time of the Last VAC Distribution by Region as Stated by FCHVs



FCHV dosing a child with Vitamin A Capsule in Kathmandu Valley

Graph Fvit # 3 shows the results of a question asked to the FCHVs about who helped her during the most recent vitamin A capsule distribution campaign. Results vary by region, but it is encouraging to note that in all regions VDC members are showing some activity.

Graph Fvit #4: Source of Assistance provided to the FCHVs during the Last VAC Distribution by Year as Stated by FCHVs



Graph Fvit # 4 compares the results for Years 3 and 4; there was a slight increase in support from health workers and teachers/agriculture workers, a decrease from family members and virtually no change for VDC members/others.

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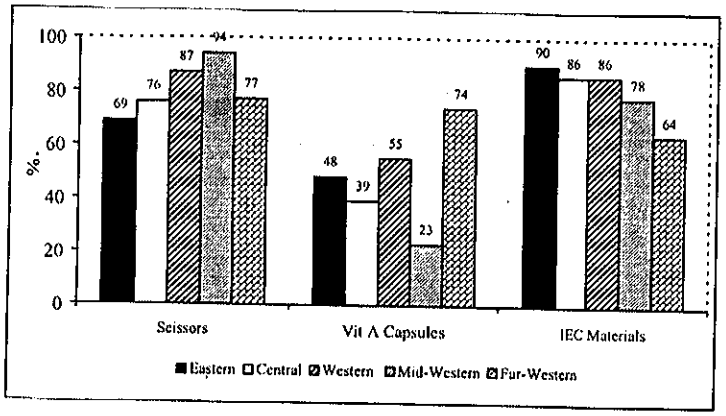
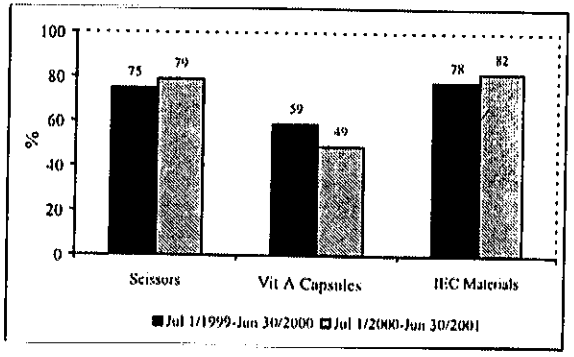
Graph Fvit #5: Vit A Materials Available with FCHVs by Region in the NVAP Districts



The NVAP provides scissors to the FCHVs in their introductory training and in most regions the FCHVs keep a small number of vitamin A capsules on hand after dosing rounds. The NVAP also provides IEC materials to the FCHVs in their initial training, but resupply can be a problem and with storage and weather problems, deterioration is rapid.

Graph Fvit # 5 shows the availability of these commodities with the FCHVs by Region. There is great variation and a need to devise a mechanism for regular and appropriate resupply.

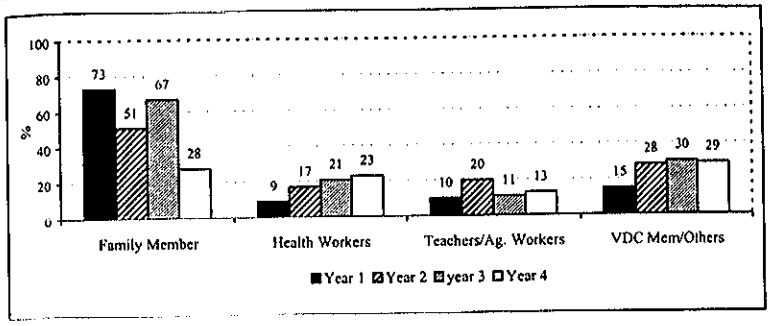
Graph Fvit #6: Vit A Materials Available with FCHVs in the NVAP Districts by Year



Graph Fvit # 6 compares the availability by year and while there is a slight increase in the availability of scissors and IEC materials, there is a decrease in the vitamin A capsule availability.

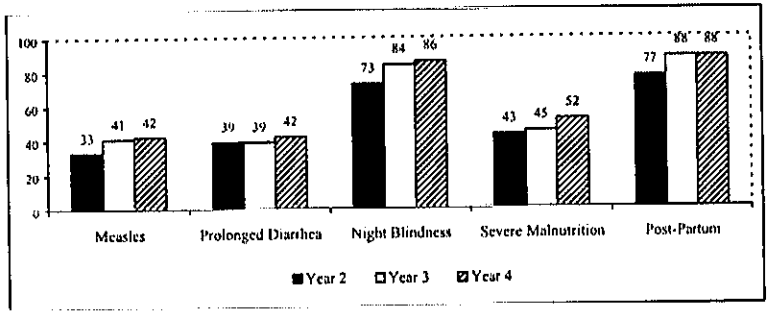
Over the four-year life of the LCHSSP, the following changes in support provided to FCHVs during the VAC distribution has been noted: a decrease in the role of family members and an increase in support from health workers and VDC members (Graph Fvit #7).

Graph Fvit #7: Source of Assistance provided to the FCHVs during the Last VAC Distribution by Year as Stated by FCHVs



FCHV knowledge about the need for VAC in cases of measles, prolonged diarrhea and severe malnutrition has not shown the desired improvement and will be targeted in Year 5 and beyond.

Graph Fvit #8: FCHVs' Knowledge on Conditions to Receive High Dose Vit A in the NVAP Districts (Monitoring started from Year 2)



Summary of NVAP-Related FCHV Monitoring

FCHVs' knowledge about the types of cases which require treatment with high dose vitamin A capsules needs immediate strengthening. While their awareness about nightblindness and postpartum dosing is quite good, knowledge that cases of measles, prolonged diarrhea and severe malnutrition also need VAC needs to be greatly increased. This needs immediate attention during the fiscal year 2058/59 (2001/2002).

While there were slight changes in sources of support for FCHVs during the Vitamin A dosing campaigns, there is still much room for further support at the local level.

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Regular, reliable resupply mechanisms for scissors, VAC, IEC materials to the FCHVs are needed. Guidelines have been sent from the Nutrition Section, CHD to all District Health Offices requesting them to inform their health facility staff to leave a balance of VAC with the FCHVs for treating postpartum cases. This needs to be followed up during regular monitoring visits.

Local women explaining the Vitamin A Poster to JSI Team Leader

5. Nutrition Monitoring

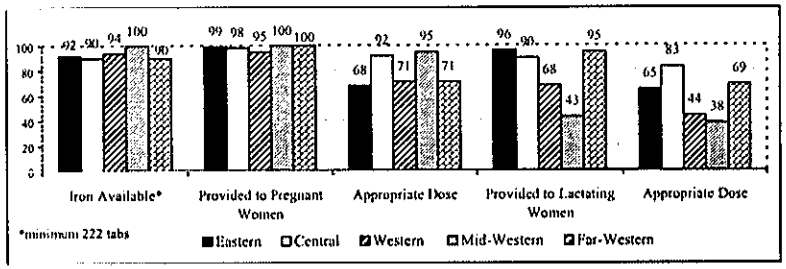
The Chief of the Nutrition Section, Child Health Division, has requested that JSI's CHFS monitor some specific activities related to the MOH's nutrition programs, as part of their regular supervisory visits. Particularly she has requested reports on the following: iron availability and utilization at health facilities; iodine content of salt samples anywhere. As the test kits to determine the iodine content of salt were not available, this activity was not conducted in Year 4 of the LCHSSP. It is anticipated that the activity will resume in Year 5.

Table NM#1: Number of Nutrition Monitoring Visits Conducted by CH Staff

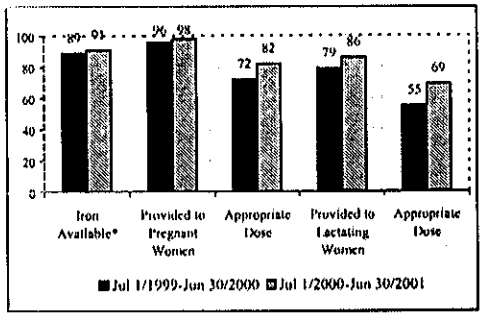
Period	Eastern	Central	Western	Mid-Western	Far-Western	Total
Jul 1/1999-Jun 30/2000	86	184	24	11	84	389
July 1/2000-June 30/2001	85	189	62	21	42	399

Table NM # 1 compares the number of sites where nutrition program-related monitoring was carried out in Years 3 and 4. Overall there was a slight increase in Year 4 with JSI staff monitoring in 399 health facilities.

Graph NM# 1: Iron Distribution and Appropriate Dose by Region



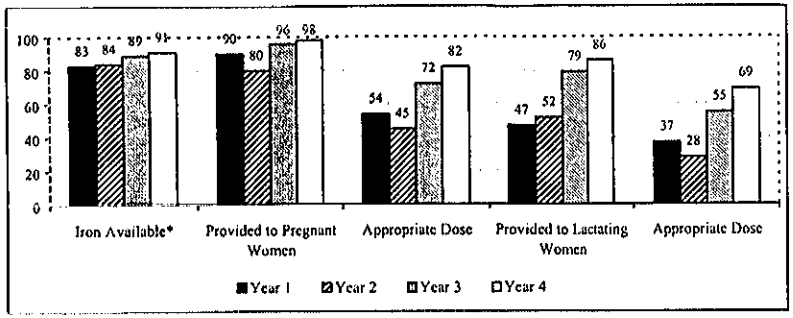
Graph NM# 2: Iron Distribution and Appropriate Dose by Year



* minimum 222 tabs

As shown in Graph NM # 1, results vary by Region. JSI CHFS found that iron was available (defined as a minimum of 222 tablets) in 91% of HFs. While 98% of HF staff reported that they provide iron tablets to pregnant women, only 82% (range 68 – 95%) of them could state the correct dosage. Fewer health workers (86%) reported providing iron tablets to lactating women and even fewer (69%) knew the appropriate dosage. With iron availability now so high, stress needs to be given through the Nutrition Section on its correct usage.

Graph NM# 3: Iron Distribution and Appropriate Dose by Year



Summary of Findings of Nutrition Program-Related Monitoring

The availability of iron tablets in health facilities has improved, even between Years 3 and 4 of the LCHSSP, with 91% of visited HFs having at least enough iron tablets on hand on the day of visit to correctly dose one woman, through 6 months of pregnancy and 6 weeks postpartum. Knowledge that pregnant and lactating women should receive iron has improved and knowledge of the appropriate dosage has also improved, to 82% and 69% respectively, but there is still much room for improvement in actual provision of iron tablets to the women who need them.

JSI CHFO monitoring HF staff in Chitwan District

II. Community-Based Pneumonia Control Program in 14 Districts

Previous documents have described the rationale and background of the Community-Based Pneumonia Control program, therefore an exhaustive historical perspective is not provided here. The purpose of this document is to summarize the results of monitoring and supervision during the year 2000/2001 and where appropriate, to compare these results with those of previous project years.

For the purposes of analysis and comparison, the 14 districts are divided into 3 separate groups as follows:

A districts - Makwanpur, Chitwan, Jhapa, Parsa, Morang, Sunsari
B districts - Bajura, Siraha, Rasuwa, Bara, Rautahat
C districts – Nawalparasi, Bardiya, Kanchanpur

Group A districts are those districts where the community-based pneumonia program was implemented under the " ARI Strengthening Program" and all activities were initiated before July 1998. Group B districts came into the program under the "Community-Based ARI/CDD (CBAC) Program" in 1998/1999. In Group B districts, I/NGOs (ADRA, CARE, PLAN, SAVE/US) have also been active partners in implementation in specific districts since the initiation of the program. In the year 1999/2000, two Group C districts (Nawalparasi and Bardiya) were added under the "CB-IMCI (Community Based Integrated Management of Childhood Illnesses) Approach". In 2000/2001, training was completed in the third CB-IMCI district, Kanchanpur, bringing the total to 14 districts. Regardless of the name of the overall program, in all districts in addition to other facility-based trainings/activities the community-level health workers, Village Health Workers, Maternal Child Health Workers, and Female Community Health Volunteers have all been trained in the diagnosis and management of pneumonia. The majority of the community-level health workers have been given cotrimoxazole to treat simple pneumonia cases. Referral and home care have been taught in all districts and in some districts many additional components have been added to training (diarrheal diseases, nutrition, EPI promotion) and additional activities such as mothers' group and DDC/VDC orientations, and training of traditional healers have been included to support the community health workers, particularly the FCHVs.

1. Health Facility Level

Interviewed by	# HF
I/NGOs	168
JSI	424
Total	592

Monitoring visits were conducted at 592 health facilities, with 168 interviews conducted by I/NGO partners and 424 by JSI child health field staff (CHFS). Of these, 177 were conducted in A districts, 270 in B districts and 145 in C districts.

At the health facility an effort is made to determine what percentage of the current staff have been trained through the community-based program. The chronic problem of transfer of trained staff persists. Graph AHF # 1 shows by type of district the percent of trained staff found through the monitoring visits. Overall the results are fairly encouraging with 83% of HPIs trained, 86% of AHWs, and 73% of ANMs.

Group A districts have been included in the program for 3-5 years and it is encouraging to note that 82% of HPIs, 77% of AHWs who were trained by the program are still in their posts. However, only 66% of ANMs have been trained and if we look at the numbers conversely, in Group A districts 18% of HPIs, 23% of AHWs and 34% of ANMs require

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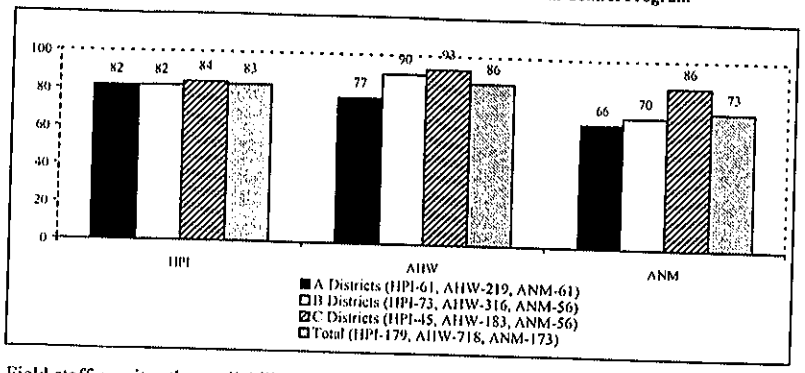
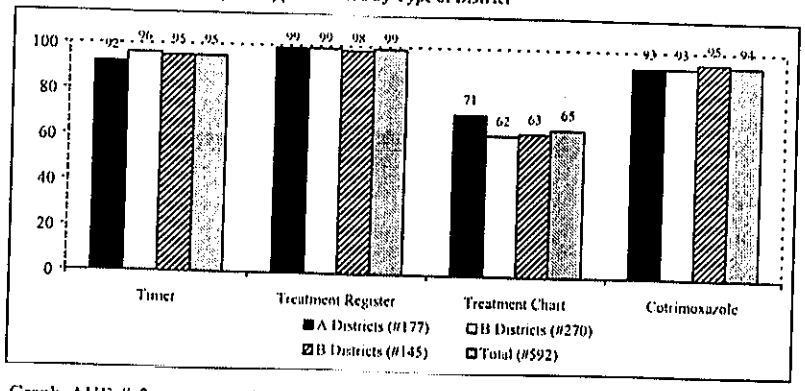
training. There is a constant training need which is difficult to address as the program expands but discussions will be held with the CHD to try to address this problem in the next fiscal year.

Graph AHF #1: HF Staff Trained through Community-Based Pneumonia Control Program



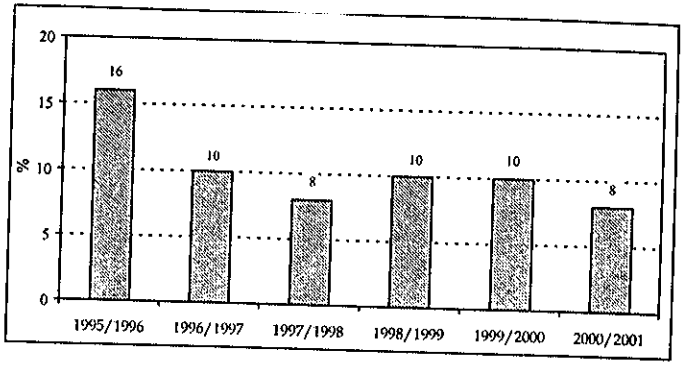
Field staff monitor the availability of specific supplies at the health facilities which they visit. As shown in Graph AHF # 2, 95% of the HFs had timers, 99% had treatment registers, 65% had treatment charts and 94% had cotrimoxazole tablets available on the day of visit.

Graph AHF #2: Availability of Supplies at HFs by Type of District



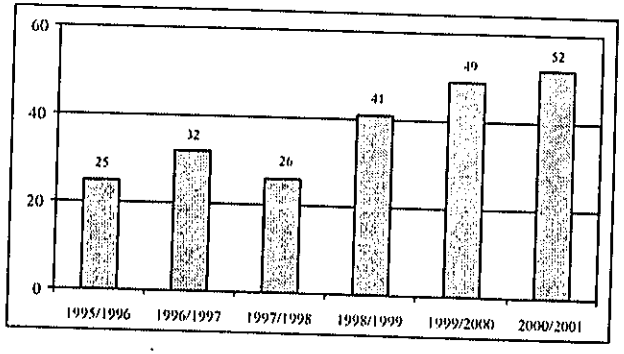
Graph AHF # 3 compares the percentage of all pneumonia cases seen at HFs in program districts which were classified as either "severe pneumonia (SP)" or "very severe disease (VSD)" by program year. It is encouraging to note that the percentage is showing a downward trend, and only 8% of cases where classified as SP or VSD in the year 2000/2001 as compared to 16% in the first year. This supports the hypothesis that early detection of pneumonia cases in the community will decrease the likelihood that these children will develop severe illness. This will continue to be monitored annually.

Graph AHF #3: Percent of All Pneumonia Cases Seen at HF in Program Districts Which Were Classified as Severe Pneumonia or Very Severe Disease by Year



Follow-up of treated cases on the third day is very important, to ensure that the child is improving or to make a decision to modify the treatment plan. Graph AHF # 4 shows the encouraging trend in increasing follow-up from the HF level. In 1995/96 it was reported as 25% and by 2000/2001 this had risen to 52%. This data is taken from the treatment registers at the health facilities.

Graph AHF #4: Percent of All Pneumonia Cases Seen at HF which are Followed-up by Year



The percentage of expected pneumonia cases in a district has been estimated in order to compare progress over the years of program implementation. An estimated incidence of 300 cases of pneumonia/1000 children under 5 years of age/year has been used to determine the total expected number of cases.

Graph AHF # 5 looks at the trend in expected pneumonia cases treated at the HF level since the CB-ARI program began in 1995/96. Districts are coded by number depending on when they joined the program. In 1995/96, 16% of expected pneumonia cases were treated at the HF level in Chitwan and Makwanpur (combined data) and 18% of expected cases were treated at the HF level in Morang and Sunsari. In 2000/2001, 21% of expected cases were treated in Chitwan and Makwanpur at the HF level; 28% in Morang and Sunsari; 25% in

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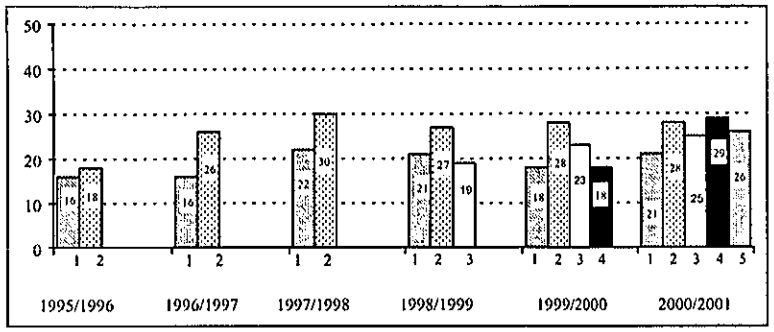
Jhapa and Parsa; 29% in the "B" districts of Bajura, Rasuwa, Bara, Rautahat and Siraha; and 26% in the "C" districts of Nawalparasi and Bardiya.

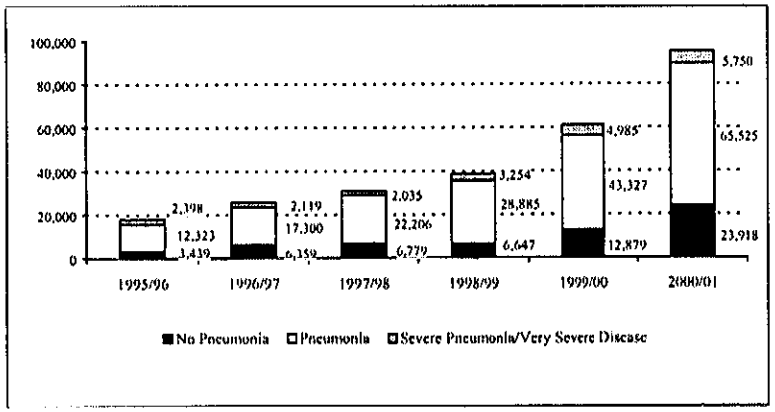
Graph AHF #5: Trend of Percent of Expected Pneumonia Cases Treated at HF Level Only



1= Chitwan/Makwanpur, 2=Morang/Sunsari, 3=Jhapa/Parsa, 4=Bajura/Bara/Rautahat/Rasuwa/Siraha, 5 = Nawalparasi/Bardiya

Graph AHF # 6 looks at this in data in a different way, using absolute numbers of pneumonia cases treated at HFs. For example, in 1995/96 when the program was only in 4 districts, a total of 18,160 ARI cases were assessed at HFs, and of those 3,439 were classified as "no pneumonia", 12,323 were classified as "pneumonia" and 2,398 were classified as "severe pneumonia" which also included very severe disease. By the year 2000/2001, a total of 95,191 ARI cases presented to HFs in the program districts, and of those 23,916 were classified as "no pneumonia", 65,525 were classified as "pneumonia" and 5,750 were classified as "severe disease".

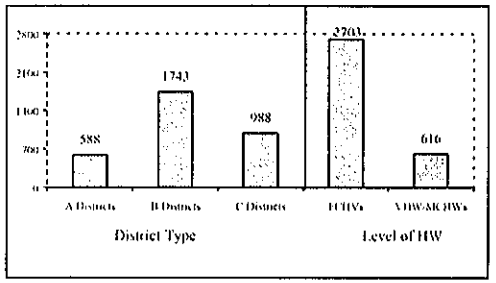
Graph AHF #6: ARI Cases Treated in HF in Program Districts



2. Community Level

The majority of the monitoring effort for the community-based pneumonia control program is targeted to the community-level to ensure that the VHWs/MCHWs/FCHVs are correctly diagnosing, treating and/or referring pneumonia cases. During Year 4 (July 2000 – June 2001) CHFS interviewed a total of 3,319 CHWs (616 VHWs/MCHWs and 2,703 FCHVs) as shown in Graph AC # 1. Of these interviews, 588 were conducted in A districts, 1,743 in B districts (where the I/NGO support is obviously contributing significantly) and 988 in C districts.

Graph AC #1: Number of CHW (VHW/MCHW and FCHV) Interviews Conducted



This represents a further increase since the beginning of the LCHSSP. In Year 1, 513 CHWs were interviewed; in Year 2 this increased to 1,252 and in Year 3, 2,574 CHWs were interviewed and now the total has reached 3,319. In the 14 districts, a total of 8,982 CHWs have been trained, so as a rough estimate 37% of them have been interviewed this year. A small number of interviews are repeat visits to the same CHWs, so this average is only an approximate.

FCHVs giving an orientation to the mothers during a Mothers' group meeting (MGM)

In Graph AC # 2, the percentage of interviewed CHWs who have treated and referred pneumonia cases by type of district and overall is compared. There is not a large difference between districts, with the lowest results found in B districts where 78% of interviewed CHWs reported having treated at least one pneumonia case; overall, in all districts 81% of interviewed CHWs had treated pneumonia.

The percentage of CHWs who have referred cases is lower, but interesting to note, 25% of interviewed CHWs in C districts had referred at least one pneumonia case. Overall, 11% of those interviewed had referred at least one case.

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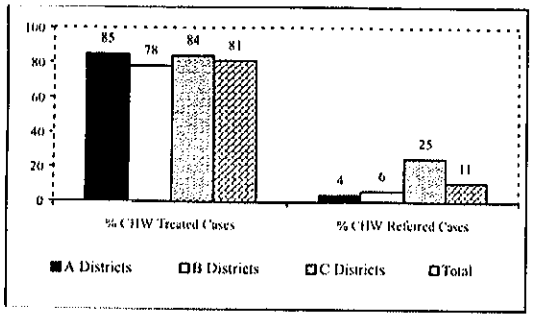
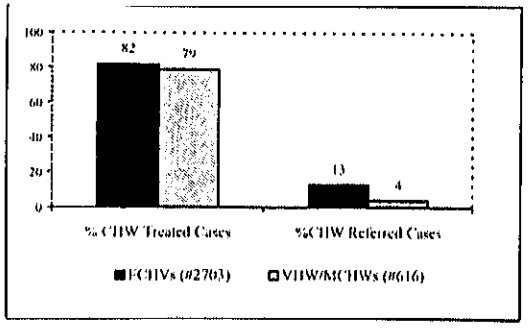
Graph AC #2: Comparison of Percentage of CHWs (VHW, MCHW, FCHV) Who Treated/Referred 10 Most Recent Pneumonia Cases by District



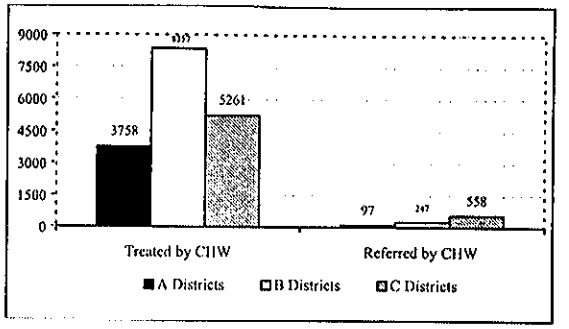
CHEO Monitoring an FCHV in Kanchanpur District

Graph AC #3: Comparison between Percentage of VHW/MCHWs and FCHVs Who Treated/Referred Pneumonia Cases



Graph AC # 3 compares CHWs treatment and referral by level of health worker. Eighty-two percent of FCHVs interviewed had treated pneumonia cases and 13 percent had referred cases, as compared to 79% and 4% respectively for the combined cadre of VHWs/MCHWs.

Graph AC #4: Comparison of Number of 10 most recent Pneumonia Cases Treated/Referred by Type of District



Graph AC # 4 compares the number of pneumonia cases treated and referred by CHWs by type of district. These figures are obtained from looking at the CHW records of treatment and referral for the 10 most recent cases. From this graph it appears that in Year 4 more cases were treated in B districts, but this may be misleading as this number reflects that the number of CHWs visited is higher in B districts. A more meaningful comparison is to look at the average number of cases treated or referred per CHW in the different types of districts. This is summarized in Table AC # 1.

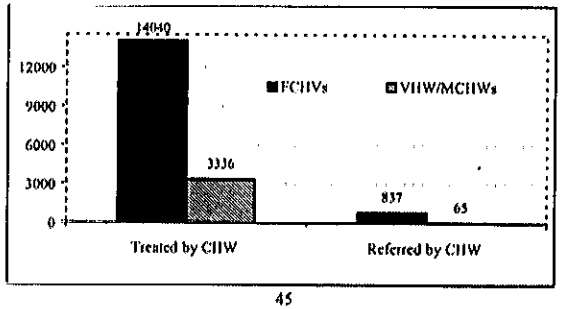
Table AC #1: Average Number of 10 Most Recent Cases Treated/Referred by Type of Districts

Type of Dists	# CHWs Who treated cases this year	Total # of Cases* Treated	Average # of Cases Treated/ CHW	# of CHW Who Referred Cases this year	Total # of Cases* Referred	Average # of Cases Referred/ CHW
A	497	3,758	7.6	24	97	4.1
B	1,367	8,357	6.1	103	247	2.4
C	833	5,261	6.3	244	558	2.3
Total	2,697	17,376	6.4	371	902	2.4

**The ten most recent cases seen by the CHW*

In A districts, we see that the average number of cases treated per CHW is 7.6; the average number referred is 4.1. In B districts, CHWs treated on average 6.1 cases, and referred only 2.4. In C districts CHWs treated an average of 6.3 cases and referred 2.3. Overall, on average, CHWs treated 6.4 pneumonia cases and referred 2.4 cases. Time frames are variable as data is collected during routine yet random monitoring visits.

Graph AC #5: Comparison between Number of 10 Most Recent Pneumonia Cases Treated/Referred by FCHVs and VHW/MCHWs



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When comparing FCHVs and VHWs /MCHWs (Graph AC # 5) we find that the total number of cases treated by FCHVs is much higher than those treated by VHWs/MCHWs, but again this reflects that there are many more FCHVs trained to treat pneumonia. Alternatively, Table AC # 2 looks at the average number per health worker, and we see that the average FCHV has treated 6.3 cases and referred 2.4. The average VHW/MCHW has treated 6.9 cases and referred 2.4. The average number of cases treated by both FCHVs and VHW/MCHWs has increased since Year 3.

Table AC #2: Average Number of 10 Most Recent Pneumonia Cases Treated/Referred by Level of CHW

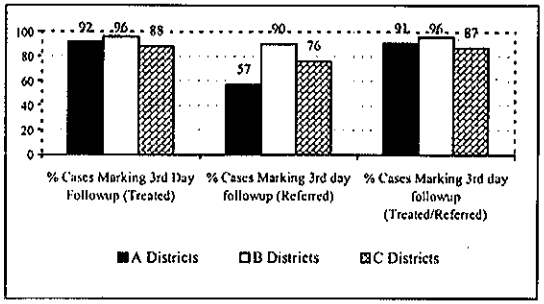
Type of CHW	# CHWs Who Treated Cases	Total # of Cases Treated*	Average # of Cases Treated/ CHW	# of CHW Who Referred Cases	Total # of Cases Referred	Average # of Cases Referred/ CHW
FCHV	2,213	14,040	6.3	344	837	2.4
VHW/MCHW	484	3,336	6.9	27	65	2.4
Total	2,697	17,376	6.4	371	902	2.4

An FCHV filling out her treatment book in Kanchanpur

When Child Health Field Staff interview CHWs they utilize a standardized checklist to guide questioning to determine their knowledge and they also observe their skills in counting respiratory rate and actual management of a case, if possible. In addition, they conduct a record review in order to be as objective as possible in data collection. They review the information that is recorded in the CHWs' treatment and referral books and do not rely on verbal information only to determine treatment practices. CHFS conduct a record review of the 10 most recent treated and referred cases and this data is utilized in the analysis presented here and to USAID in our quarterly reports.

Utilizing the objective data obtained from the treatment and referral books, results are analyzed to determine percentage follow-up for cases, one of the indicators of quality of case management utilized. Graph AC # 6 shows that from the CHWs' record books in A districts 92% of treated cases had follow-up visit with the CHW, in B districts this was 96% and in C districts 88% of treated cases had a follow-up visit recorded in the CHW book.

Graph AC #6: Comparison between Percentage Follow-up of 10 Most Recent Pneumonia Cases Treated/Referred by Type of District

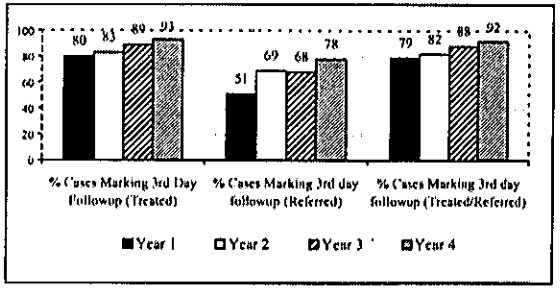


FCHV providing training to other FCHVs in a new program district

Follow-up of referred cases is more difficult, as the caretaker may have been asked to return to the CHW for follow-up and also to any other care provider whom she consulted for further assessment and treatment for her child. Considering the challenges faced in conducting a follow-up visit with a referred child, it is quite encouraging to see that 57%, 90% and 76% of referred children in the A, B and C districts respectively had a follow-up visit with the CHW. The final graphs in AC # 6 show the combined results with 91% of all children (referred or treated) getting a follow-up visit in A districts, 96% in B districts, and 87 % in C districts. This is an incredible achievement and compares very favourably with the follow-up from health facility level.

Graph AC #7: Comparison between Percentage Follow-up of 10 Most Recent Pneumonia Cases Treated/Referred by Year

Trends over the four years of the LCHSSP for these indicators are shown in Graph AC # 7. All show an increase over time, even as the program has expanded and monitoring and follow-up has become more challenging.



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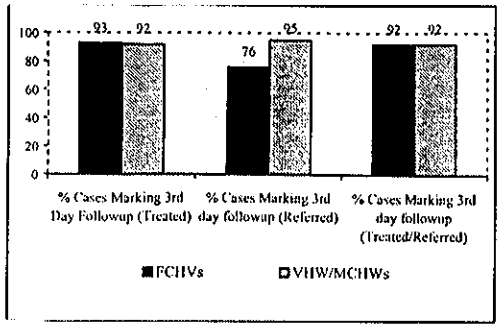
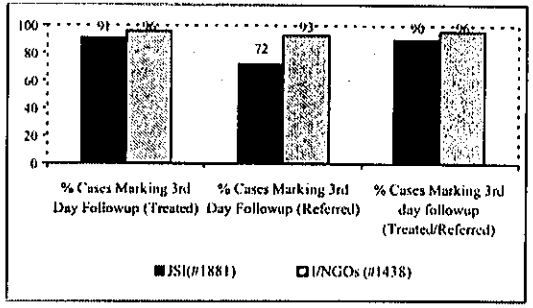
Graph AC #8: Percentage of 10 Most Recent Pneumonia Cases Follow-up by FCHVs and VHW/MCHWs after Treated/Referred



Graph AC # 8 shows a comparison between the percentage of cases followed up by level of health worker. There is almost no difference between the follow-up conducted by FCHVs or VHWs/MCHWs except for referred cases. VHWs/MCHWs reported higher follow-up (95%) than FCHVs (76%) but the number of cases that they refer is smaller. See Graph AC # 5 for details.

Graph AC #9: Percentage of 10 Most Recent Pneumonia Cases Follow-up after Treated/Referred as Collected by JSI and I/NGOs

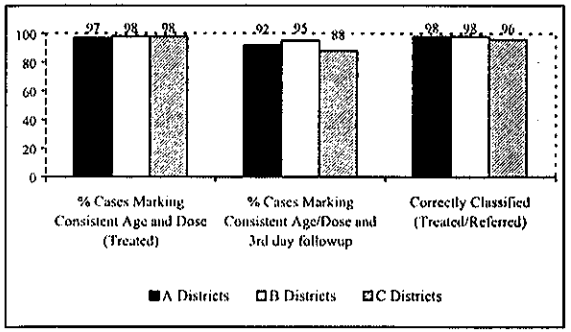


In B districts, JSI and INGO staff utilize the same checklists when interviewing CHWs and the results are collated at JSI's central office in Kathmandu. This allows an objective comparison between the organizations and individual district results. Graph AC # 9 shows the comparison between results obtained in JSI- (1,881) and I/NGO- (1,438) conducted interviews. There is some difference in the results, with INGO monitoring reports showing a higher percentage of follow-up for both treated and referred cases. This may reflect their increased capacity to provide more support to their CHWs through other program inputs. This issue was discussed at the INGO/DHO Focal Person review meeting in Hetauda in April 2001 and all participants were requested to ensure the validity of data presented by monitoring their own field supervisors.

CHFO monitoring the FCHV in Bardiya District

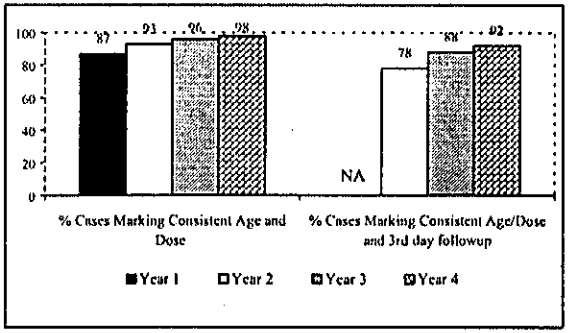
Other indicators of the quality of case management provided by the CHWs can be obtained from the record reviews and some of these are summarized and compared in the next 4 graphs.

Graph AC #10: Percentage of 10 Most Recent Pneumonia Cases Treated by CHWs Marking Consistent Age/Dose and 3rd day Follow-up by Type of District



From the CHW treatment book records (most recent 10 cases) it can be determined if the CHWs gave the correct dose of cotrimoxazole for the patient's age group. Graph AC # 10 shows that in all types of districts, over 90% of the CHW records reviewed showed that the correct dose of cotrimoxazole had been given according to the patient's recorded age group. Similarly, by combining the results, consistent age/dose and follow-up visit on the third day, between 88 to 95% of the CHW records showed that patients had received the correct dose of cotrimoxazole **and** had had a follow-up visit for reassessment on the third day of treatment. Some analysis of classification of cases can also be conducted by reviewing the treatment record books, and it appears that in all districts the classification has been correctly recorded in over 95% of cases.

Graph AC #11: Percentage of 10 Most Recent Pneumonia Cases Treated by CHWs Marking Consistent Age/Dose and 3rd day Follow-up by Year

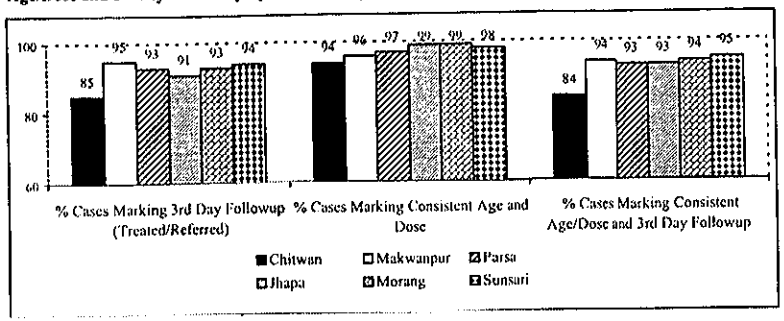


Graph AC # 11 compares these results for the 4 years of the LCHSSP. The percentage of cases where consistent age/dose and follow-up were recorded was not analyzed in Year 1. There is an encouraging positive trend over the life of the project.

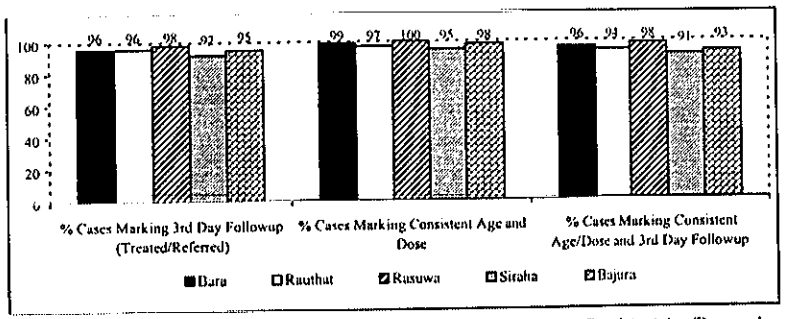
Graph AC # 12 looks at this data by district for all of the A districts. Graph AC # 13 compares B districts and Graph AC # 14 compares C districts during Year 4. Chitwan and Nawalparasi show the lowest third day follow-up rates and JSI's CHFOs in those districts

will stress this important point during the monitoring meetings to be conducted in these districts during the next fiscal year.

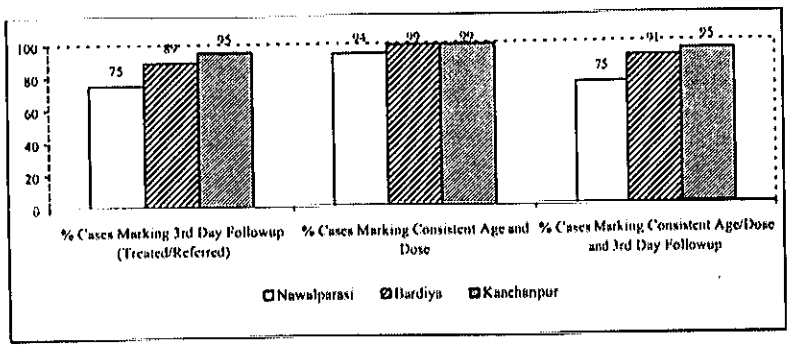
Graph AC #12: Percentage of 10 Most Recent Pneumonia Cases Treated by CHWs Marking Consistent Age/Dose and 3rd day Follow-up by District (only A Districts)



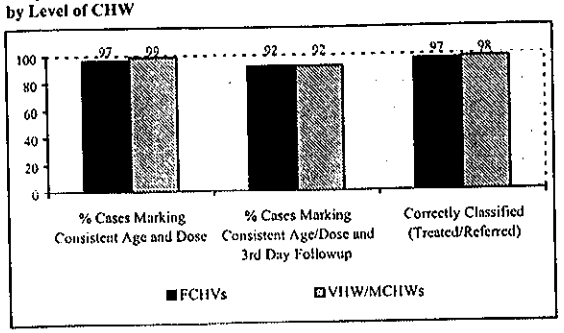
Graph AC #13: Percentage of 10 Most Recent Pneumonia Cases Treated by CHWs Marking Consistent Age/Dose and 3rd day Follow-up by District (only B Districts)



Graph AC #14: Percentage of Pneumonia Cases Treated by CHWs Marking Consistent Age/Dose and 3rd day Follow-up by District (only C Districts)



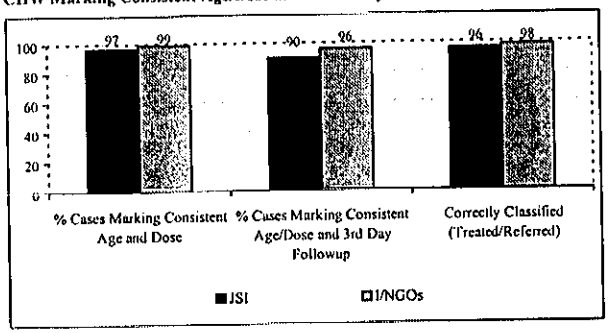
Graph AC #15: Percentage of 10 Most Recent Pneumonia Cases Treated Marking Consistent Age/Dose by Level of CHW



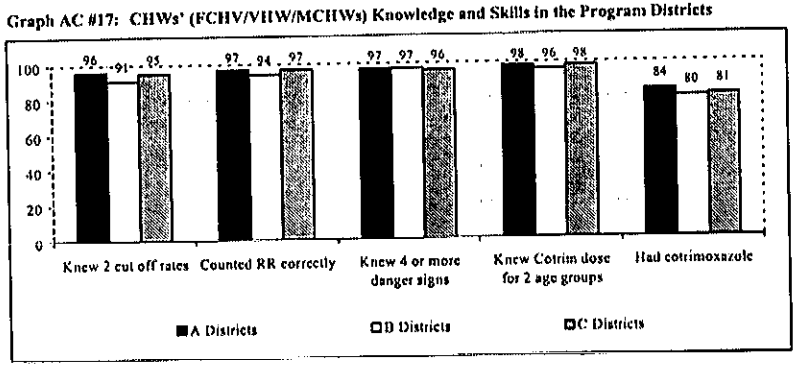
Graph AC # 15 compares the age/dose, follow-up and correct classification data by level of health worker interviewed. FCHVs hold their own with VHWs/MCHWs and we see that there is almost no difference between the cadres for all indicators.

Graph AC #16: Percentage of 10 Most Recent Pneumonia Cases Treated by CHW Marking Consistent Age/Dose as Collected by JSI and I/NGO

Graph AC # 16 compares the results received through the reports of JSI and INGO field workers. Again the results are very consistent and are encouraging.



Graph AC #17: CHWs' (FCHV/VHW/MCHWs) Knowledge and Skills in the Program Districts



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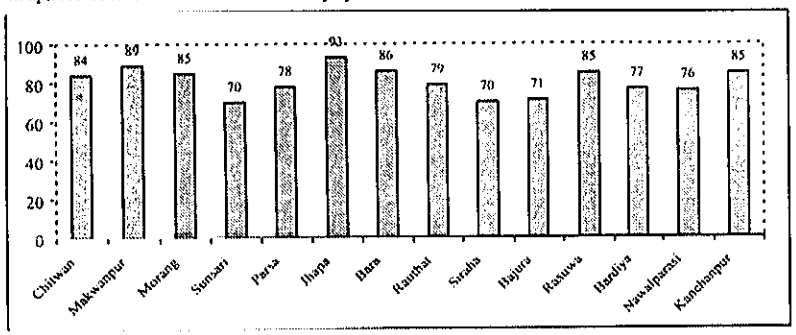
FCHVs with their supplies of cotrimoxazole in Kanchanpur

The most concerning finding from Graph AC # 17 is that cotrimoxazole availability with the CHWs is not optimal, although there is some improvement over Year 3 results. In Year 4, availability was 84% in A districts, 80% in B districts and 81% in C districts. An improvement in availability of cotrimoxazole in A and B districts since Year 3 may be partly attributable to the various local cost recovery initiatives being implemented in program districts through community support mechanisms. These will be further strengthened during Year 5 of the LCHSSP.

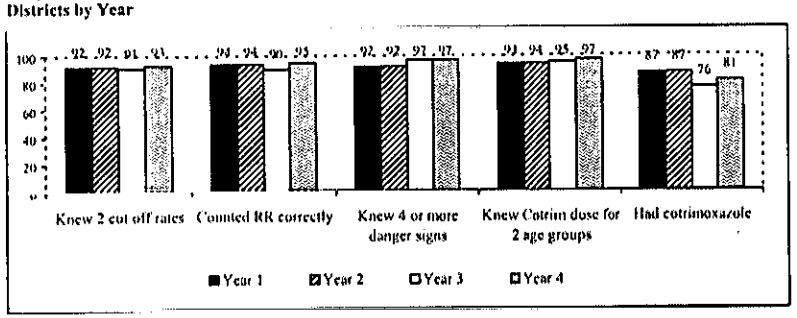
Graph AC #18 shows cotrimoxazole availability with CHWs by district. Such analysis allows for district specific responses by program managers.

Graph AC #18: Cotrimoxazole Availability by Districts

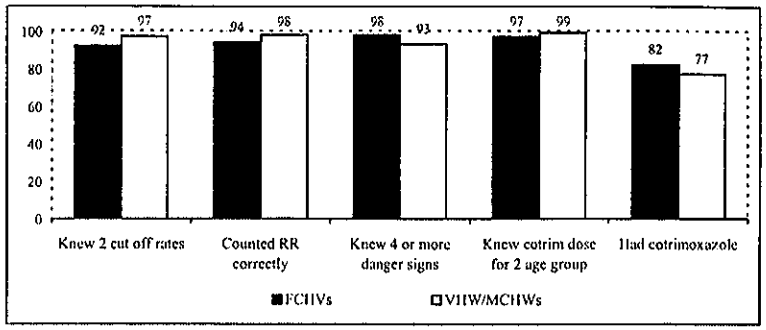


Graph AC # 19 compares CHW skill, knowledge and cotrimoxazole availability in Years 1, 2, 3 and 4 of the LCHSSP.

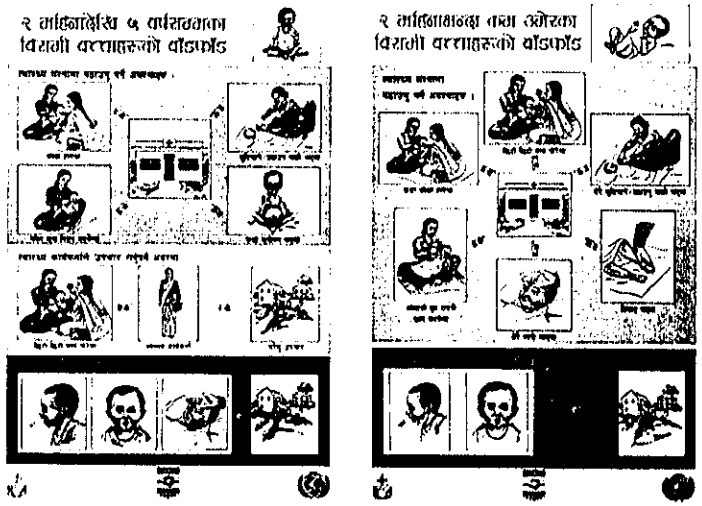
Graph AC #19: Comparison of CHWs' (FCHV/VHW/MCHWs) Knowledge and Skills in the Program Districts by Year



Graph AC #20: Comparison of CHWs' (FCHV/VHW/MCHWs) Knowledge and Skills by Level of CHW



As stated earlier, the majority of the FCHVs, who are truly voluntary workers in their villages, are illiterate, while VHWs/MCHWs are paid MOH health workers with a minimum education to 8th grade. We continue to compare the performance of these two cadres to reinforce the findings that well supported and motivated FCHVs are equally capable of excellent performance like MCHWs and VHWs. The results in Graph AC # 20 declare this finding graphically. For the " knew 4 or more than 4 danger signs" indicator, FCHVs are allowed to look at a pictorial classification card if they cannot recall all danger signs, (see classification card below) but in practice the majority of them quickly rhyme off the danger signs without referring to the card. Cotrimoxazole availability remains better with the FCHVs than with the VHWs/MCHWs but both need improvement.



The classification card used by CHWs

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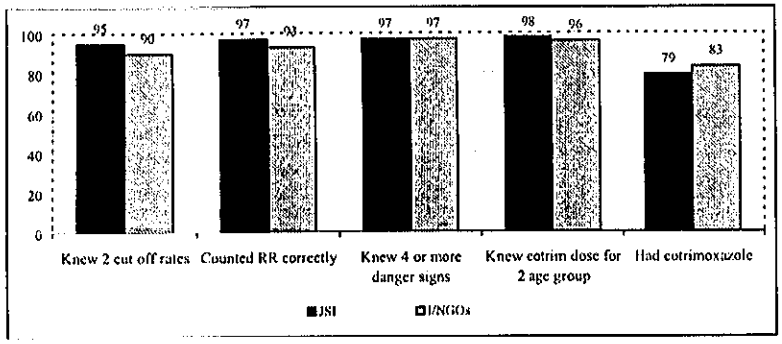
Graph AC # 21 compares the same indicators from the data received through JSI and INGO interviews. Results are similar for most categories except cotrimoxazole availability is better in INGO supervised areas. This perhaps reflects more frequent supervision and support in their priority working areas where resupply mechanisms may be working better.

Graph AC #21: CHWs' (FCHV/VHW/MCHWs) Knowledge and Skills in B Districts as Reported in Interviews Conducted by JSI and I/NGO Staff



The percentage of expected pneumonia cases receiving treatment is an important indicator of how successful the program really is, as our main goal is to decrease mortality through appropriate and prompt treatment. Graph AC # 22 (which is divided into three parts "a, b and c") traces the percentage of expected pneumonia cases treated as the program has matured and expanded.

FCHV counting respiratory rate of a child

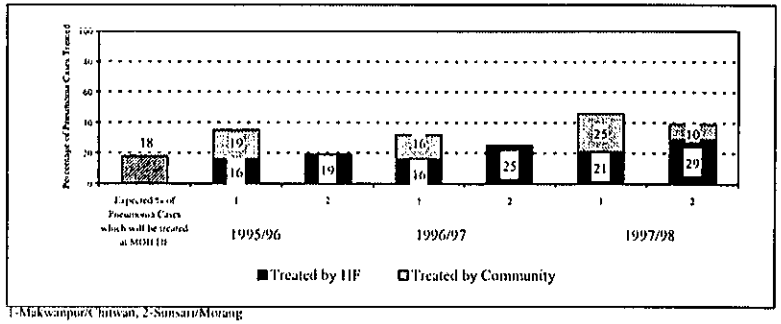
In Graph AC # 22a the treatment data from the two original "treatment" districts, Makwanpur and Chitwan and the two original "referral" districts, Morang and Sunsari are compared for the years 1995/96, 1996/97 and 1997/98. This data was presented in last year's annual report and is only presented here again to complete the picture with Graph AC #22b which adds on the treatment information for 1998/99 and 1999/2000 when additional districts were added to the program. Graph AC # 22c completes the picture to date showing the 2000/2001 data.

In 1995/96, HMIS data showed that 18% of expected pneumonia cases (based on an estimated prevalence of 300 case/1000 children under 5/per year) were treated in the static health facilities in Nepal. In that same year, in Makwanpur and Chitwan, 35% of expected cases were treated, with 19% getting treatment at the community level from CHWs and 16%

were getting treatment from HFs. In that year, 19% of expected cases were treated at the HFs in Morang and Sunsari.

In 1996/97, 32% of the expected cased were treated in Makwanpur and Chitwan; in 1997/98, 46% of expected cases were treated with 25% at the community level and 21% at the HF level. In Morang and Sunsari in 1996/97, 25% of expected cases were treated at the HFs, but in 1997/98 mid-year the CHWs started to treat pneumonia. In that year the percentage of expected pneumonia cases treated went up to 39%, with 29% treated at the HF level and an additional 10% treated at the community level.

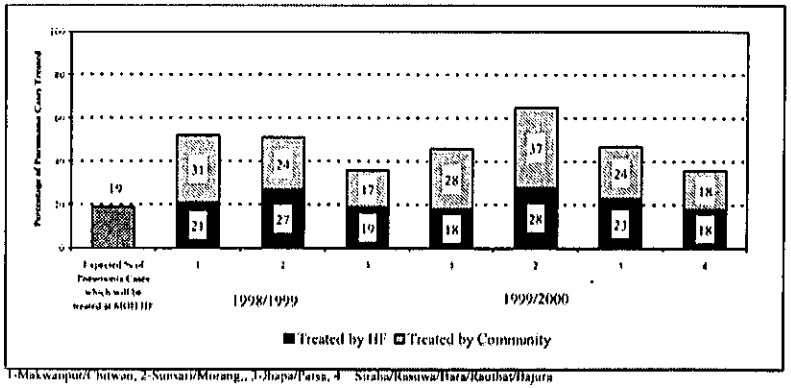
Graph AC #22a: Percentage of Pneumonia Cases Treated in A Districts over a three year period by CHWs and HF staff



1-Makwanpur/Chitwan, 2-Sunsari/Morang

Graph # 22 (b) continues the story for the next two years. In 1998/99 the first full year of data from Jhapa and Parsa was available for analysis. In that year, while only 19% of expected cases were treated in non-program districts, in Makwanpur and Chitwan, 52% were treated (31% at community level and 21% at HF level); in Morang and Sunsari, 51% were treated (24% at the community level and 27% at the HF level); in Jhapa and Parsa 36% were treated (17% at the community level and 19% at the HF level).

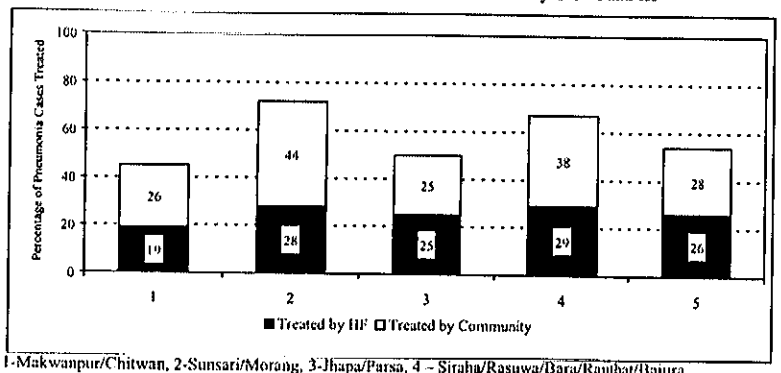
Graph AC #22b: Percentage of Pneumonia Cases Treated by CHWs and HF staff (1998-2000)



1-Makwanpur/Chitwan, 2-Sunsari/Morang, 3-Jhapa/Parsa, 4 Siraha/Rautawa/Bara/Rautahat/Bajura

In 1999/2000, the following results were found: in Makwanpur and Chitwan 46% were treated (28% at the community level); in Morang and Sunsari 65% were treated (37% at the community level); in Jhapa and Parsa 47% were treated (24% at the community level); and in the new B districts of Siraha, Rasuwa, Bara, Rautahat and Bajura 36% were treated (18% at the community level).

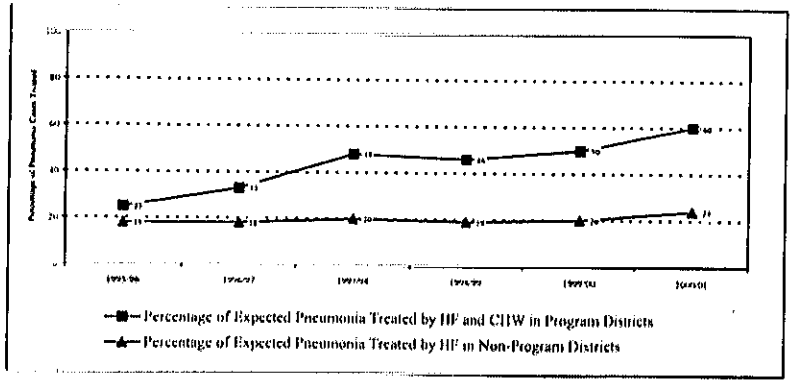
Graph AC #22c: Percentage of Pneumonia Cases Treated in 2000/2001 by CHWs and HF



1-Makwanpur/Chitwan, 2-Sunsari/Morang, 3-Jhapa/Parsa, 4 – Siraha/Rasuwa/Bara/Rautahat/Bajura, 5 - Nawalparasi/Bardiya

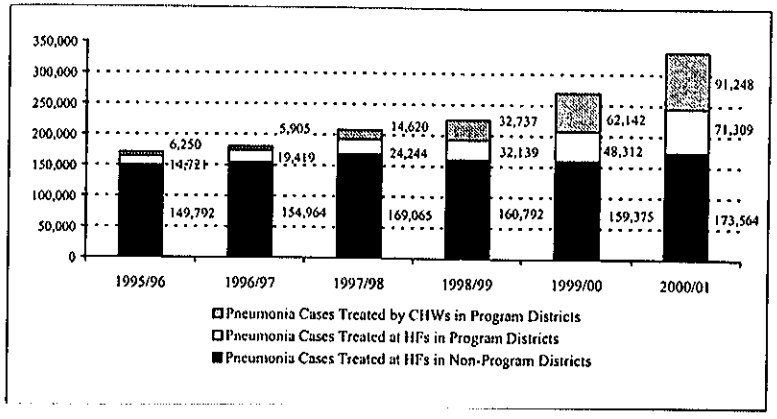
Graph # 22 (c) shows the results for 2000/2001 which are summarized as follows: in Makwanpur and Chitwan, 45% of expected cases were treated (26% at the community level); in Morang and Sunsari, 72% of expected cases were treated (44% at the community level); in Jhapa and Parsa, 50% were treated (25% at the community level); in B districts, 67% were treated (38% at the community level); and in C districts, 54% were treated (28% at the community level). Overall, 60% of expected pneumonia cases were treated in program districts in 2000/2001.

Graph AC #23: Percentage of Pneumonia Cases Treated in Program and Non-Program Districts from 1995/96 to 2000/2001



Graph AC # 23 compares the annual total percentage of expected pneumonia cases treated in program districts with the HMIS treatment data from non-program districts. In 1995/96, 25% of expected cases were treated in program districts as compared to 18% who received treatment in non-program districts. This graph shows a steady increase in the percentage of expected cases treated as the program has expanded and matured reaching a maximum of 60% in 2000/2001.

Graph AC #24: Pneumonia Cases Treated in the Whole Country



Graph AC #24, looks at pneumonia treatment data in yet another way. This graph reports on pneumonia treatment for the whole country of Nepal and attempts to compare what is happening in districts with community-level pneumonia treatment as compared to those districts where the program has not yet started.

In 1995/96, in non-program districts (71) 149,792 children were treated for pneumonia at HFs; while in the program districts, 14,721 children were treated at HFs in 4 districts, and an additional 6,250 were treated at the community level in 2 districts. Only Makwanpur and Chitwan had CHWs treating pneumonia when the program started.

In 2000/01, over 160,000 children received pneumonia treatment in the 13 program districts, with 91,248 (56 %) of these treated by CHWs. In the remainder of the country, 62 districts, only 173,564 additional cases of pneumonia were identified and treated. There is still a great need to expand the community-level program nationwide.

These numbers show not only the huge contribution made by the CHWs in extending treatment beyond the HFs, but also show that the HFs in the ARI program districts are also making a significant contribution.

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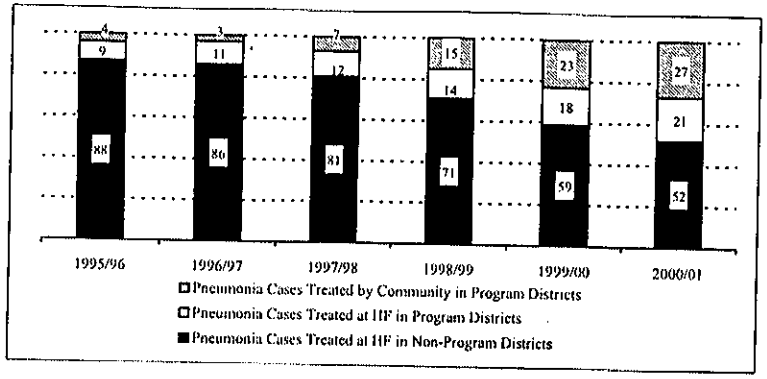
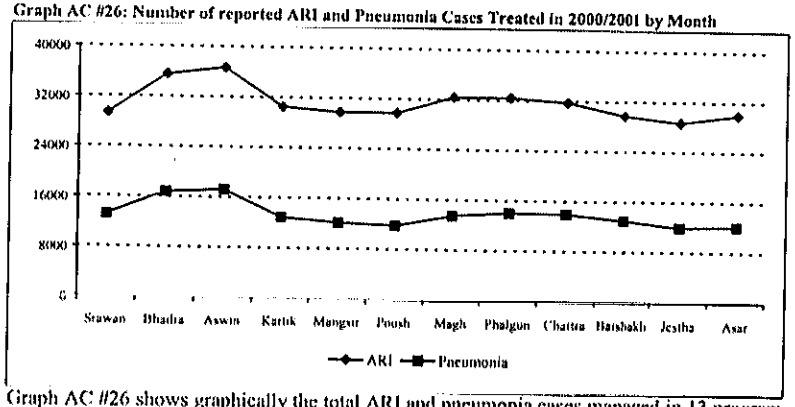
Graph AC #25: Percentage of Pneumonia Cases Treated by Community and HF in Program Districts and by HF in Non-Program Districts in Whole Country



If we look at these figures one more time, Graph AC # 25, as percentages of all children with pneumonia being treated through the MOH system each year, we see that in 1995/96 the percentages treated in program districts were relatively low but as the program expands and matures the proportion of cases treated in the ARI program districts is growing steadily. In 2000/2001, of all 336,121 pneumonia cases treated in Nepal, 27% were treated by CHWs in 13 program districts, and an additional 21% were treated in the HFs of those 13 districts. Forty-eight percent of all the pneumonia cases treated in the country were detected and treated in just 13 districts. While community level treatment has been initiated in a 14th district, Kanchanpur, it is not included in this analysis as full year data is not available.

Graph AC #26: Number of reported ARI and Pneumonia Cases Treated in 2000/2001 by Month



Graph AC #26 shows graphically the total ARI and pneumonia cases managed in 13 program districts during 2000/01 by month. Apart from a peak in Bhadra/Aswin (Aug/Sept) there is little seasonal variation.

III. Training

During this year community-level training for CB-IMCI was conducted in Kanchanpur district only. Health facility level training was conducted, with technical support from Nepal Pediatric Society (NEPAS) in Dhanusha. Table T#1 summarizes the number of persons trained in these districts.

Table T #1: Number of Health Workers Trained

Districts	DDC Orientation	SHPI/AHW/ ANM	VHW/ MCHW	FCHV 1st Phase	FCHVs 2nd Phase	Dhami/ Jhankris
Kanchanpur	-	88	32	633	614	65
Dhanusha	69	182	Will be completed next year			

Table T#2 shows the number of persons reached through the additional orientations conducted along with the initial training. Again, mothers were encouraged to bring children who had symptoms of ARI to the Mothers' Group Orientations and 382 pneumonia cases were found and 100 children were referred for further follow-up to the nearest health facility.

Table T #2: Number of Persons Reached through Orientations/Meetings in the C Districts

Districts	VDC Orientation	Mother Group Meeting	Total < 5 Children Examined	Pneumonia Cases Detected	
				Treated	Referred
Kanchanpur	219	9,957	5,715	382	100

In the 13 "old" districts monitoring meetings were held at different levels. JSI CHFS attended and assisted HF/DHO staff in facilitating the majority of these meetings. A total of 7,216 FCHVs, 733 VHWs, 442 MCHWs and 4,337 VDC members participated in the community-level monitoring meetings conducted at the individual health facilities At the district level meetings, 860 health facility incharges and 81 DDC members participated. These events are useful to help to institutionalize the process of record review and problem solving, using the CB-pneumonia treatment program as the focus of the discussion. The model could be used for any community-level monitoring and support activity.

Table T #3: Number of Health Workers and Local Leaders Participated in Monitoring Meetings

District	FCHV/VHW/MCHW Monitoring Meeting				District Level Monitoring Meeting	
	FCHVs	VHW	MCHW	VDC Members	HF Incharges	DDC Members
Chitwan	301	38	30	89	41	10
Makwanpur	353	37	29	310	52	1
Parsa	709	75	26	369	87	2
Bara	859	87	38	496	107	0
Rautbat	856	91	44	586	111	3
Rasuwa	148	15	8	165	22	9
Jhapa	419	48	38	191	54	5
Morang	539	61	37	263	68	5
Sunsari	408	48	39	165	53	10
Siraha	948	103	65	722	116	8
Bajura	233	23	18	223	30	12
Nawalparasi	666	74	50	485	82	8
Bardiya	777	33	20	273	37	8
Total	7,216	733	442	4,337	860	81

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IV. Working towards a Sustainable Program

The success and sustainability of any program depends largely upon community involvement and ownership. If community health workers are to treat pneumonia, it is vital that they have adequate supplies of cotrimoxazole with them at all times. Communities must be oriented, motivated and given regular follow up and feedback to ensure the availability of this essential drug and other commodities.

A key element of the community-based program has been to create awareness among community members about the problem of pneumonia and diarrhea and to help communities recognize that they play an important role in motivating FCHVs and other health workers. It is important that they understand that their support is essential to the success of the program.

Through the organization of DDC and VDC level orientation sessions and monitoring meetings, communities have already taken significant steps to ensure the availability of cotrimoxazole to treat pneumonia and blue plastic cups to measure the correct volume of water to prepare ORS. The tables below highlight the activities carried out this year in different program districts. JSI's CH staff are actively involved in encouraging DDC and VDC representatives to support the program and make certain commitments.

Table S#1: Orientation and Exchange Visits Activities this Year

Activities	# Participants	# Districts
DDC Orientation	33	2
VDC Orientation	878	3
Inter and Intra District Exchange Visits	89	2

Table S #2: Achievement Made this Year Towards Sustainability

Activities	# VDCs	# Districts
Cost Recovery Program	84	9
Seed Money Received	21	3
Systematic Ledger Established to Track Funds	10	1
VDC Support to FCHV	52	7
VDC-Established FCHV Endowment Funds	15	2

Over the past four years, twenty VDCs in Morang, 106 VDCs in Siraha, 17 VDC's in Makwanpur, 10 VDCs in Bardiya, 19 VDCs in Kanchanpur five VDC's in Bajura, three VDCs in Bara, one VDC in Rasuwa, five VDCs in Chitwan and four VDCs in Nawalparasi have already started to replenish the cotrimoxazole through cost recovery schemes. In Chitwan, 25,000 BPC's have distributed at household-level through community support and 8 VDCs in Makwanpur, 15 VDC's in Kanchanpur and four VDC's in Bajura have started distributing the cups. Twenty-four VDCs in Makwanpur have started providing monthly meeting allowances to FCHVs. These are positive steps but we realise that further effort is needed to build community support and involvement to ensure the sustainability of the program.

An FCHV informs her VDC leaders about her newly learned skills at a VDC orientation meeting in Kanchanpur.

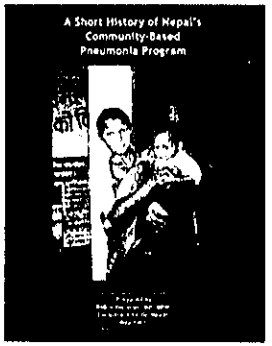
V. Special Reports

During Year 4 of the LCHSSP, two reports, a booklet and an interactive CD-ROM were prepared by JSI. "A Short History of Nepal's Community-Based Pneumonia Program" is a report written by Dr. Robin Houston, Monitoring Consultant to JSI. The report highlights many important aspects of the history of Nepal's Community-Based Pneumonia Program. It summarizes the developments of the sound scientific basis upon which the current program has been established and highlights some of the lessons learned along the implementation pathway. The report also explores the factors that have contributed to the success of the Community-Based Pneumonia Program. The second report, "Cost Recovery Strategies in Makwnapur and Siraha Districts" was written by Nadia Carvalho, a graduate student of George Washington University. This report represents a summary of a study conducted to determine the catalyzing factors and effectiveness of two cost recovery strategies. Fiona McNab, a consultant to JSI prepared a booklet summarizing the story of two FCHVs during the ARI case management training in Kanchanpur district. Fiona also assisted Dr. Robin Houston, and Sushil Karki with the development of an interactive CD-ROM which includes the full history of the Community-Based Pneumonia Program in Nepal, a review of the various tools and documents produced and an overview of monitoring data of the program.

A DDC and VDC orientation booklet, first written in 1998/99, has also been updated this year to include the latest health indicator figures and the twelve key family practice messages of the 'Improving Family and Community Practices' component of the IMCI strategy. In addition, Kate Thomas, a Peace Corps Volunteer conducted a study examining the "KAP Gap" between Female Community Health Volunteers (FCHVs) and mothers in Kaski, a district where the CDD Reactivation Program or the ARI Strengthening Program are not presently implemented. The report of this study is still in a draft format but a final copy of the report will be available shortly.

1. A Short History of Nepal's Community-Based Pneumonia Program

The following is a reproduction of the preface of the report:



This document is designed to provide a retrospective review of a successful and somewhat unique child survival program directed toward reduction in the leading cause of death among children in Nepal: pneumonia. While those involved with this effort over time have written a wide variety of reports and assessments of various aspects of the program, this document is designed to describe the full history of that effort, from early scientific research efforts, early pilot efforts, operational research to refine the approaches used, to the current status of this effort.

The Nepal program has demonstrated the ability of a community-based approach to increase the number of pneumonia cases receiving appropriate treatment. This has been demonstrated under scientific research conditions, under operational conditions with close monitoring in four districts, and finally in 14 pilot districts. All of these show the same thing: community-based treatment works, and it can done through the current Nepali health infrastructure, and it is likely to be able to be scaled up to a national program.

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Pneumonia remains the leading cause of death in children in many poor countries. It is common in these countries for the health infrastructure to be weak and chronically under-funded, making facility-based treatment problematic. Hence there is a renewed interest in ways to bring health services closer to the populations they serve, and more and more community-based approaches are being explored. The experience in Nepal deserves to be shared with a wider audience because it not only demonstrates remarkable progress in addressing a critical disease, but also provides insight into community-based programming that has applications well beyond pneumonia or even health.

This document is for policy makers, donors, program implementers, and all those involved in the ongoing effort to reduce child mortality or involved with community-based programs attempting to improve the well being of the communities they serve.

2. Cost recovery Strategies in Makwanpur and Siraha Districts

The following are extracts from the introduction and executive summary of the report:

The assurance of a constant supply of essential drugs remains a major problem in the delivery of basic health care services in Nepal. Although HMG has maintained a certain level of commitment to resource allocation of drugs and supplies to local health facilities, the supply of essential drugs typically lasts for only up to 6 months each year. As a result health facilities do not often dispense the full course of drugs and health facilities are required to give patients prescription slips so that they can purchase drugs locally. Health workers do not follow the standard dosing treatment schedules, patient load at health facilities is very irregular, and the revenue generated from registration fees is not properly used. Various factors such as the inadequate availability of drugs at health facilities, the increasing notion that the government alone cannot provide basic health services to the rural population, and the experience provided through several drug schemes that community involvement is an appropriate strategy for sustaining a health delivery system, were considered.

Cost recovery activities have recently been started in Makwanpur and Siraha districts, where FCHVs charge community members for pediatric cotrimoxazole. The strategy in Siraha was initiated in a structured manner when the Child Health section of the DPHO agreed for SCF (US) to replicate the Nuwakot district health model. In Siraha district only FCHVs charge for pediatric cotrimoxazole, and the program is district-wide. In Makwanpur district cost recovery activities were started semi-spontaneously and internally after an exchange visit from the Nuwakot district health team. The strategy is not yet district-wide, but in VDC's where the program has been started, HFs, VHWs, MCHWs and FCHVs all charge for pediatric cotrimoxazole.

The cost recovery strategies in Makwanpur and Siraha were undertaken with the ultimate goal of making health a responsibility of the community. Monitoring activities of the CDD and ARI programs have shown that community members have access to and are making use of the services, and most importantly, they are benefiting from them. In order for the

progress from programs aimed at reducing childhood deaths from diarrheal diseases and ARI to continue, these programs must be sustained within the communities through local resources.

For the purpose of this study, cost recovery was defined as the continued efforts to make health a community responsibility, and efforts aimed at managing and maintaining health programs through the use of local resources. This includes covering the costs of pediatric cotrimoxazole tablets and/or ORS packets at the community level through sales by FCHVs with the final aim of achieving independence from external sources of aid for these commodities.

The study's objectives were to study the existing cost-recovery strategies in Makwanpur and in Siraha. An investigation into the experiences and personal changes of FCHVs were also conducted. The overall objective was to assemble recommendations for implementing similar cost strategies in other districts of Nepal in the future.

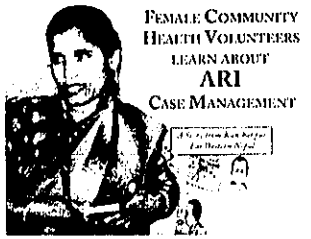
The following recommendations for implementing similar cost strategies in other districts were identified:

- As per findings in Makwanpur district, it is recommended that cost recovery activities be implemented after the ARI program has been well established. This would enable the community to believe in the FCHV's ability to treat pneumonia, and in the effectiveness of cotrimoxazole
- Stress community participation from the beginning
- Implement the strategy district-wide; HFs and FCHVs both charge for cotrimoxazole
- Involve drug retailers in the supply of cotrimoxazole to HFs
- Allow FCHVs to replenish their cotrimoxazole supplies at HFs

Makwanpur and Siraha districts are undergoing attempts to continually make health a community responsibility through efforts aimed at managing and maintaining health programs through the use of local resources. Cost recovery activities designed to cover the cost of pediatric cotrimoxazole in Makwanpur and Siraha (and the cost of ORS packets and BPCs in Makwanpur) enable communities to become independent from external aid sources for provision of these commodities. In effect, the current health programs in both districts are being sustained within the community by way of local resources. Cost recovery activities have also resulted in a regular supply of cotrimoxazole tablets being made available at the village level. Finally they have heightened community awareness about ongoing cost recovery strategies in the districts and have increased community belief in FCHV services and the benefits of cotrimoxazole, resulting in enhanced community motivation to pay for the drug when needed. Implementing cost recovery activities requires time, motivation, determination and regular follow up, among other elements. Makwanpur and Siraha districts both show great understanding of these essential requirements, as well as the ability to make cost recovery strategies in their districts a success.

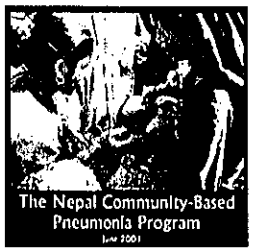
3. Female Community Health Volunteers learn about ARI Case Management: A story from Kanchanpur Far Western Nepal.

In November 2000, 633 Female Community Health Volunteers (FCHVs) in Kanchanpur, a district in the Far Western Nepal, received training on the case management of childhood pneumonia. This booklet is a photo story of two FCHVs who attended the ARI training. It describes the roles of FCHVs selected to treat pneumonia and those selected to refer children with pneumonia to the nearest health facility.



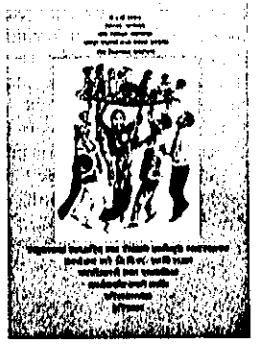
4. The Nepal Community-Based Pneumonia Program: an interactive CD-ROM

The CD-ROM contains information on the evolution of the Community-Based Pneumonia Program in Nepal. It is a presentation of a series of linked documents, some in MS PowerPoint (pps files), and some in MS Word. These files are linked much like a website, through hyperlink connections. There are four main menus within this presentation; program history, program documents, program monitoring data and selected references. It is possible to print off or copy the various presentation files, and use the various components as needed, modifying them to meet different program needs. This interactive CD-ROM is intended to be used by JSI and partners, donors, other program implementers, and all those interested to learn more about this successful and somewhat unique approach to improving child survival in Nepal.



5. DDC and VDC orientation booklet

This booklet has been developed to familiarize DDC and VDC representatives with the Community-Based IMCI program. It is intended to increase their awareness about the program and the potential impact the program can have on child mortality in their district and villages. The booklet provides information about the role FCHVs and emphasizes their need for continual support to carry out their work. It also discusses the role DDC and VDC members play in ensuring the sustainability and improvement of the program, and encourages them to take an active role in supporting the program.



A copy of booklet is handed out to each DDC and VDC representative during the orientation meetings. A flip chart has also been developed to accompany the booklet. The chart is used by facilitators during the meetings to guide discussions about the Community-Based IMCI program and its sustainability.

6. Examining the "KAP Gap" Between Female Community Health Volunteers (FCHVs) and Mothers with Children under Five: Household-Level Knowledge and Management of Diarrheal Disease and ARI (Draft report)

Individual interviews were conducted with Female Community Health Volunteers (FCHVs) and mothers with children under five years in Kaski District to document their knowledge and practice related to household-level management of diarrheal disease (DD) and acute respiratory infection (ARI). A secondary objective was to compare the gap in knowledge and practice between FCHVs and neighboring mothers. Additional data were gathered to identify the channels through which health information is disseminated to FCHVs and mothers, to what extent health information is reaching them, and to determine how best to reach both groups with health information.

The results of this survey provide data on descriptive characteristics, mothers' access to and use of health services, FCHV training background and work activities, FCHVs' and mothers knowledge and practice related to DD and ARI case management, and health information issues. The FCHVs in Kaski District have not been involved in the CDD Reactivation Program or the ARI Strengthening Program, which is evident based on a variety of low knowledge and practice findings. Many FCHVs expressed the hope that their concerns and achievements would be shared with various decision-makers at the health facility (HF), District Public Health Office (DPHO), and INGO levels, and subsequently, that their requests would be addressed.

Kaski FCHVs reported high involvement in a number of activities: 100% provided oral polio vaccine (OPV) on biannual National Immunization Days (NID); 98% distributed vitamin A capsules (VAC) on biannual vitamin A days; 96% gave oral rehydration solution (ORS), referred cases to the HF, and gave health education; and 82% participated in mothers' group (MG) meetings. Many FCHVs replied that some HF staff did assist them, but most felt they were working in relative isolation much of the time. What FCHVs wanted most from HF staff were: periodic supervision visits, restocking of essential supplies, and better quality refresher training and review meetings of longer duration which address new and different topics related to maternal and child health.

The level of FCHV-mother interaction appeared quite high overall. The majority of mothers said they went to the HF (85%) and/or the FCHV (76%) for health services or advice during child illness. Most mothers reported that their average distance (measured in minutes walking) to the nearest HF was 49 minutes versus 8 minutes to the nearest FCHV. This significant different in distances reinforces the population-based strategy of FCHV placement and provides mothers with a key link to community-based health services. Almost all mothers (99%) reported knowing an FCHV and 92% knew her name. Many said they have gone to her for ORS (49%), VAC (46%), other medication or advice (50%), and family planning methods (11%). These figures are reflective of the supplies FCHVs had on hand at the time of the interview: (71% had ORS, 20% had VAC -- leftover from the October 2000 Vitamin A Day, 34% had pills, and 24% had condoms).

Despite the positive degree of FCHV-mother interaction reported, the results of this survey identify and document a rather significant disconnect between FCHVs' and mothers' knowledge of DD and ARI. That is, a "KAP Gap", or gap in the knowledge, attitudes and practices of FCHVs compared with mothers was evident. In general, FCHVs' knowledge was consistently higher across most categories related to managing diarrhea and ARI cases at the household level. However, many critical messages related to childhood illness have not

yet reached the FCHVs, and diffusion of key messages from FCHVs to mothers appears inadequate to improve mothers' knowledge about DD and ARI related issues.

In regard to both groups' knowledge and performance regarding DD, FCHVs were much more likely than mothers to know select signs of dehydration (skin elasticity, sunken eyes, and dry mouth), although both groups had high knowledge of giving increased fluids (98% of FCHVs and 80% of mothers). FCHVs were also more likely to know certain rules of home treatment (continued feeding, giving ORS, and use of correct measuring device for ORS preparation). However, mothers more frequently cited change in general condition than did FCHVs. Both FCHVs and mothers had poor knowledge related to other dehydration signs (absence of tears and marked thirst) and several indications for referral to HF (fever and blood in stool). Blue plastic cups (BPC) were rarely available among FCHVs (18% of FCHVs had one compared with none of the selected mothers), and only 44% of FCHVs and 5% of mothers reported using any device that could correctly measure the volume of water needed to prepare ORS (e.g., BPC, one liter bottle, or manna – equivalent to one half liter). Almost all mothers and many FCHVs reported using tea glasses of varying volume to measure water during ORS preparation.

When looking at FCHVs' and mothers' knowledge of ARI management, the primary difference emerged regarding three critical danger signs (fast breathing, chest indrawing, and abnormally sleepy or difficult to wake) with FCHVs showing much higher knowledge for each sign. Both groups' knowledge of all ARI home treatment categories except for keeping the child warm was quite low. Most FCHVs did know what to do upon observing ARI danger signs (80% of FCHVs reported referring to HF and 20% referred to a private medical shop or the regional hospital in Pokhara) compared with mothers' health care seeking patterns (59% and 56% respectively).

Both groups demonstrated very poor knowledge about four of the five conditions which require one high dose vitamin A capsule (VAC): measles (4% of FCHVs and 1% of mothers), persistent diarrhea (12% and 0% respectively), night blindness (30% and 2%), and severe malnutrition (8% and 2%). Surprisingly, most FCHVs (84%) and one quarter of mothers (26%) were aware that postpartum mothers require one high dose VAC within six weeks after delivery.

In terms of health communication strategies and the extent to which health information is reaching both FCHVs and mothers, a variety of methods and channels emerged. Most significant was the fact that many FCHVs (82%) reported their own involvement with mothers' groups (MG), yet the majority of mothers interviewed reported that they themselves were not MG participants (18%). This perhaps points to why mothers are not being reached with critical information regarding household management of DD, ARI, and VAC high dose treatment for specific conditions. Additionally this finding highlights the need to identify other venues for FCHVs to reach women and/or the motivation of more women's participation in MGs in order to build on already positive FCHV-mother interaction and to bridge the wide knowledge gap. Literacy was quite high in both groups (94% of FCHVs and 77% of mothers), perhaps attributable to the criterion for literacy being the ability to read the title of a mother's health information booklet. Radio ownership and radio listening behavior was high in both groups; some 96% of both FCHVs and mothers reported listening to the radio for at least one hour twice weekly.

Both FCHVs and mothers expressed their strong desire to learn more about health, specifically about issues related to child health and their own reproductive health. Almost all respondents said they learn best and most easily through discussion in a group setting (i.e.,

small training or MG/community meeting) with books and pictures to take home for self-study. Topics that should be addressed in future trainings for FCHVs and community trainings or meetings targeting mothers include in order of preference: (1) child health-related topics especially ARI and DD but also including vaccine-preventable diseases; (2) pregnancy and delivery-related issues and traditional birth attendant (TBA) skills for FCHVs; (3) family planning methods, side effects, and failure rates; (4) sexually transmitted diseases (STDs) including HIV/AIDS; and (5) other women's reproductive health issues.

Based on the findings of this study, the following recommendations are proposed:

- Target and reinforce specific child health messages via varied media and channels for FCHVs and mothers.
- Develop new ways/broaden scope of health communication strategies to reach mothers
- Build on positive FCHV-mother interaction and accessibility to improve information dissemination at the community level.
- Strengthen FCHVs' HF support mechanisms by: improving supervision visits, ensuring continuous availability of essential supplies, and providing more frequent and varied trainings accompanied by information, education and communication (IEC) materials.
- Ensure female health care workers (ANMs and MCHWs) are performing expected duties as per the current job description and are remaining on site and on duty.

VI. Participation in Workshops, Trainings and Conferences

1. **Third Asian Conference on Food Safety and Nutrition from October 3-6, 2000 – Beijing, China**

Ram K. Shrestha from NTAG participated in the 3rd Asian Conference on Food Safety and Nutrition in Beijing. The conference focussed on food safety codes, food fortification, biotechnology and nutrition needs and priorities for the new millennium in South Asia. There were poster and oral presentation on vitamin A and iron supplementation and assessment programs in different countries.

2. **PVO-IMCI Meeting from January 16 – 24, 2001 – Baltimore, USA**

Dr. Penny Dawson participated in the PVO-IMCI Meeting and presented a paper entitled "Community-Based IMCI in Nepal: Partnerships to Increase Access, Quality and Scale of Child Pneumonia Treatment through Community Health Workers". During her visit to the USA she also presented papers entitled "Status of Nepal's CB-IMCI Program", "JSI/Nepal's Overall Activities and Achievement" and " Major Achievements of NVAP and Community-Based Pneumonia Control Program" to BASICS and JSI/DC staff, JSI/Boston and USAID/Washington respectively.

3. **XX IVACG Meeting from February 12 – 16, 2001 - Hanoi, Vietnam**

Dr. Penny Dawson, Dr. Hukum Dev Shah, Sharada Pandey, Prithbi B. Thapa and Ram Shrestha participated in the twentieth IVACG meeting in Hanoi. Ram Shrestha made a poster presentation entitled "Sustaining a Successful Program: Hidden Factors in Nepal NVAP Experience".

Ram Shrestha and Prithbi B. Thapa at the twentieth IVACG meeting in Hanoi

4. **The RHINO Workshop on Issues and Innovation in Routine Health Information in Developing Countries from March 14 – 1 6, 2001 – Maryland, USA**

Sushil Karki from JSI/Nepal and Lyndon Brown from O/HFP/USAID participated in this workshop. The workshop was divided in two sessions - 1) Presentations - 1 1/2 days and 2) Group Work - 1 1/2 days. On the second day all participants were divided into 8 groups and each group was provided a topic for subsequent group work. Sushil and Lyndon selected the following topic: "Integration of private sector into public sector HIS". Following the completion of the group work presentations were made to address lessons learned and to make recommendations.

5. **Global Health Council Meeting, 'Healthy Women, Healthy World: Challenges for the Future' from May 29 – June 1, 2001 – Washington DC, USA**

Kumar Lamichhane participated in the Global Health Council Meeting in Washington DC.

6. **Annual JSI International Division Meeting from June 4th- 7th , 2001- Washington DC USA**

Kumar Lamichhane participated in JSI's International Division Meeting as a representative of JSI Nepal's Child Health Team. He spoke about the evolution of CB-IMCI in Nepal and demonstrated the use of community level job aids. Dick B. Rai represented the Administrative Section and Frank White did honours for the Logistics team.

7. **JSI Semi-Annual Child Health Team Review Meetings – August 28-September 1, 2000, Pokhara February 26 – March 2, 2001, Kathmandu**

All JSI Child Health staff participated in the two semi-annual review meetings held this year. Colleagues from MOH, USAID, NTAG and MASS were also invited to attend parts of the meetings.

8. **Community-Level Interventions for Saving Newborn Lives (SNL) Conference – April 29 – May 2, 2001. Kathmandu**

JSI's Team Leader and Kumar Lamichhane attended part of this meeting attended by worldwide experts in interventions at the community-level for saving newborn lives. In meetings with Dr. Abhay Bang, SEARCH, India tentative plans for a field visit were initiated.

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VII. Visitors

November 27 – 29, 2000

Ms. Rebecca Rohrer, O/HF/USAID Director visited JSI's Eastern Region Field Office, Health Facilities and FCHVs in Morang Districts from November 27 - 29, 2000 to observe Logistics and Child Health activities. Before the observation visit, Ms Rohrer was also briefed about overall JSI and JSI Eastern Region activities.

March 19 – 23, 2001

Representatives from BRAC, Pathfinder and Swa-Nirvar, NGOs working in Bangladesh, along with Charles Llewellyn, USAID/Dhaka visited Nepal from March 19 – 23, 2001 to observe Community-Based Pneumonia Program. The team was given a detailed briefing about the program in Kathmandu. During their Nepal visit they also visited HFs and observed FCHVs in Chitwan and Nawalparasi. Kumar Lamichhane and Shree Hari Sharma from JSI facilitated their visit to Chitwan and Nawalparasi.

March 25 – April 8, 2001

Mr. Thomas Hardy, Senior Technical Advisor for Nepal visited Nepal from March 25 – April 8, 2001 to assist the JSI/Nepal team and key project partners (NTAG and MASS) to revise and update the project's strategic plan which guides staff and management in the implementation of project activities. In addition, Mr. Hardy assisted in a review of project progress to date towards achievement of end of project results.

May 3 – 4, 2001

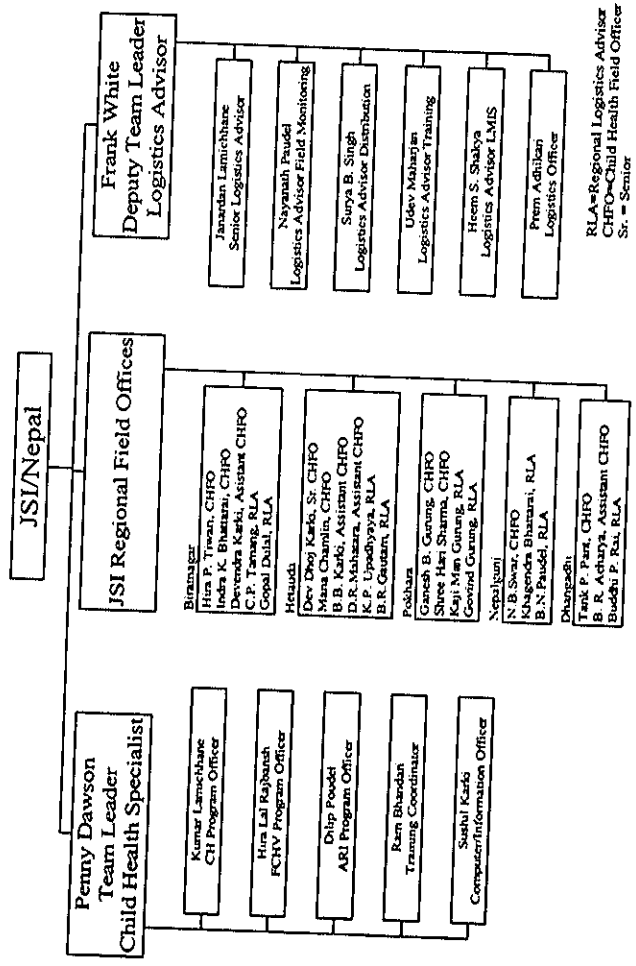
Abdullah Baqui from JHU/Baltimore visited Chitwan on May 3 - 4, 2001 to observe the Community-Based Pneumonia Control Program. During his field visit, Abdullah Baqui visited the DHO, HF and interacted with FCHVs in Chitwan. He was briefed by the DPHO and Health Facility Incharge on Community-Based Pneumonia Control Program activities implemented in Chitwan district. Kumar Lamichhane and Shree Hari Sharma from JSI facilitated his visit.

May 4 – 6, 2001

Marion Kelly from DFID and David Osrin from MIRA visited Makwanpur from May 4 – 6, 2001 to see MIRA's Neonatal Care Program and JSI's Community-based Pneumonia Control Program. Both Programs' progresses were presented to them. They also visited the FCHV and saw how a semi-literate FCHV can detect and treat the pneumonia. The team was facilitated by Dilip Poudel and Dev Dhoj Karki from JSI and Dr. D.S. Manandhar from MIRA.

Annex # 1

Technical Organogram



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JSI/NEPAL FIELD OFFICES' LOCATION AND CONTACT INFORMATION

JSI/Nepal Field Offices	Address	Tele #
Biratnagar	Gaheli, Biratnagar – 10, Morang	021-22196
Hetauda	Chowki Tole, Hetauda, Makwanpur	057-21321
Pokhara	Nadipur, Pokhara, Kaski	061-23356
Nepalgunj	Phultekra, Nepalgunj, Banke	081-20244
Dhangadi	Taranagar, Dhangadi, Kailali	091-22997

CHECKLISTS USED BY CH STAFF

General (DD/ARI/Vit A)

a. Child Health Checklist for Supervision at the District Level
a. Child Health Checklist - Health Facility Level
c. CH Checklist for VHW/MCHW
d. CH Checklist for FCHV Activities

Specific

a. ARI Followup Checklist - Health Facility Level
b. ARI Community Level Program Followup Checklist - VHW/MCHW/FCHV
c. Vitamin A Checklist for FCHV

JSI/CH -04
Feb 26/99

CHILD HEALTH CHECKLIST FOR SUPERVISION AT THE DISTRICT LEVEL

District: _____ Visit #: _____(Srawan-Asar) Date of Visit _____
Name of Interviewee: _____ Position: _____
Name of Interviewer: _____ Organization: _____

A. VITAMIN A

1. District Coordination Committee - formed ? Y N
   - Meeting? Y N
2. Case Treatment Protocol Available ? Y N
3. Distributed to all HFs Y N
   (If not, why not _____)
4. Post Partum Protocol Available? Y N
5. Distributed to all HFs? Y N
   (If not, why not _____)
6. Vit A IEC Material Available? Y N

B. Logistics Observation

7. Do you have ORS packets now? Y N
8. If no, since when? _____
9. Do you provide ORS packets to all HF regularly Y N
10. Are the ORS packets properly stored? (Observation) Y N
11. # of ORS packets _____
12. # of cotrimoxazole - pediatric _____
    - Adult _____
13. Iron tab # _____
14. Depo Provera (# of vial) _____
15. Pills # _____
16. Condom # _____
17. Vit A Capsules # _____
18. ORT/Corner Materials Set # _____
19. BPC # _____
20. CDD Treatment Chart # _____
21. ARI Treatment Chart # _____
22. Did you buy cotrimoxazole ped for this FY Y N
    If yes, Mention manufacture company name _____

23. What supports/activities do your staff think need to be improved?
    1) case management 2) supervision
    3) training 4) supplies/equipment
    5) others?

Materials Supplied

Name	Quantity

Before leaving the DHO give feedback to the staff and mention the points

File:NQCDDD

CH-03
Revised: Sept 2001

CHILD HEALTH CHECKLIST HEALTH FACILITY LEVEL

District: _____ Health Facility: _____ Date: _____
Name of Health Worker: _____ Designation: _____
Name of DHO's Supervisor: _____ Designation: _____
Name of Supervisor: _____ Designation: _____
Visit # _____ (Srawan - Asar)

				Remarks
A.	**ORT Corner:**			
1.	Facility has ORT Corner Equipment?	Y	N	_____
2.	Is it functioning?	Y	N	_____
	(Functioning = water, measuring device ORS should be ready to serve at the time of observation)			
3.	Type of measuring utensil being used (Specify) ? _____			
4.	Volume of water correct (950 - 1200 mls is correct)	Y	N	_____
B.	**Vitamin A**			
5.	Case treatment Protocol Available in OPD	Y	N	_____
6.	Post Partum Protocol Available in OPD	Y	N	_____
7.	what conditions should receive Vit A high dose ?			
	A. Measles	Y	N	_____
	B. Persistent diarrhea	Y	N	_____
	C. Night Blindness/Xeropthalmia	Y	N	_____
	D. Severe Malnutrition	Y	N	_____
	E. Post Partum (Mention time frame_____)	Y	N	
8.	Recording of case treatment _____			

Cases Treated	Last 1 month (from OPD Register/HMIS)
1) Measles	
2) Persistent diarrhea	
3) Night blindness/Xerophth'a/bitot's spot	
4) Severe Malnutrition	
5) Post Partum	
Total	

9.	In the HMIS report are you reporting VAC used for:			
	- prevention ?	Y	N	_____
	- treatment ?	Y	N	_____
10.	Vit A IEC Materials Displayed	Y	N	_____
C.	**Logistics:**			
11.	Do you have ORS packets now?	Y	N	_____
12.	Are they properly stored?	Y	N	_____
13.	Do you provide ORS to FCHVs (through VHW/MCHW/HF)	Y	N	_____
14.	CDD Treatment Chart Displayed	Y	N	_____
15.	ARI Treatment Chart Displayed	Y	N	_____

16. Stock Observation During Visit:
    ORS #: _____ BPC #: _____ Vit A #: _____ Iron # _____
    Cotrimoxazole (pd) # _____ Cotrimoxazole (Adult) # _____
    Chloromphenical syrup # _____ Depo Y/N _____ Pills Y/N _____
    Condom Y/N _____

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D. Supervision:

From	Y/N
DHO Staff (in last 3 months)	
HF (in last 2 months)	
Others in last 3 months (specify)	

E. Supplies Provided During the Visit:

CTP # _____PPP # _____CDD Treatment Chart/Pocket Treatment Chart #_____
ARI Treatment Chart # _____ ORT Equipment Set # _____
ORS # _____ BPC # _____
CDD/ARI Posters # _____ Others # _____

F. What Kind of Cases do You Treat with Cotrimoxazole ped ?
Pneumonia _____
Others _____

G. Iron (Verbal)

Pregnant Women (Y/N)		Lactating Women (Y/N)	
Provided to	Knowledge of Sufficient Dose for 6 months (60 mg 180 Tabs)	Provided to	Knowledge of Sufficient Dose for 6 weeks (Y/N) (60mg 42 tabs)

File:nonQICDD

JSI/CH-02
Revised: Sept 2000

CH CHECKLIST FOR VHW/MCHW

District: _____ Date: _____ Visit #: _____(Srawan-Asar)
HP:_____ SHP/VDC: _____
Name of VHW/MCHW: _____ Name of DHO Supervisor: _____
Name of Supervisor: _____

Activities Last Month: **Yes No Remarks**

1. FCHVs visited last month Y N _____
   If yes, how many FCHVs_____
2. Number of mothers group meetings attended: _____
3. Contraceptive pills given to # of client ____# of FCHVs_____
4. Distribution of ORS to # of client _____ # of FCHVs_____
5. Monthly reports sent to Health Facility Y N _____
6. Referred any children/people with VAD/Other to HF for treatment (in last month) Y N _____
   If yes, a) Measles _____ b) Persistent diarrhea___
   c) Night blindness/Xerop-a ____ d) Severe malnutrition ____
   e) Post partum _____

Knowledge:

7. 2 ways to prevent AIDS Y N _____
8. 2 Signs of pneumonia Y N _____
   (Fast Breathing (Y/N)__, Chest Indrawing (Y/N)__, Any other (Y/N__)
9. 3 signs of dehydration: Y N _____
   (General condition (Y/N) __ Thirst (Y/N) __ Skin elasticity (Y/N)___, Any other (Y/N)___)
10. Explain the three rules for treating diarrhea at home Y N _____
    a. increased fluid intake Y N _____
    b. Continue feeding Y N _____
    c. Reasons for seeking medical help: Y N_____
    (If any two of following, the answer will be yes)
    Many watery stool, - Repeated vomiting; - Mark thirst, - Eating or drinking poorly;
    Fever, and Blood in stool
11. Vit A Y N _____
    a. 2 signs of Vit A deficiency
    (nightblindness, Xerophthalmia, bitot-s spot, Cornealulcer, Keratomalacia)
    b. 2 Animal Sources of Vit A Y N_____
    a. _____
    b._____
12. What conditions should receive Vit A high dose?
    A. Measles Y N
    B. Persistent diarrhea Y N
    C. Night Blindness/Xerop-a Y N
    D. Severe Malnutrition Y N
    E. Post Partum (mention time frame_____) Y N

Availability:

13. Availability:
    a. Pills Y/N _____
    b. Condom Y/N_____
    c. ORS Y/N_____
    e. CDD/ARI/Vit A Posters Y/N _____
14. ORS Received in past 2 months Y/N

Supervision:

15. From HF staff Y/N (in last 2 month)
16. From DHO staff Y/N (in last 3 month)
17. Others staff Y/N (in last 3 month) Specify

Supplied during the visit _____ _____ _____
_____ _____ _____

JSI/CH-01
Revised: Sept 2000

CH CHECKLIST FOR FCHV ACTIVITIES

Name: _____
VDC Name: _____
DHO Staff: _____
Age: ___ Ed: _____(Lit=1,Illit=2)
Ward # _____
JSI/Others Staff: _____ Visit # ____ (Srawan-Asar)
Date # _____Other involvement: _____

Remarks

ACTIVITIES OF LAST MONTH

1. Assisted in EPI Center — Y N
2. Mothers group meeting conducted — Y N
   a. VHW/MCHW present — Y N
3. Distributed:
   a. Oral contraceptives: — Y N
   b. Condoms: — Y N
   c. ORS to # of client _____ — Y N
4. FCHV register available (Ward Register) — Y N
   If available, register up-to-date ? — Y N

KNOWLEDGE OF FCHVs

5. Exclusive breast feeding — Y N
6. 2 Signs of dehydration — Y N
   (General condition Y/N__, Thirst Y/N: __, Skin elasticity Y/N__, Any other Y/N____
7. Explain the three rules for treating diarrhea at home
   a. Increased fluid intake — Y N
   b. continue feeding — Y N
   c. Reasons for seeking medical help — Y N
   (If anyone of followings, the answer will be yes)
   -Many watery stools Y/N___ -Repeated vomiting Y/N____
   -Marked thirst Y/N_____ -Eating or drinking poorly Y/N___
   -Fever Y/N_____ -Blood in stool Y/N____
8. Measured correct volume of Water — Y N
   (950 - 1200 mls is correct volume)
   (Specify measuring device _____)
9. A sign of pneumonia — Y N
   (Fast breathing Y/N__, Chest Indrawing Y/N__, Any other Y/N____)
10. Available with FCHV
    a. Pills Y/N_____ b. Condom Y/N____ c. ORS Y/N ___
    d. BPC Y/N _____ e. Mother Booklet Y/N_____
11. ORS received during past two months: — Y N
    If yes, source - (VHW/HF/JSI/bought by self/others)

Supervision:
From VHW/MCHW Y/N (in last 1 month)
From HF staff Y/N (in last 2 month)
From DHO staff Y/N (in last 3 month)
Others Y/N (in last 3 month) Specify

Ask to bring salt for test!!

Supply on the spot by JSI/DHO/Others staff:
1) Blue glass _____ 2) ORS: _____
3) Condom: _____ 4) Pills: _____
5) IEC (CDD/ARI/Vit A/Others) Posters_____

ARI # 1
Revised: Sept 2000

ARI FOLLOWUP CHECKLIST
HEALTH FACILITY LEVEL

District: _____ PHC/HP/SHP:_____
Followup by District staff: _____ Visit: _____(Srawan - Asar)
JSI Staff: _____ Date:_____

A. Staff Training

Name	Post	ARI Strengthening Training	
		Y/N (Year)	If no, Reason

B. Availability and Use of ARI Materials

Materials	Available (Y/N)	Remarks
OPD Register		
Timer		
Referral Slip Box		
Home Therapy card		
Treatment Card (FCHV/VHW/MCHW)		
Cotrim Dose Card		
Treatment Chart		
Classification Card		
Posters		
Treatment Book #_____(in stock)		
Referral Book #_____(in stock)		

C. ARI Medicines Received/Distributed

Medicines		Balance		
		Stock		If no since when
Cotrim Ped Tab #_____				
Chloramphenicol Suspension #_____				
Others	P.Penicillin	Y	N	
	Amoxycillin	Y	N	
	Ampicillin	Y	N	

D. Service Activities

Activities	Total	Remarks
# of Treatment slip received from CHW in HF in last month		

1. **Referral slip Received from CHW (last visit or Srawan NFY ____)**

Activities	Total	Remarks
# of referral slip received in HF		
# of very severe diseases confirmed by HF		
# of severe pneum. confirmed by HF		
# of pneumonia confirmed by HF		
# of no pneumonia confirmed by HF		

2. **Observation of HF ARI Treatment Register (last visit or Srawan NFY ____)**

Items observed	#	Remarks
# of ARI cases registered		
# of very severe diseases		
# of severe pneumonia cases		
# of pneumonia cases		
# of no pneumonia cases		
# of cases referred to hospital by HF		
# of revisit (followup) cases at HF		
# of CHWs' referred cases registered in OPD Register		
# of cases treated by cotrimoxazole		
# of cases treated by CHL		
# of cases treated by other medicine		

3. **ARI Report**
   Last month's report sent Y/N___
   MCHW/VHW's report received Y/N___

4. **Supervision**

From	Y/N
DHO ARI Focal Person (in last 3 months)	
HF (in last 2 months)	
Others in last 3 months (specify)	

5. **Materials supply During the Visit**

	Name	Quantity
A.		
B.		
C.		

E. Sustainability

a) Met VDC member (all ARI/CB-IMCI Districts)	Y/N___
b) If yes, mention designation of the person contacted	
c) Is VDC committed to support (CB-IMCI districts) ?	Y/N___
d) If yes, written/verbal	
e) Has commitment been implemented (CB-IMCI districts) ?	Y/N___

File:ARIHF

ARI COMMUNITY LEVEL PROGRAM FOLLOW UP CHECK LIST VHW/MCHW/FCHV

District:_____ PHC/HP/SHP:_____ VDC:_____
VHW/MCHW/FCHV:_____ Ward No:____Age: _____
Education: _____ Visit #: _____ (Srawan - Ashar)
(Literate = 1, Illiterate = 2)
Accessible Y/N _____ Treatment FCHV Y/N _____
(Definition of supervisor)
Follow up by:_____ Date:_____

A. Training and Materials

	Yes	No	Remarks
1. ARI Community Level Training taken	____	____	_____
2. ARI Timer	____	____	
3. ARI Referral book	____	____	
4. Treatment book	____	____	
5. Treatment card (cotrim dose card)	____	____	
6. Classification card	____	____	
7. Home therapy card	____	____	
8. Reporting form (for VHW/MCHW only)	____	____	
9. Cotrim Balance (min 20 tabs)	____	____	(#_____)

B. Knowledge and Skill

1. **Respiratory Cut off Rate:**
   - less than 2 month ____ ____
   - 2-60 month ____ ____

2. **Danger Signs of Pneumonia (Only FCHV can see classification card during interview)**

Under 2 months	Y/N	2 month to 5 years	Y/N
Fast Breathing		Chest Indrawing	
Severe Chest Indrawing		Not able to drink	
Stopped Feeding Well		Abnormally Sleepy	
Abnormally Sleepy		Severe Malnutrition	
Fever			
Low Body Temperature			

	Correct	Incorrect
3. a. When to follow up the referred and treated cases	____	____
b. What to do on the day of follow up (Assessment)*	____	____
(CI ____ RR ____ Cotrim Dose ____ Home Therapy ____)		

4. **Explain the Home Therapy Card (Only FCHV can use Home Therapy Card)**

a. Look for - Fast breathing	____	____
b. Look for - Chest indrawing	____	____
c. Keep young infant warm	____	____
d. Breast feed frequently	____	____
e. Clean the nose	____	____
f. Give more fluid	____	____
g. Give food more frequently	____	____
5. **Counting RR by using timer**	____	____
6. **Doses of cotrim 2 to 12 months**	____	____
12 to 60 months	____	____

*** If answer is CI, RR, Cotrim Dose then write "Y" in correct column**

C. Service Activities (Date: From ..... to .....)

Total # of treated cases from last visit (if no visit, total treated in 6 months) _____

Treatment Book Indicators (maximum 10 most recent cases)

S/N	Correctly Classified	Cases Consistent Marking Age by Dose	cases marking 3rd day followup	Both Correct (Consistent Age/Dose and 3rd day followup	Treated Cases Referred on 3rd day
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
Total					

Referral Book Indicators (maximum 10 most recent cases)

< 2 months			2 - 60 months		
S/N	Correctly Classify	cases marking 3rd day followup	S/N	Correctly Classify	Cases marking 3rd day followup
1			1		
2			2		
3			3		
4			4		
5			5		
6			6		
7			7		
8			8		
9			9		
10			10		
Total			Total		

D. Supervision (for only ARI)

From VHW/MCHW YES/ NO (in last 1 month) Report collected Y/N _____
From HF staff YES/ NO (in last 2 month)
From DHO staff YES/ NO (in last 3 month)
Others YES/NO (in last 3 month) Specify _____

E. Supply on the Spot by JSI/DHO Staff

a. IEC Materials: _____ (specify)
b. Cotrim P.: _____
c. Others: _____ (specify)

F. Have any traditional healers referred any case of ARI/Pneumonia to you for treatment Y/N ___

Note:
*Correct treatment = Correct cotrim dose by age.
Follow up=Reassessed by CHW on 3rd day or CHW verified out come with parent/guardian/caretaker on 3rd day.

Practice with case studies for classification
Correct for < 2 month Y/N _____ Correct for 2 months to 5 years Y/N _____

JSI/CH-01a
Revised: Sept 2000

Vitamin A Checklist for FCHV

Name:_____ Age: ___ Ed: _____(Lit=1,Illit=2)
VDC Name: _____ Ward # _____
DHO Staff : _____ JSI/Others Staff:_____ Visit # _____ (Srawan-Asar)
Date # _____ Other involvement: _____

Knowledge

1. 2 Animal Sources of Vit A: Y N
   A._____
   B._____
2. Have you told any mother about the two sources of Vit A?
   A. Animal Y N
   B. Vegetable Y N
3. What conditions should receive Vit A high dose ?
   A. Measles Y N
   B. Persistent diarrhea Y N
   C. Night Blindness/Xerophthalmia Y N
   D. Severe Malnutrition Y N
   E. Post Partum (within 6 weeks (45 days) of delivery) Y N
   Time frame _____

ACTIVITIES

4. Did you dose children with Vit A in last round? Y N
   if Yes how many _____
5. # of children missed last round _____
   Reasons: a) Shortage of Capsule___, b) Others_____
6. Who supported you in pre-distribution and distribution of Vit A in last round _____
   (Family member=1, health workers=2, teachers=3, agriculture workers=4
   VDC members=5, others = 6 _____specify)
7. Referred any children/people with
   VAD/Other to HF for treatment (within last 6 months) Y N
   If yes:a) Measles _____
   b) Persistent diarrhea _____
   c) Night Blindness/Xeropthalmia _____
   d) Severe Malnutrition _____
   e) Post Partum _____ Reasons _____
8. How many postpartum cases did you dose in last 6 months _____

Availability

1. Scissors Y N
2. Vit A Capsule Y N
3. Vit A Flipchart Y N
4. Other Vit A/Nutrition IEC Materials Y N
5. Register Y N

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Annex #4

Source of Performance Milestone Data

The LCHSSP is a performance-based project, which means that annually specific program performance milestones are documented and reported to USAID. Data on the two milestones for Year 4 of the LCHSSP (2000/2001) are provided in JSI Child Health Field Staff (CHFS) monitoring reports, and are summarized below.

1. FCHV Program

Performance Milestone: Percentage of active FCHVs reporting provision of MCH services to their MOH supervisors.

Year 4 Performance: (2000/2001) 74%

Source of Data: JSI CHFS field reports from all 5 Regions from interviews with a total of 729 FCHVs.

Reference in report of child health monitoring activities:

Page 30: Graph F #14: Supplies Distributed by FCHVs During Past One Month by Year

Comment: Ideally, this data could be obtained through the MOH's Health Management Information System (HMIS) but at the present time the FCHV service statistics are not reported separately to the Central Level, although they are reported at the health Facility level.

2. ARI Program

Performance Milestones: Percentage of children 0-60 months of age with pneumonia symptoms referred or treated appropriately by FCHVs, VHWs/MCHWs in targets districts.

Year 4 Performance: (2000/2001) a) 92% of cases treated or referred by FCHVs/ VHWs/MCHWs had third day follow-up marked in the record book.

b) 98% of cases treated by FCHVs/VHWs/MCHWs had consistent age and cotrimoxazole dose marked in the record book.

Source of Data: JSI CHFS field trip reports from 13 districts where the community level intervention has been implemented; interviews with 2,575 community health workers. (For 'B' districts this also includes INGO Monitoring Reports)

Reference in report of child health monitoring activities:

Page 47: Graph AC #7: Comparison Between Percentage Followup of 10 Most Recent Pneumonia Cases Treated/Referred by Year

Page 49: Graph AC #11: Percentage of 10 Most Recent Pneumonia Cases Treated by CHWs Marking Consistent Age/Dose and 3rd Day Follow-up by Year

Comments: The data which was compiled and analyzed to calculate these figures is summarized in the table below:

	Treated Cases*		Referred Cases*		Treated/Referred Cases*		Treated Cases*	
# CHWs Interv'd	# of 10 most recent Cases	#/% cases of marking third day followup	# of 10 most recent Cases	#/% cases of marking third day followup	# of 10 most recent Cases	#/% cases of marking third day followup	# of 10 most recent Cases	#/% cases of marking Consistent Age and Dose
3,319	17,376	16,160 (93%)	902	703 (78%)	18,278	16,863 (92%)	17,376	17,028 (98%)

* 10 most recent cases